UNIT 4

Numbers to 99 and Financial Literacy

Essential Questions

- How can we add and subtract tens?
- How can we represent and compare numbers to 99?
- How can we earn income and make decisions about spending, saving, and charitable giving?

Explore: Game Points

Students build curiosity from the beginning of the unit by engaging in a mathematical task that elicits multiple strategies and allows them to apply their own knowledge.

Unit Story: The Collectors

In this story, Steph visits a flea market in search of Curioso cards to add to her collection and meets other collectors.

Focus on the TEKS

TEKS

Addressing

1.2.A, 1.2.B, 1.2.C, 1.2.D, 1.2.E, 1.2.F, 1.2.G, 1.3.A, 1.3.D, 1.5.A, 1.5.B, 1.5.C, 1.5.E, 1.5.G, 1.9.A, 1.9.B, 1.9.C, 1.9.D

Math Process Standards:

1.1.A, 1.1.B, 1.1.C, 1.1.D, 1.1.E, 1.1.F, 1.1.G

ELPS:

1.A, 1.B, 1.C, 1.D, 1.E, 1.F, 2.B, 2.C, 2.D, 2.E, 2.F, 3.A, 3.C, 3.D, 3.E, 3.F, 3.H, 4.C, 4.D, 4.E, 4.F

Students extend the counting sequence to **estimate** and count quantities organized into groups of 10 and remaining ones, and read and write numbers up to 100. They develop an understanding of the base-ten structure of numbers within 100 and recognize that the two **digits** of a two-digit number are amounts of **tens** and ones. Students use place value understanding to compare and order two-digit numbers using symbols and **greater than** and **less than** comparative language.

Students identify **income** and connect income as a means to obtain the **goods** and **services** related to wants and needs. They distinguish between **spending** and **saving** money that is earned and received, and recognize that charitable giving includes **donating** items or money to those in need.

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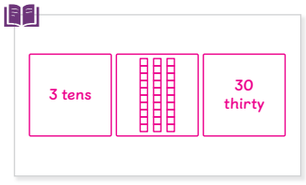
Connections and Coherence

Spotlight on Connecting the Content and Process Standards

Students engage in these Math Process Standards as they . . .

TEKS 1.1.A	Apply their understanding of income to identify scenarios for using income and how income can be used to purchase wants and needs. **(Lesson 17, Activities 1 and 2)** **TEKS 1.9.B**
TEKS 1.1.B	Consider different ways to organize and count points in groups of 5 and 10 to compare strategies and notice which strategies are more helpful to the task. **(Lesson 1, Activity 1)** **TEKS Building Toward 1.2.C**
TEKS 1.1.D	Sort then draw different base-ten representations that show the same multiple of 10 up to 120. **(Lesson 3, Activity 1)** **TEKS 1.2.C** 
TEKS 1.1.E	Interpret and create different base-ten representations of two-digit numbers as an amount of tens and ones. **(Lesson 8, Activity 2)** **TEKS 1.2.C**
TEKS 1.1.F	Analyze mathematical relationships involving charitable giving and recognize charitable giving as another financial option to spending and saving money. **(Lesson 19, Activity 2)** **TEKS 1.9.D**
TEKS 1.1.G	Explain comparisons between two-digit numbers using greater than and less than and by making conjectures and reasoning about the value of the digits. **(Lesson 19, Activity 2)** **TEKS 1.9.D**

Coherence

Prior Learning

- Students connected quantities of objects and images with written numerals up to 10 and compared quantities and written numerals. **(Kindergarten)**
  TEKS K.2.B, K.2.C, K.2.G
- Students counted groups of objects and images in different arrangements and recognized that teen numbers are composed of 10 ones and some more ones. **(Kindergarten)**
  TEKS K.2.B, K.2.C
- Students discovered that 10 ones make a ten and that all teen numbers are made up of a ten and a number of ones. **(Grade 1)**
  TEKS 1.2.B, 1.2.C

Future Learning

- Students will use objects and pictorial models to solve addition and subtraction problems and compare groups of objects within 20. **(Grade 1)**
  TEKS 1.3.B
- Students will use place value understanding and properties of operations to develop fluency with strategies for adding and subtracting two-digit numbers. **(Grade 2)**
  TEKS 2.4.B
- Students will extend their place value understanding to three-digit numbers to read, write, represent, and compare numbers up to 1,200. **(Grade 2)**
  TEKS 2.2.A, 2.2.B

Unit at a Glance

Explore

Game Points: Launch the unit with a nonroutine task to investigate the question, "How can you organize and count your points?"

Assess and Respond

A Pre-Unit Check

Learn more about your students' understanding of foundational concepts and skills that will support them in Sub-Unit 1.

TEKS 1.2.C 1.3.B
TEKS 1.1.D

Sub-Unit 1

1 Explore: Game Points

How can you organize and count your points?

Consider different ways to organize and count points when playing a fluency game.

Building Toward TEKS 1.2.C
TEKS 1.1.A, 1.1.B, 1.1.E, 1.1.F

2 Meeting Yara

Organizing and Counting Collections in Groups of 10

Explain and compare strategies for organizing and counting collections of objects in which the total is a multiple of 10.

TEKS 1.5.A 1.5.B
TEKS 1.1.D, 1.1.F

Sub-Unit 2

5 Meeting Prashant

Organizing and Counting a Collection in Tens and Remaining Ones

Count a collection by organizing objects into as many groups of 10 as possible and counting by 10 and then counting on by 1.

TEKS 1.2.C 1.5.A 1.5.B
TEKS 1.1.E, 1.1.F

6 Curioso Collections

Representing Two-Digit Numbers With Tens and Ones

Represent and describe two-digit numbers as amounts of tens and ones.

TEKS 1.2.C
TEKS 1.1.E

7 Do They Show the Same Number?

Interpreting Representations of Two-Digit Numbers

Interpret different base-ten representations—including drawings, expanded form, and written numerals in standard form—to determine whether they show the same number.

Building Toward TEKS 1.2.C
TEKS 1.1.E, 1.1.F, 1.1.G

Assess and Respond

A Quiz: Sub-Unit 2

Learn about your students' understanding of the concepts and skills so far in this unit.

TEKS 1.2.C 1.3.A 1.5.B 1.5.C
TEKS 1.1.D, 1.1.F

Sub-Unit 3

11 Steph's Growing Collection

Comparing Two-Digit Numbers Using *Greater Than* and *Less Than*

Compare 2 two-digit numbers and describe the comparisons using *greater than* and *less than*.

TEKS 1.2.E
TEKS 1.1.F

12 Greater Than, Less Than

Making Conjectures About Comparing Two-Digit Numbers

Make and test conjectures about comparing 2 two-digit numbers using place value reasoning.

TEKS 1.2.E
TEKS 1.1.C, 1.1.D, 1.1.G

All lessons can be taught using the Student Edition while the teacher projects Presentation Screens.

We recommend students use devices to interact with some lessons, as indicated with .

Pacing: 24 days | **Short on time?** See pacing considerations below.

Pre-Unit Check: 20 min

19 Lessons: 60 min each

Sub-Unit Quizzes: 20 min each

End-of-Unit Assessment: 45 min

3 It's a Match

Matching Different Representations of the Same Multiple of 10

Interpet different base-ten representations of two-digit multiples of 10 to determine the value.

TEKS 1.2.B 1.2.C
TEKS 1.1.D, 1.1.G

4 How Many Cubes?

Finding 10 More and 10 Less

Find 10 more or 10 less than multiples of 10 within 100.

TEKS 1.2.A 1.5.C
TEKS 1.1.D, 1.1.F

Assess and Respond

A Quiz: Sub-Unit 1

Learn about your students' understanding of the concepts and skills so far in this unit.

TEKS 1.2.C 1.3.B
TEKS 1.1.B, 1.1.D

8 Curioso Customers

Connecting Representations of Two-Digit Numbers

Translate between different representations of two-digit numbers, including drawings, words, expressions, and written numerals.

TEKS 1.2.C
TEKS 1.1.E

9 Connecting With Collectors

Writing Two-Digit Numbers to Match Different Base-Ten Representations

Interpret different base-ten representations of two-digit numbers, including expanded form and standard form, and record the values with written numerals.

TEKS 1.2.C
TEKS 1.1.E

10 Boris's Thimbles

Adding Ones to a Multiple of 10

Add ones to multiples of 10 within 100 and use cubes and drawings to determine the sums.

TEKS 1.3.A
TEKS 1.1.E

13 Mystery Symbols

Exploring Comparison Symbols

Connect understanding of *greater than* and *less than* to the abstract *greater than* and *less than* symbols.

TEKS 1.2.E 1.2.G 1.5.E
TEKS 1.1.D, 1.1.F, 1.1.G

14 Purr-fect Comparisons

Using Comparison Symbols and Digits to Make True Statements

Interpret and complete comparison statements that are missing symbols or digits to make the statements true.

TEKS 1.2.D 1.2.E 1.2.G
TEKS 1.1.D

15 Stephs's Friends

Writing Comparison Statements Using Symbols

Write 2 comparison statements about the same numbers using <, >, or = and generate a number greater than or less than a given number.

TEKS 1.2.D 1.2.E 1.2.G 1.5.G
TEKS 1.1.C, 1.1.D

Unit at a Glance

Explore

Game Points: Launch the unit with a nonroutine task to investigate the question, "How can you organize and count your points?"

continued

16 A Trip to the Flea Market

Comparing and Ordering One- and Two-Digit Numbers

Use place value understanding to compare and order one- and two-digit numbers.

TEKS 1.2.E 1.2.F 1.2.G
TEKS 1.1.F, 1.1.G

Assess and Respond

A Quiz: Sub-Unit 3

Learn about your students' understanding of the concepts and skills so far in this unit.

TEKS 1.2.E 1.2.F 1.2.G 1.5.E
TEKS 1.1.D, 1.1.F

Sub-Unit 4

17 How Do We Make Purchases?

Income as a Means of Obtaining Goods and Services

Recognize money as earned income that can be used to purchase goods and services.

TEKS 1.3.D 1.9.A 1.9.B
TEKS 1.1.A, 1.1.C, 1.1.D

All lessons can be taught using the Student Edition while the teacher projects Presentation Screens.

We recommend students use devices to interact with some lessons, as indicated with .

Pacing: 24 days | **Short on time?** See pacing considerations below.

Pre-Unit Check: 20 min

Sub-Unit Quizzes: 20 min each

19 Lessons: 60 min each

End-of-Unit Assessment: 45 min

18 **What Can I Do With Money?**

Distinguishing Between Spending and Saving Money

Recognize the difference between spending and saving money.

TEKS 1.9.C
TEKS 1.1.F

19 **It's Time to Give Back!**

Considering Charitable Giving

Recognize donating as a form of charitable giving that is an alternative to spending or saving money and analyze its impacts.

TEKS 1.5.A 1.9.B 1.9.C 1.9.D
TEKS 1.1.F

Assess and Respond

A **End-of-Unit Assessment**

Learn about your students' understanding of the concepts and skills in the unit.

TEKS 1.2.B, 1.2.C, 1.2.E, 1.2.F, 1.2.G, 1.5.E, 1.9.A, 1.9.B, 1.9.C
TEKS 1.1.A, 1.1.D, 1.1.F

Pacing Considerations

End-of-Unit Assessment: This assessment can be given on the same day as the Pre-Unit Check for the next unit.

Lesson 1: This lesson can be omitted. It is an exploration that helps students engage in the unit, but is not essential for meeting required standards. If omitted, read and discuss the Unit Story prior to Lesson 2.

Lesson 9: This lesson can be omitted if students demonstrate understanding of different base-ten representations.

Lessons 11 and 12: These lessons can be condensed into 1 lesson if students demonstrate a solid understanding of the language *greater than* and *less than*.

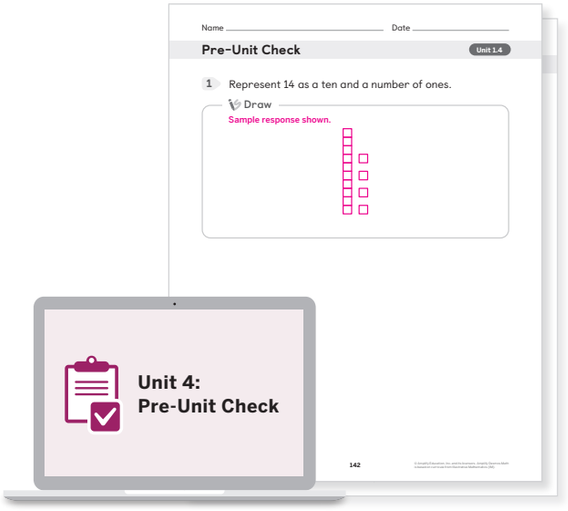
Assessments

Every unit includes a variety of formative and summative assessments designed to highlight students' understanding of a variety of concepts and skills.

Pre-Unit Check

Assign the **Pre-Unit Check** to learn more about your students' understanding of foundational concepts and skills that will support them in Sub-Unit 1.

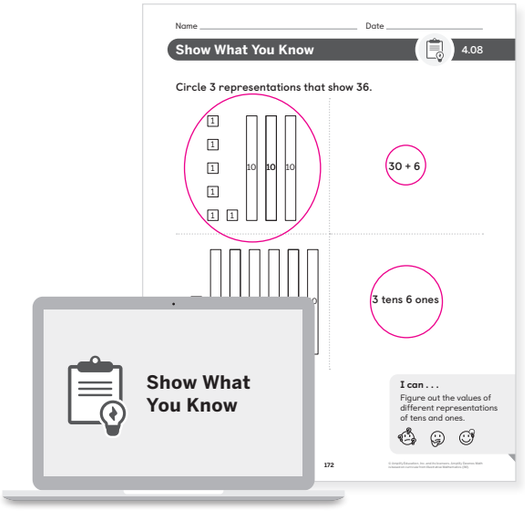
TEKS: 1.1.D, 1.2.C, 1.3.B



Lesson | Show What You Know

Use the **Show What You Know** to learn more about your students' progress toward the lesson goal(s). Here is one example from this unit.

TEKS: 1.2.C

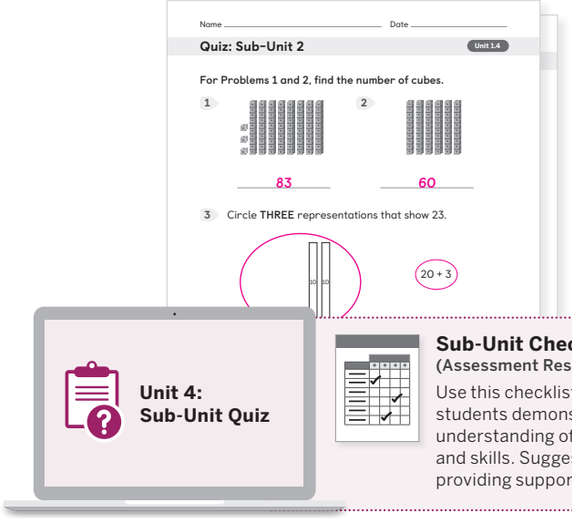


Sub-Unit Quizzes

Assign each **Sub-Unit Quiz** to learn about your students' understanding of the concepts and skills so far in this unit.

TEKS:

- **Quiz: Sub-Unit 1:** 1.1.B, 1.1.D, 1.2.C, 1.3.B
- **Quiz: Sub-Unit 2:** 1.1.D, 1.1.F, 1.2.C, 1.3.A, 1.5.B, 1.5.C
- **Quiz: Sub-Unit 3:** 1.1.D, 1.1.F, 1.2.E, 1.2.F, 1.2.G, 1.5.E

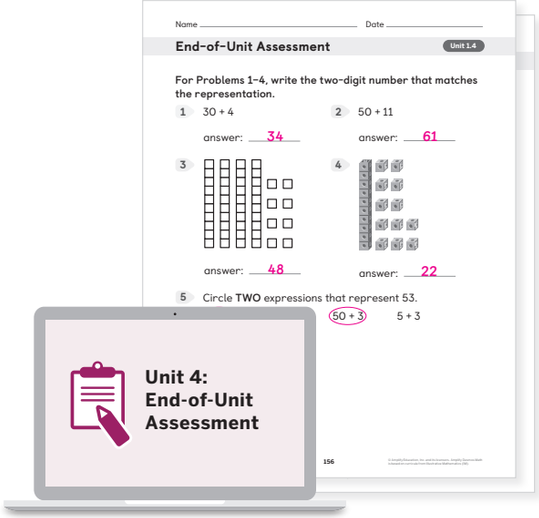


Sub-Unit Checklist
(Assessment Resources)
Use this checklist to look for students demonstrating their understanding of key concepts and skills. Suggestions for providing support are included.

End-of-Unit Assessment

Assign the **End-of-Unit Assessment** to learn about your students' understanding of the concepts and skills in this unit.

TEKS: 1.1.A, 1.1.D, 1.1.F, 1.2.B, 1.2.C, 1.2.E, 1.2.F, 1.2.G, 1.5.E, 1.9.A, 1.9.B, 1.9.C, 1.9.D



Differentiation

Every unit includes additional resources to support, strengthen, and stretch student learning. You can also assign digital resources that adjust to each student's current level of skill and understanding:

• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

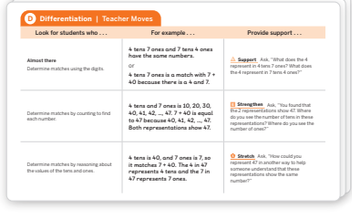
Differentiation Across the Unit

	Support	Strengthen	Stretch
	Mini-Lessons	**Centers**	**Extensions**
Sub-Unit 1 (Lessons 1–4)	• **ML 4.02:** Counting Groups of 10 • **ML 4.03:** Matching Different Representations of the Same Number of Tens • **ML 4.04:** Finding 10 More and 10 Less	• ***Check It Off:*** Add Three Numbers • ***Counting Collections:*** Up to 20 • ***How Close?:*** Add to 20, Subtract From 20 • ***Math Stories:*** Unknown Numbers	• **Sub-Unit 1 Extension Activities**
Sub-Unit 2 (Lessons 5–10)	• **ML 4.05:** Counting a Collection With Tens and Ones • **ML 4.06:** Representing Two-Digit Numbers With Tens and Ones • **ML 4.07:** Matching Representations of Two-Digit Numbers • **ML 4.08:** Representing Two-Digit Numbers in More Than One Way • **ML 4.09:** Writing Two-Digit Numbers for Base-Ten Representations • **ML 4.10:** Adding Ones to a Multiple of 10	• ***Check It Off:*** Add Three Numbers • ***Counting Collections:*** Up to 99 • ***Compare:*** Add and Subtract Within 10 • ***Cover Up:*** Add 7, 8, or 9 • ***Last Number Wins:*** Numbers to 99 by 1 • ***Shake and Spill:*** Cover (Up to 10)	• **Sub-Unit 2 Extension Activities**
Sub-Unit 3 (Lessons 11–16)	• **ML 4.11:** Comparing Two-Digit Numbers • **ML 4.12:** Making Comparison Statements About Two-Digit Numbers • **ML 4.13:** Exploring Comparison Symbols • **ML 4.14:** Using Comparison Symbols • **ML 4.15:** Writing Two Different Comparisons Statements About the Same Number • **ML 4.16:** Comparing and Ordering One- and Two-Digit Numbers	• ***Cover Up:*** Add or Subtract 10 • ***Last Number Wins:*** Numbers to 99 by 1, Numbers to 99 by 10 • ***Mystery Number:*** Two-Digit Numbers	• **Sub-Unit 3 Extension Activities**
Sub-Unit 4 (Lessons 17–19)	• **ML 4.17:** Using Income to Buy Goods and Services • **ML 4.18:** Understanding the Difference Between Spending and Saving • **ML 4.19:** Understanding the Difference Between Donations and Ways to Make Money	• ***Cover Up:*** Subtract 1 or 2, Make 10 • ***Greatest of Them All:*** Two-Digit Numbers	• **Sub-Unit 4 Extension Activities**

Differentiation Within the Lesson

Each Teacher Edition includes point-of-use differentiation suggestions to modify or adjust instruction during the lesson to accommodate the needs of all learners.

Here is one example from **Lesson 7**, where students determine if different types of base-ten representations show the same number.



Vocabulary of the Unit

Every lesson includes opportunities for all students to access mathematical and non-mathematical vocabulary and actively participate in their own vocabulary development.

Vocabulary

New Vocabulary	Lesson
digit	6
donating	19
estimate	3
expanded form	7
goods	17
greater than	11
less than	11
saving	18
services	17
spending	18
standard form	7
a ten/tens	3

Review Vocabulary
conjecture
equal
expanded form
fewer
income
less
more
needs
one/ones
value
wants

Contextual Vocabulary	Lesson
guitar picks	2
booth	7

Spotlight on Vocabulary

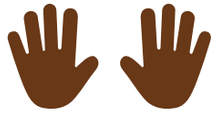
Vocabulary Strategy

In this unit, the term *tens*, the plural of *ten*, refers to multiple groups of 10 ones. Consider using the following vocabulary routine to support students' vocabulary development.

Total Physical Response Invite students to count by tens, flashing 10 on their hands each time.

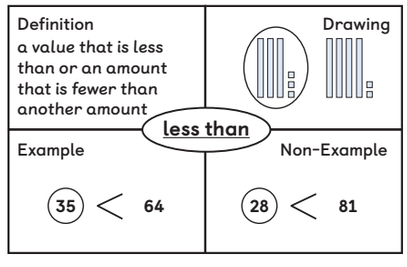
- Give them a number, have them count by tens to the number, and ask, "How many tens did you count?" . . .

ELPS 1.A, 1.B, 1.C, 1.E



Frayer Models

Lesson 11 students create a Frayer Model graphic organizer that shows a definition, drawing, example, and non-example of the term *less than*.



Additional Vocabulary Strategies and Frayer Model templates can be found in the ***Math Language Development Resources.***

Language Development

Every lesson includes embedded opportunities for all students, including those building English proficiency, to develop their mathematical language skills and engage in meaningful language interactions.

Math Language Routines

Math Language Routine	Lesson
MLR1: Stronger and Clearer Each Time	3, 11
MLR2: Collect and Display	6, 11
MLR7: Compare and Connect	2, 5, 7, 9, 10, 16, 17
MLR8: Discussion Supports	4, 8, 12–16, 18, 19

Spotlight on MLR2: Collect and Display

In Lesson 6, Activity 1, students read and interpret two-digit numbers and collect language used to describe the numbers. ELPS 3.C, 3.D, 3.E, 3.F

MLR

MLR2: Collect and Display

- Collect student language used to describe the numbers, such as *ones*, *tens*, *digit*, and *two-digit number*, on the prepared *Words to Describe Numbers* chart.
- Display and update the chart during the Connect. Invite students to use language from the chart as needed throughout Unit 4 activities.

Spotlight on Meaningful Language Interactions

Listening

In **Lesson 9, Activity 1**, students listen to their partner in a discussion about what two-digit number matches each representation.

EB

Emergent Bilinguals As students complete Problem 6, use gestures to highlight and emphasize the connections between the written numeral and the representation. For example, use fingers to count the amount of tens in the representation and then point to the digit in the tens place to show how the digit relates to the drawing or connecting cubes. ELPS 1.B

Reading

In **Lesson 16, Activity 1**, students apply their understanding of comparing to write 2 true comparison statements about a pair of numbers and are encouraged to refer to reference charts for support.

EB

Emergent Bilinguals Encourage students to refer to and use the *Words to Compare* chart and the *Words to Describe Numbers* chart from previous lessons to review examples of *greater than* and *less than* statements. ELPS 3.F

Speaking

In **Lesson 15, Activity 1**, students share comparison statements comparing 2 given numbers and are pressed for details about determining a second comparison statement using the same numbers.

EB

Emergent Bilinguals Support students' understanding of English language structures by modeling a sample comparison statement. ELPS 2.C

Materials and Prep

Here are materials and resources used in this unit and where to find them.

Materials

Manipulative Kit

Hands-On

- 5-frames **(Lessons 2–5)**
- 10-frames **(Lessons 2–5, 7, 8)**
- connecting cubes **(Lessons 1, 3, 4, 6, 9–16)**
- dot cubes **(Lesson 1)**
- double 10-frames **(Lessons 1, 6)**
- number cards **(Lessons 2–5, 7, 8, 10-12)**
- two-color counters **(Lessons 1, 7, 8, 10–15, 17, 18)**

Classroom materials

- chart paper **(Lessons 3, 6, 12, 17)**
- collections of small objects **(Lessons 2–8)**
- cups **(Lessons 7, 8)**
- dry-erase markers **(Lessons 10–12, 14, 15)**
- markers **(Lessons 3, 6, 12, 17)**
- paper clips **(Lessons 11, 15)**
- sheet protectors **(Lessons 9–12, 14)**

Additional Resources

Lesson

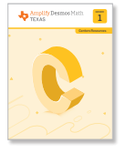
PDF
Presentation Screens
Digital

- Activity PDFs* **(Lessons 1, 3, 7, 11–13, 16)**
  *Refer to each lesson overview to see the Activity PDFs needed for the lesson.
- Work Mats, Cards, and Grids

Centers

PDF

- Center PDFs*
  *Refer to the Centers page to see the Center PDFs needed or suggested for the unit.
- Work Mats, Cards, and Grids



Assessment

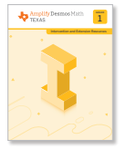
PDF
Digital

- Pre-Unit Check
- Quiz: Sub-Unit 1
- Quiz: Sub-Unit 2
- Quiz: Sub-Unit 3
- End-of-Unit Assessment
- Show What You Know

Intervention and Extension

PDF
Digital

- Mini-Lessons
- Extensions



Caregiver Support

These resources can be shared with students' caregivers. They provide background on the mathematics in this unit, as well as suggestions for supporting students at home.

Caregiver Hub

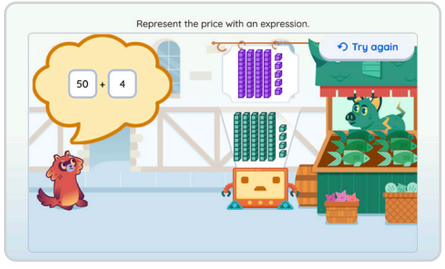
Caregiver Letter

Centers

Technology

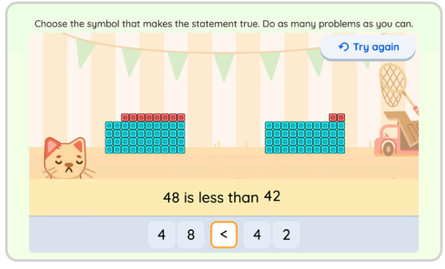
Dynamic, digital interactions are integral to Amplify Desmos Math. Powerful digital tools, such as the teacher dashboard, enable teachers to effectively facilitate rich math discussions.

A Powerful Digital Experience



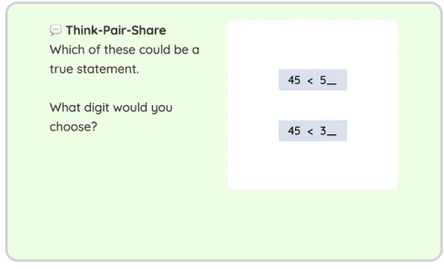
Visualize the Mathematics
(Lesson 8)

Students use multiple representations of mathematical concepts and skills in order to make connections, understand structure, and find patterns.



Receive Responsive Feedback
(Lesson 14)

Students are free to explore mathematics in interactive ways. When they try new ideas, they receive real-time responsive feedback so they can refine their thinking and move learning forward.



Collaborate With Classmates
(Lesson 14)

Students have opportunities to view, appreciate, and respond to the mathematical thinking of their classmates and work together in problem solving.

Lessons With Digital Student Screens

Digital Lessons are recommended to be taught with students on devices for a dynamic learning experience. Aligned Student Edition pages are also available for notetaking and off-device learning when needed.

Lesson		Why digital?
8	Curioso Customers	Students receive real-time feedback to help them make connections between different types of base-ten representations.
14	Purr-fect Comparisons	Students receive real-time responsive feedback that connects language, quantity, and symbols to support understanding.

Accessibility

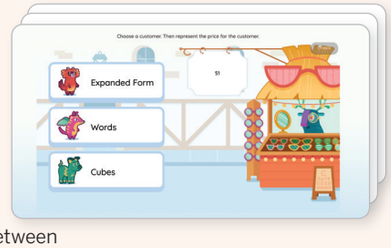
Every lesson is designed using the principles of Universal Design for Learning. Every lesson also includes support suggestions that build on students' strengths.

Universal Design for Learning

Here is one example from a lesson designed Representation.

Spotlight on language and symbols . . .

Lesson 8, Activity 1: Students explore the relationship between expanded form, words and cubes making explicit links between representations of two-digit numbers.

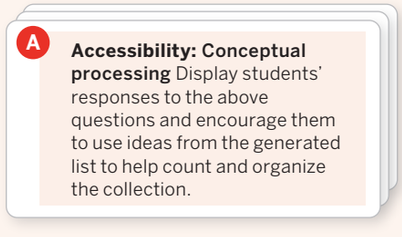


Just-In-Time Accommodations and Supports

Each Teacher Edition includes suggested supports that are based on the areas of cognitive function recognized by the Education Development Center (EDC).

Spotlight on Conceptual Processing . . .

Lesson 5, Activity 1: These Accessibility supports are provided during the Launch.



Centers

Every unit includes Centers, which are fun and engaging ways for students to practice math skills. The table shows the Center stages introduced or suggested to revisit in this unit. More information can be found in the Centers Resources book.

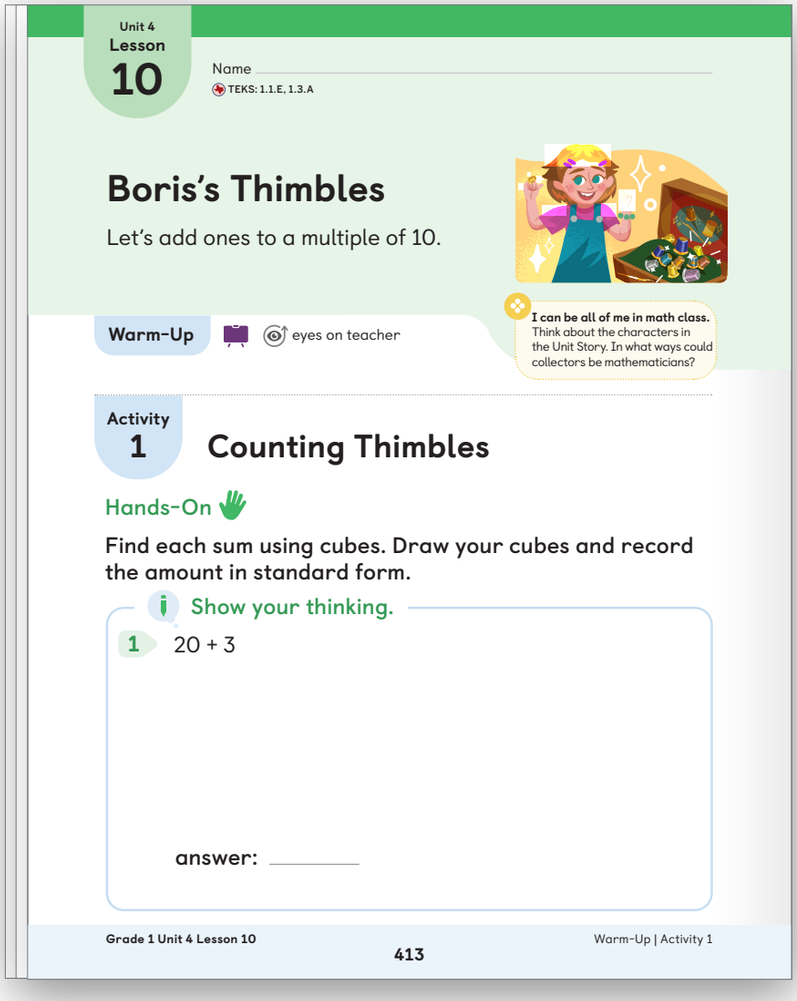
		Introduced in Activity or Center Time in	Used in Center Choice Time in	Suggested for Differentiation in	TEKS
Check It Off	Add Three Numbers	Grade 1	Lessons 2 – 5, 7 and 8	Lessons 2, 4 and 6–9	1.5.G
Counting Collections	Up to 20	Grade K	Lessons 2 – 5	Lessons 3 and 4	K.2.A, K.2.B, K.2.C
	Up to 99	Grade 1	Lessons 7 and 8	Lessons 6–8	1.2.C
Cover Up	Subtract 1 or 2	Grade 1	Lessons 17 – 19	Lessons 17–19	1.3.D
	Make 10	Grade 1	Lessons 17 – 19	Lessons 17–19	1.3.C, 1.3.D
	Add 7, 8, or 9	Grade 1	Lessons 7 and 8	Lessons 5–10	1.3.D, 1.5.G
	Add or Subtract 10	Grade 1	Lessons 11 and 12	Lessons 10–13	1.5.C
Greatest of Them All	Two-Digit Numbers	Grade 1	Lessons 17 – 19	Lessons 17–19	1.2.E, 1.2.G
How Close?	Add to 20	Grade 1		Lesson 2	1.3.D, 1.5.G, 2.4.A
	Subtract From 20	Grade 1	Lessons 2 – 5	Lessons 3 and 4	1.3.D, 1.5.G, 2.4.A
Last Number Wins	Numbers to 99 by 1	Grade 1	Lessons 11, 12, 14 and 15	Lessons 9–12 and 14–16	1.5.A
	Numbers to 99 by 10	Grade 1	Lessons 11, 12, 14 and 15	Lessons 11–16	1.5.C
Math Stories	Unknown Numbers	Grade 1		Lesson 2	1.3.B, 1.3.F, 1.5.D
Mystery Number	Two-Digit Numbers	Grade 1	Lessons 14 and 15	Lessons 13–16	Building On 1.2.B
Shake and Spill	Cover (Up to 10)	Grade 1		Lesson 5	1.3.C, 1.3.D

Professional Learning

Here is an opportunity to deepen your understanding of the math in this unit and how to teach it.

Spotlight on Conceptual Understanding

Lesson 10, Activity 1



Unit 4
Lesson
10

Name

TEKS: 1.1.E, 1.3.A

Boris's Thimbles

Let's add ones to a multiple of 10.

Warm-Up eyes on teacher

I can be all of me in math class. Think about the characters in the Unit Story. In what ways could collectors be mathematicians?

Activity
1

Counting Thimbles

Hands-On

Find each sum using cubes. Draw your cubes and record the amount in standard form.

Show your thinking.

1 20 + 3

answer: _____

Grade 1 Unit 4 Lesson 10 413 Warm-Up | Activity 1

Try This

Put on your student hat and complete Problems 1 and 2.

Questions for reflection

- This is the first time students add tens to a one-digit number using concrete and pictorial models to determine the sums.
  - » What strategies do you anticipate students will use, based on their prior experiences with addition and place value?
  - » How do you think the order in which the amounts are given in the problems will influence how students approach the problems?
- Some students may choose to count on by 1.
  - » How might you support students in using what they know about finding 10 more and adding multiples of 10 to progress toward more efficient strategies?

Other lessons that attend to Conceptual Understanding:

- **Lesson 4:** Students consider ways to use the base-ten structure of numbers to add 10 to multiples of 10 and subtract 10 from multiples of 10.
- **Lesson 12:** Students explore using place value reasoning to compare 2 two-digit numbers.

Mathematical Background

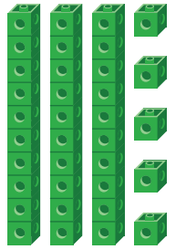
Here is an overview of the content students will learn in this unit.

Numbers to 99 and Financial Literacy

Representing Two-Digit Numbers

TEKS X.X.X, X.X.X

- Two-digit numbers can be represented using:
  - » Drawings
  - » Manipulatives (connecting cubes or base-ten blocks)
  - » **Expanded Form**
  - » **Standard Form**



3 tens 5 ones

Expanded form: 30 + 5

Standard form: 35

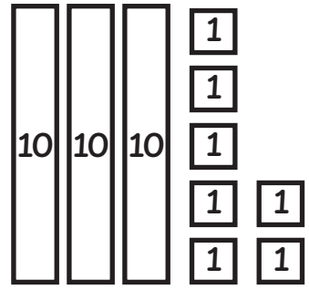
Adding Ones to a Multiple of 10

TEKS 1.3.A

- Adding ones to a multiple of 10 can be done by representing the tens and ones using concrete and pictorial models.

Find the sum using cubes. Draw your cubes and record the amount in standard form.

30 + 7



answer: 37

Comparing Numbers

TEKS 1.2.E, 1.2.G

- Comparison numbers can be done using words like greater than, less than, equal to, or symbols: <, >, and -.
- Comparison statements:
  - » Are read from left to right
  - » A comparison of two different numbers can result in two different comparison statements

35 is **greater than** 26

35 > 26

26 is **less than** 35

26 < 35

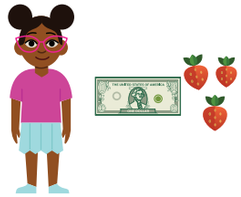
Income, Spending, and Saving

TEKS 1.9.A, 1.9.B, 1.9.C 1.9.D

- Income, spending, saving, and charitable giving are fundamental concepts of financial literacy.
  - » Income is money earned, which can be used to purchase **goods** and **services**.
  - » **Saving** money allows for accumulating more over time, while **spending** money results in having less.
  - » Charity can take different forms, such as **donating** items or raising money to donate.

Saving

Spending



Connections to Future Learning

Here is how the content in this unit connects to where your students are headed in their math journeys.

Adding and Subtracting Within 100

In this unit, students represent two-digit multiples of ten in different ways to recognize the numbers as amounts of tens. They explore strategies for adding and subtracting one or more tens from two-digit multiples of 10. **In Grade 2**, **Unit 2**, they apply this understanding to add within 100.

TEKS: 2.4.B

Example:

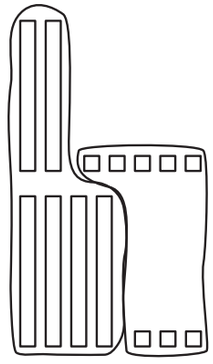
25 + 43 = 68

20 + 40 = 60

5 + 3 = 8

60 + 8 = 68

I broke apart both numbers into tens and ones. Next I added the tens to tens and the ones to ones. Then I added the total tens and ones together to find the sum.



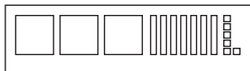
Using Place Value to Represent and Compare Numbers Up to 1200

In this unit, students develop place value understanding by representing two-digit numbers as amounts of tens and ones with tools, drawings, words, and **expanded forms**. They interpret base-ten representations of two-digit numbers. Students compare 2 two-digit numbers and record comparisons using the >, <, and = symbols. **In Grade 2**, **Unit 4**, students will extend their understanding of place value to represent, interpret the value of, and compare numbers up to 1200.

TEKS: 2.2.D

Example:

Represent 376 in each of the following ways: base-ten diagram, showing the amount of each unit, expanded form, and in words.

	3 hundreds 7 tens 6 ones
300 + 70 + 6	three hundred seventy-six

Example:

Use the symbols >, <, or = to compare the numbers.

932 __>__ 239

I compared the values in the hundreds place because hundreds have the greatest value. 932 has 9 hundreds and 239 has only 2 hundreds, so 932 has the greater value.

Saving, Deposits, and Withdrawals

In this unit, students distinguish between spending and saving. **In Grade 2**, **Unit 1**, students will calculate how saved money can grow over time, and learn that a deposit is money added to an account, and a withdrawal is money taken out.

TEKS: 2.11.A, 2.11.C

Example:

Chelsea saved money every week for a new paint brush set. The first week she saved $5. On the second week she saved $8. On the third week she saved $3 and on the fourth week she saved $9. By the end of the four weeks, how much money had Chelsea saved?

5 + 8 + 3 + 9 = ?

9 + 1 = 10

8 + 2 = 10

10 + 10 + 5 = 25

answer: ~~$25~~

Unit Story

Every unit has a Unit Story to engage students and help them make connections between math and authentic contexts.

About the Story

Steph and her mom visit a flea market in search of Curioso cards to add to Steph's collection. At the flea market, Steph meets other collectors and sees the unique things they collect. Steph also meets Prashant, who has the largest Curioso card collection she has ever seen!

Unit Story Read-Aloud

For the **Warm-Up of Lesson 1**, read aloud the Unit Story. Use the **Presentation Screens** for Lesson 1 to display the story images to introduce students to the characters.

The Math in the Story

Numbers to 99 and Financial Literacy

Students count, organize, and compare collections of objects that represent collections from the Unit Story. They interact with representations of characters' collections to develop place value understanding.

Throughout the unit . . .

- Students represent collections as amounts of tens and ones in different ways, and they compare amounts in different collections.
- Students solve addition and subtraction story problems about different collections.

Math Connections

Students will connect the math of the unit to the Unit Story in these activities:

- **Lesson 2, Activities 1 and 2**
- **Lesson 5, Activity 1**
- **Lesson 6, Activities 1 and 2**
- **Lesson 8, Activities 1 and 2**
- **Lesson 9, Activities 1 and 2**
- **Lesson 11, Activity 1**
- **Lesson 12, Activity 1**
- **Lesson 13, Activity 1**
- **Lesson 15, Activity 1**
- **Lesson 16, Activity 2**
- **Lesson 17, Activities 1 and 2**
- **Lesson 18, Activities 1 and 2**
- **Lesson 19, Activities 1 and 2**

Math Identity and Community

The Unit Story provides an opportunity for students to reflect on their math identity and share their experiences of being a part of a math community. Throughout the unit, you may wish to support students in their mathematical journey by asking them to reflect on the Math Identity and Community questions provided at the start of each lesson.

I can be all of me in math class.

Steph explored many collections. Describe a time you explored something in math class. **(Lesson 4)**

In the Unit Story, the characters are proud of collecting. What are you proud of in math class? **(Lesson 8)**

Story Moments

Lesson 2 Activity 2

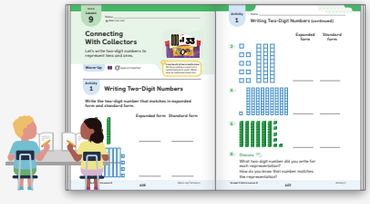
Math Connection

Steph meets guitar pick collectors, Yara and PJ. Students count a representation of PJ's collection.

Lesson 5 Activity 1

Math Connection

Students organize and count collections of Curioso cards from Prashant and his friends.



Lesson 9 Activity 1

Math Connection

Students interpret different base-ten representations of Curioso collections.

Lesson 10 Activity 1

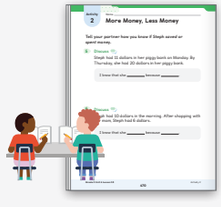
Math Connection

Students count Boris' thimbles using cubes and drawings to represent a multiple of 10 and a one-digit number.

Lesson 15 Activity 1

Math Connection

Students help Steph and her friends compare the number of Curioso cards in their collections.



Lesson 18 Activity 2

Math Connection

Students recognize when Steph saved or spent money by describing if she ended up with more or less money.

Read this aloud during the **Warm-Up of Lesson 1, using the lesson's Presentation Screens.**

Read-Aloud The Collectors

2

The Briarcliff Flea Market was full of life. Everywhere Steph looked, people were selling different things—racks of clothes, shelves of shiny rocks, even old toys.

But Steph and her mom had not come for clothes, or rocks, or even toys. They had come for Curioso cards.

3

Steph's dad had given her a pack of cards for her birthday. They weren't many, but she loved them all the same. She took them with her everywhere—to bed, to dinner, to school. She liked having them near her. It made her feel happy and warm. Now she wanted to add to her collection.

4

Together, Steph and her mom wandered the aisles. There were so many different kinds of shops with so many different kinds of shopkeepers.

There was Milton, the owner of Milton's Bits and Bobs.

His shop sold old things—old maps, old postcards, old newspapers. Some of the most interesting things were Milton's coupons. They were from a grocery store from a long time ago.

But Milton had no Curioso cards to sell.

Ask: *"What do you notice? What do you wonder?"*

5

Next, Steph and her mom met Yara of Yara's Tunes. Her tent was full of T-shirts, posters, and big round disks that play music called records.

On the table, Yara kept a giant jar of colorful plastic pieces, called picks. Musicians used them to play guitar, Yara explained. Every time Yara went to a concert, she'd search for picks to add to her jar.

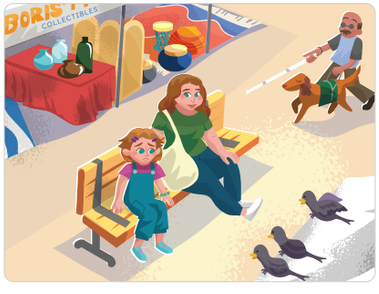
They were cool, but Yara had no Curioso cards to sell.

6

Next, Steph and her mom met Boris of Boris's Fine Collectibles.

Boris's booth was filled with beautiful objects. There were statues, vases, and shining silver spoons. But by far, the most beautiful were Boris's thimbles. They looked like tiny cups for mice to drink from. "They were used for sewing," Boris explained. People wore them on their fingers to protect from getting poked.

7



His thimbles were pretty, but Boris had no Curioso cards to sell.
By now, Steph and her mom had been wandering the flea market for a long time. Steph's legs hurt. She was thirsty. And worst of all, she was starting to get worried.

What if there were no Curioso cards anywhere? What if nobody else even liked Curioso cards?

Ask: *"What do you notice? What do you wonder?"*

8

Just then Steph heard a voice. “Don’t worry! We have plenty of cards left!”

She looked up and saw a big crowd in front of a booth. Steph took her mom’s hand and they went toward the crowd. There they came to a shop called Prashant’s Comics and Games.

9

A young man stood with a big album. But instead of pictures, the album held cards— Curioso cards! Steph and her mom made their way forward.

“Wow,” Steph said. Her eyes went big and wet. “I’ve never seen so many Curioso cards in my life.”

Prashant smiled. “It took me a long time to collect. Some of these cards were very hard to find” he said.

Ask: *“What do you notice? What do you wonder?”*

10

Steph admired all the different Curiosos. She squeezed the few cards she brought with her in her hands. “Would you sell me one of your cards?” she asked.

Prashant frowned. “I’m sorry, these cards are not for sale,” he said. “They mean too much to me.”

Then he reached into a display case and handed Steph a fresh, new pack of cards. “But I’ll give you this as a gift. From one collector to another.”

Notes:

Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Pre-Unit Check

Independent | 20 min

Facilitation: Assign the Pre-Unit Check to learn more about your students' understanding of foundational concepts and skills that will support them in Sub-Unit 1. Read aloud the problems to students as needed.

Classroom materials: Provide access to connecting cubes.

TEKS
(S) = Supporting standard
(R) = Readiness standard

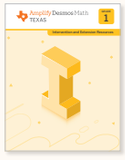
Item Analysis

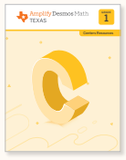
Problem(s)	Concept or skill	Preparation for	DOK	TEKS
1	Representing a teen number	Lesson 1	2	1.2.C 1.1.D
2, 3	Representing a teen number with a *10 + n* expression	Lesson 1	2	1.3.B 1.1.D

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources





Intervention and Extension Resources includes:
- Mini-Lessons • Extensions

Centers Resources includes:
- Centers

Assessment Resource PDF

Name _____ Date _____

Pre-Unit Check

Unit 1.4

1 Represent 14 as a ten and a number of ones.

Draw

Sample response shown.

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Name _____ Date _____

Pre-Unit Check (continued)

Unit 1.4

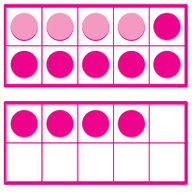
For Problems 2 and 3, find the number that makes the equation true. Sample work shown.

Show your thinking.

2 10 + 7 = 17

10 11 12 13 14 15 16 17

3 14 = 4 + 10



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D Differentiation (Pre-Unit Check)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Sub-Unit.

Sub-Unit Goals	Problem(s)	Respond to Student Thinking
Preparation for Sub-Unit 2: Understand that the 2 digits of a two-digit number represent amounts of tens and ones.	1	**Support** • **Mini-Lesson:** *Representing Teen Numbers as a Ten and Some Ones* (ML 3.05) • **Teacher Move:** Review the problem. Then provide another opportunity for students to represent teen numbers as a ten and some ones using drawings or base-ten units.
	2, 3	**Support** • **Mini-Lesson:** *Representing Teen Numbers as Equations With a Ten and Some Ones* (ML 3.06) • **Center:** *What's Behind My Back?*, *Making 20*

Watch Your Knowledge Grow (Optional)

Purpose: Students rate their understanding of the concepts that they will explore in this unit, prior to beginning the unit. Return to this page at the end of the unit and invite them to rate their understanding again to see how their knowledge has grown.

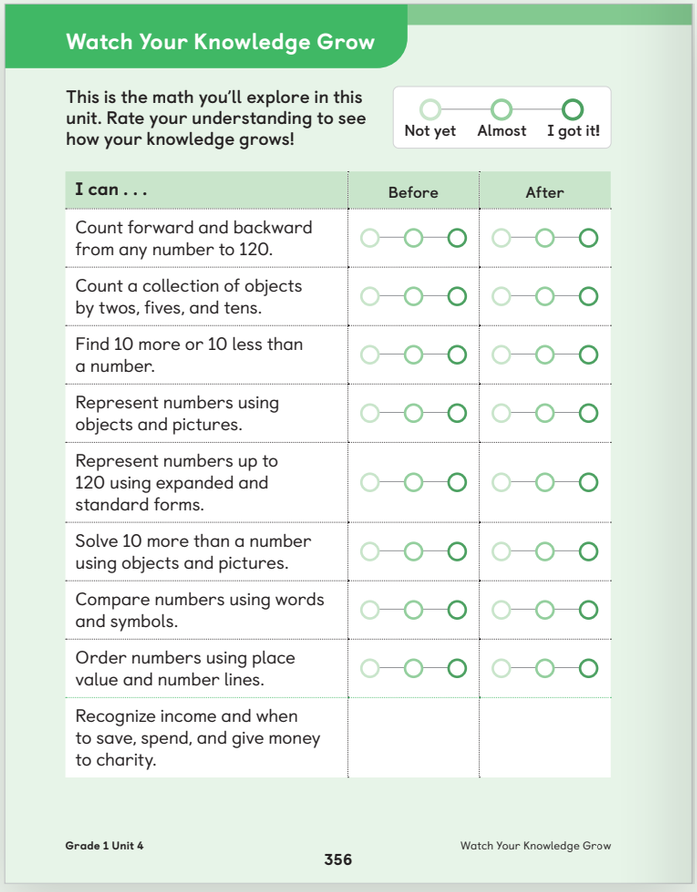
Read aloud, the instructions. Let students know they are about to explore these math concepts in the upcoming unit.

Invite students to rate their understanding of each concept prior to beginning the unit. Let them know that they will return to this page at the end of the unit to rate their understanding again. They will be able to see how their knowledge has grown! Consider asking:

- "How can we add and subtract tens?"
- "How can we represent and compare numbers to 99?"
- "How can we earn income and make decisions about money?"

EB **Emergent Bilinguals** Invite students to let you know if they are not familiar with some of the words or topics by using sentence frames such as "I don't know what ___ means yet." Then invite them to circle or highlight words that may be unfamiliar to them. Let them know that it is a normal part of learning to not be familiar with words or concepts when they are first learning about them. When they return to the page at the end of the unit, celebrate how their language development has grown. **ELPS 3.A, 3.E**

Math Identity and Community Let students know that it is a normal part of learning to not understand or be familiar with a topic prior to learning about it. Celebrate the number of 'Not yet' and 'Almost' that were selected. Remind students that this means their knowledge will increase greatly after this unit.



Watch Your Knowledge Grow

This is the math you'll explore in this unit. Rate your understanding to see how your knowledge grows!

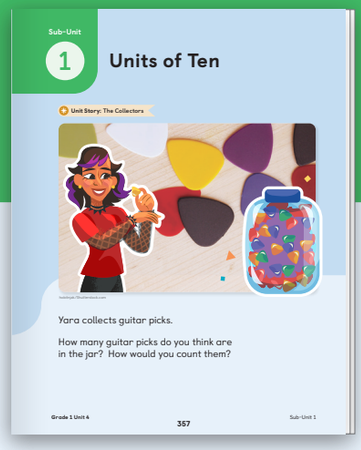
Not yet Almost I got it!

I can . . .	Before	After
Count forward and backward from any number to 120.		
Count a collection of objects by twos, fives, and tens.		
Find 10 more or 10 less than a number.		
Represent numbers using objects and pictures.		
Represent numbers up to 120 using expanded and standard forms.		
Solve 10 more than a number using objects and pictures.		
Compare numbers using words and symbols.		
Order numbers using place value and number lines.		
Recognize income and when to save, spend, and give money to charity.		

Grade 1 Unit 4 356 Watch Your Knowledge Grow

Sub-Unit 1

Units of Ten



Sub-Unit 1 Goals

- Represent the base-ten structure of two-digit multiples of 10.
- Use relationships to determine 10 more and 10 less than a multiple of 10 for numbers up to 120.

Progression of TEKS in Sub-Unit 1

- **Lessons 1–2:** Students organize and count collections.
- **Lessons 3–4:** Students represent multiples of 10 and determine 10 more or 10 less than a given multiple of 10.

Sub-Unit 1 Progression	Lesson 1*	Lesson 2	Lesson 3	Lesson 4
Number and Operations				
TEKS 1.2.A	○	○	○	●
TEKS 1.2.B	○	○	●	○
TEKS 1.2.C	●	○	●	○
Algebraic Reasoning				
TEKS 1.5.A	○	●	○	○
TEKS 1.5.B	○	●	○	○
TEKS 1.5.C	○	○	○	●

*This lesson builds toward the standard shown.

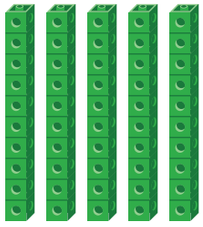
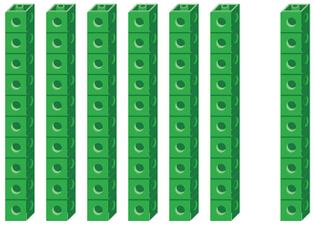
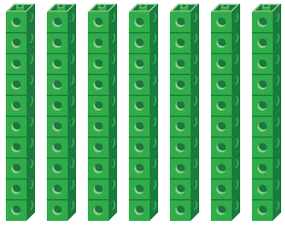
Coming Up Next

- **Sub-Unit 2, Lessons 5–10:**
  - » Numbers and Operations: **TEKS 1.2.C, 1.3.A**
  - » Algebraic Reasoning: **TEKS 1.5.A, 1.5.B**
- **Sub-Unit 3, Lessons 11–16:**
  - » Numbers and Operations: **TEKS 1.2.D, 1.2.E, 1.2.F, 1.2.G**
  - » Algebraic Reasoning: **TEKS 1.5.E, 1.5.G**
- **Sub-Unit 4, Lessons 17–19:**
  - » Numbers and Operations: **TEKS 1.3.D**
  - » Algebraic Reasoning: **TEKS 1.5.A**
  - » Personal Financial Literacy: **TEKS 1.9.A, 1.9.B, 1.9.C, 1.9.D**

Math That Matters Most

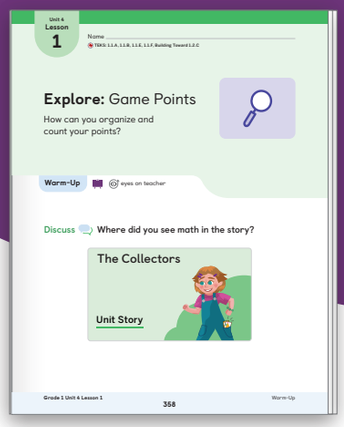
Sub-Unit 1: Represent and use the base-ten structure of two-digit multiples of 10 to determine 10 more and 10 less than a given multiple of 10 up to 120.

Progression of Strategies, Skills, or Language

Progression	For example . . .		
Interpreting different representations of two-digit multiples of 10.	 5 towers of 10 cubes is 50.	5 tens 5 tens is 50.	50 (fifty) The 5 in 50 means 50 has 5 tens.
Use any strategy to determine 10 more and 10 less than a given multiple of 10.	6 towers of 10 cubes is 60. 10 more is 70 cubes. 	8 towers of 10 cubes is 80. 10 more is 70 cubes. 	
Use patterns to determine 10 more and 10 less than a given multiple of 10.	50 When I count up by 10, 10 more than 50 is 60. When I count back by 10, 10 less than 50 is 40.		

Unit 4
Lesson
1

Student Edition pages, Manipulatives, and Presentation Screens support learning in this lesson.



Explore: Game Points

How can you organize and count your points?

Key Concepts

- **Today's Goals**
  1. **Goal:** Find the total number of points, accumulated in sets of 5 and 10.
  2. **Language Goal:** Compare strategies for organizing and counting points to consider which is most helpful. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

To build curiosity and interest from the start of the unit, students engage in a non-routine task that elicits multiple strategies and solutions. They apply their own knowledge and language to a new mathematical task. Giving students a non-routine task with multiple answers and solution paths allows them to truly engage in the mathematical practices and invites all students to see themselves as mathematicians. **(TEKS 1.1.A)**

Students consider different ways to organize and count points while playing a fluency game. They share and compare strategies to notice which strategies are the most useful when there are a lot of points to count. **(TEKS 1.1.B)**

In Kindergarten, students counted by tens, and composed and decomposed teen numbers into 10 ones and some more ones. In Unit 3, students described 10 ones as a unit called *a ten* and used this understanding to develop strategies for adding within 20. This Exploration provides an opportunity for students to explore different ways to use their understanding of counting to organize and keep track of quantities greater than 20 and find a total amount that increases in increments of 5 or 10.

Caregiver Connection

Students might enjoy playing games at home and sharing ideas about how to keep track of and count each player's points. They can be encouraged to share their ideas for recording the points and finding the total amount of points each player has after each round.

Vocabulary

Review Vocabulary

a ten

TEKS

Building Toward

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Math Process Standards: 1.1.A, 1.1.B, 1.1.E, 1.1.F

ELPS: 1.A, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 3.H

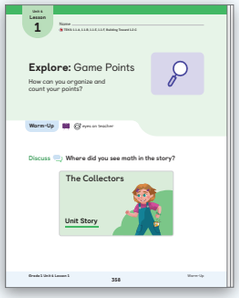
Lesson at a Glance 60 min

TEKS: 1.1.A, 1.1.B, 1.1.E, 1.1.F, Building Toward 1.2.C

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine after hearing the Unit Story read aloud. Because there is no single correct response, this invitational routine allows all students to share their mathematical curiosity about the unit narrative to which they will return throughout the unit.

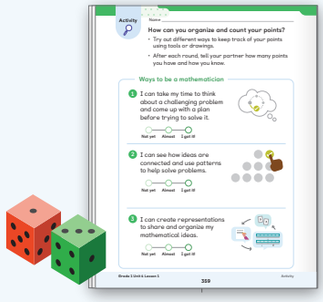


Activity

Pairs | 50 min

Students play a game in which they take turns rolling dot cubes and finding the sum of the 2 numbers. After each round, the player with the greater sum earns 10 points and the player with the smaller sum earns 5 points. Students consider different ways to keep track of their points to determine how many points each player has at the end of each round.

Manipulative Kit: connecting cubes (optional), dot cubes, double 10-frame (optional), two-color counters (optional)
Materials: Unit Story, *The Collectors*, *Explore Organizer* PDF (optional), Graphic Organizer PDF, *Two-Column Table* (optional)



Opportunities For Extension *(optional)*

This lesson ends with students describing which method they think is the most useful for keeping track of and counting large quantities of points. Students may enjoy the opportunity to compare different counting and addition strategies.

Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity** to support math language acquisition.

- ✓ Cognates
- ✓ Sentence frames
- ✓ Visuals

ELPS 1.E, 2.B, 2.C, 2.E, 2.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students hear a read aloud of *The Collectors*. They notice and wonder about mathematical situations in the story.

1 Launch

Display the cover of the Unit Story, *The Collectors*.

Use the Think-Pair-Share routine. Activate students' background and prior experiences by asking, "What are some things you could collect?"

Read aloud the Unit Story from this Teacher Edition while displaying the illustrations on Screens 2–10. Demonstrate reading with prosody to illustrate expression, rising and falling intonation patterns, pitch, and timing. ELPS 1.A, 3.H

Use the Notice and Wonder routine.

Pause on Screens 4, 7, and 9. Ask, "What do you notice? What do you wonder?"

2 Connect

Use the Think-Pair-Share routine. Ask, "Where did you see math in the story?"

Record students' responses as they share.

Say, "In this unit, you will organize and count some collections, just like the collectors in the story. Today, we will play a game where you will organize and count points."

Students might say . . . ELPS 2.B

I notice Boris has lots of thimbles.

I notice that Yara's picks fill up the whole jar.

I wonder why people use guitar picks and not just their fingers.

I wonder if Boris uses his thimbles.

I wonder which of Prashant's cards were hard to find.

Pairs | 50 min

Activity How can you organize and count your points?

Purpose: Students play a game to explore and compare different ways to organize and count large amounts of points.

Presentation Screens

Materials

Lesson Resources:

- Provide students with access to the Graphic Organizer PDF, *Two-Column Table* and the *Explore Organizer* PDF. (optional)

Manipulative Kit:

- Distribute 2 dot cubes to each pair.
- Provide students with access to connecting cubes, double 10-frames, and two-color counters. (optional)

Make It Your Own!

It is suggested that students play the game described in the Launch, but students can play another game in which they must keep track of points after each round.

1 Launch

Ask, "Steph saw many things to count at the flea market. What things could she have counted?"

Say, "Just like Steph, you could count things you see when you visit new places. You could also count while playing games."

Use the Think-Pair-Share routine. Ask, "What are different ways that you have counted points when playing games?"

Say, "Today, you will play a new game. You and your partner will take turns rolling 2 dot cubes and finding the sum. After each round, the player with the larger sum earns 10 points. The player with the smaller sum earns 5 points. Each game is 5 rounds. Each time you begin a new game, try a new way of keeping track of your points."

Read aloud the directions.

Provide access to connecting cubes, double 10-frames, two-color counters, and the Graphic Organizer PDF, *Two-Column Table*.

2 Monitor

As students complete the activity, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How could you record the number of points you earned after the first round?"
- Ask, "What counting patterns might help you figure out your total number of points?"

A **Accessibility: Executive functioning** Invite 2 students to demonstrate how to play a round of the game. After both students roll the dot cubes, ask the class which sum is larger. Then review the points each student earned.

3 Connect

Invite students to share different strategies they used to organize and count their points. Select and sequence their responses in the order shown in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "Which way of organizing and counting would be most helpful if you played the game for 5 more rounds? Why?"

EB **Emergent Bilinguals** Invite students to begin partner interactions by restating their partner's response, in their own words, before adding their own ideas to the discussion. **ELPS 1.E, 2.C, 2.D, 2.F**

Invite students to share their reflections. Provide the *Explore Organizer* PDF to students who wish to write or draw their reflections.

Say, "You found different ways to organize and count the amount of points you earned by using your understanding of counting and making 10. In this unit, you will think more about counting strategies and use what you know to solve problems with larger numbers."

Student Edition

Activity

Name _____

How can you organize and count your points?

- Try out different ways to keep track of your points using tools or drawings.
- After each round, tell your partner how many points you have and how you know.

Ways to be a mathematician

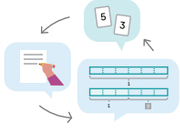
1. I can take my time to think about a challenging problem and come up with a plan before trying to solve it.

Not yet Almost I got it!

2. I can see how ideas are connected and use patterns to help solve problems.

Not yet Almost I got it!

3. I can create representations to share and organize my mathematical ideas.



Not yet Almost I got it!

Grade 1 Unit 4 Lesson 1 359 Activity

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Count all or count on by 1 to find the total.	○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○ **5, 6, 7, ..., 28, 29, 30** ***I have 30 points.***	**Strengthen** Ask, "How could you find the total without counting by 1?"
Count groups of 10 by 10 and then count on by 1 to find the total.	○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○ ○○○○○ **10, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30** ***I have 30 points.***	**Strengthen** Ask, "You counted some groups by 10. Are there any groups you could combine to make more groups of 10?"
Combine groups of 5 to make 10 and count by 10.	5 10 10 5 10 **10, 20, 30** ***I have 30 points.***	**Stretch** Ask, "What addition equation could you write to represent your total points?"

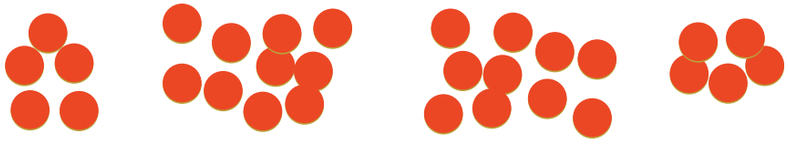
Activity Sample Student Work

Students will likely represent their answer to the Explore question in different ways. Because this is the beginning of the unit, there is no expectation for students to organize or count their points in a specific way.

How can you organize and count your points?

Sample student responses:

Sample response 1



I made piles of counters to represent my points for each round.

Sample response 2

○○○○○

○○○○○
○○○○○

○○○○○
○○○○○

○○○○○

I drew circles to represent my points for each round.

Sample response 3

(5) (10) (10) (5)

I wrote down the number of my points for each round.

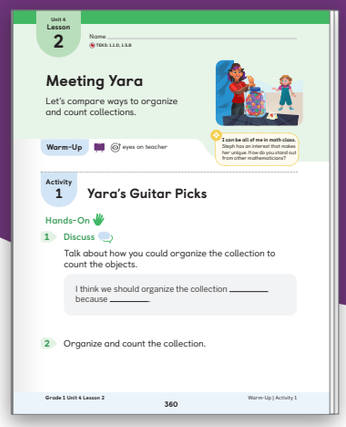
Sample response 4

~~5~~ ~~15~~ ~~25~~ 30

I found the total of my points after each round.

Unit 4
Lesson
2

Student Edition pages and Presentation Screens support learning in this lesson.



Meeting Yara

Organizing and Counting Collections in Groups of 10

Let's compare ways to organize and count collections.

Key Concepts

Today's Goals

1. **Goal:** Organize and count collections of objects that are multiples of 10 within 80.
2. **Language Goal:** Explain and compare strategies for organizing and counting a collection of objects. **(Listening, Speaking, and Writing)** **ELPS 1.E, 2.E, 2.F, 4.D, 4.F**

Connections and Coherence

Students organize and count collections of objects in which the total is a multiple of 10. They share different ways of organizing and counting to recognize that the total is the same, regardless of how the objects are organized or counted. Students then organize, count, and compare a different collection of objects to notice that it can be helpful to organize and count by groups of 10. **(TEKS 1.1.D)**

Prior Learning

In Kindergarten, students counted by 1 and 10 up to 100. In Unit 3, students learned that *a ten* is a unit made up of 10 ones. In Lesson 1, students counted out groups of 5 and 10 and explored different ways to keep track of the total amount.

Future Learning

In Lesson 3, students will explore and interpret different base-ten representations of multiples of 10 within 100.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of strategies for counting quantities greater than 20.

Vocabulary

Review Vocabulary

a one/ones

a ten

TEKS

Addressing

1.5.B

Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.

Also Addressing: 1.5.A

Math Process Standards: 1.1.D, 1.1.F

ELPS: 1.E, 2.B, 2.D, 2.E, 2.F, 3.F, 4.C, 4.D, 4.F

Building On

K.5.A

Building Math Identity

I can be all of me in math class.
Steph has an interest that makes her unique. How do you stand out from other mathematicians?

Invite students to reflect on this question as they complete this lesson.

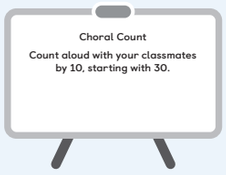
Lesson at a Glance 60 min

TEKS: 1.1.D, 1.1.F, 1.5.A, 1.5.B

Warm-Up Fluency

Whole Class | 10 min

Students use the **Choral Count** routine, in which they count as a class by 10, 5, and 2. As the count is displayed students may notice patterns and consider why those patterns or structures show up. **(TEKS 1.1.F)**

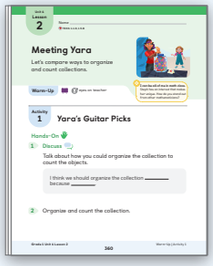


Activity 1

Pairs | 15 min

Students organize and count a collection of 40 objects to notice that the total number of objects is the same regardless of how they are organized or counted.

Manipulative Kit: double 10-frames (optional)
Materials: collections of 40 small objects
Additional Prep Assemble: sets of 40 small objects, one set per pair



Activity 2

Pairs | 15 min

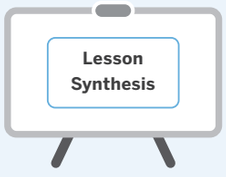
Students count a collection of 80 objects and compare counting strategies. They notice that it can be helpful to organize large collections into groups of 10 and then count by 10 to find the total.

Manipulative Kit: double 10-frames (optional)
Materials: collections of 80 small objects
Additional Prep Assemble: sets of 80 small objects, one set per pair

Synthesis

Whole Class | 5 min

Students review and reflect on why it is helpful to organize and count large quantities by 10.

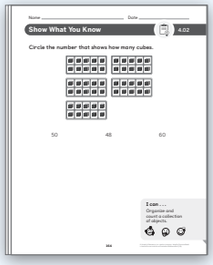


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by choosing the number that shows how many cubes.

Materials: *Show What You Know* PDF

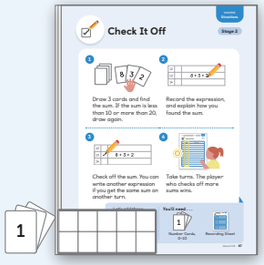


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Check It Off
- Counting Collections
- How Close?



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 4.C, 4.D, 4.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** and **write** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** and **write** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** and **write** using a variety of sentence types.	Students **listen** to spoken English and **speak** and **write** using longer sentences. Exemplar responses are provided.

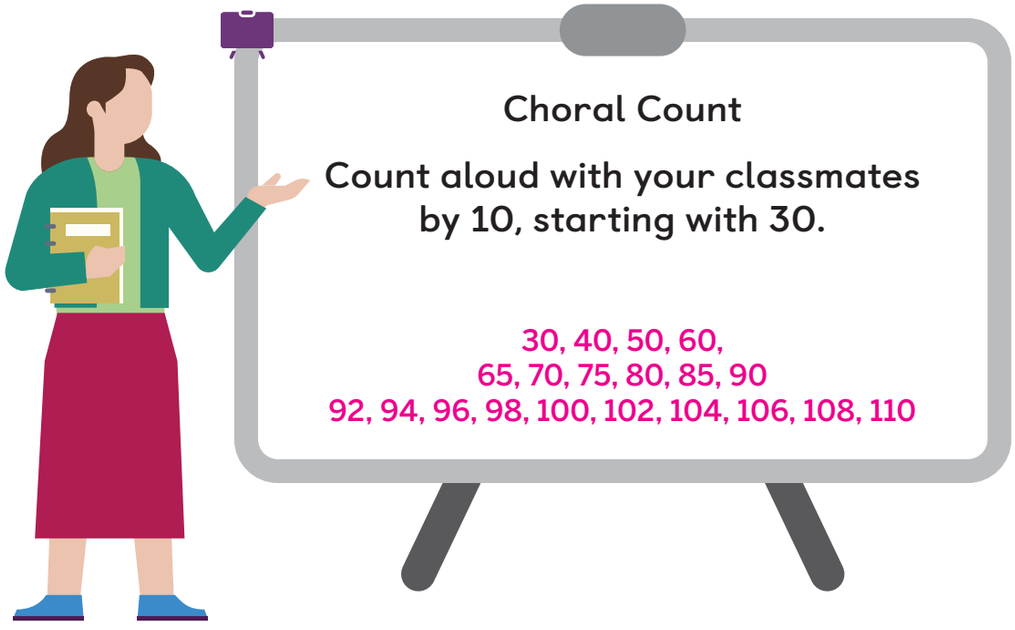
Whole Class | 10 min

Presentation Screen 1

Warm-Up Choral Count

Fluency

Purpose: Students count by 10 from 30 to 60, count by 5 from 60 to 90, and count by 2 from 90 to 110 to notice patterns.



1 Launch

Use the Choral Count routine.

Say, "Let's count by 10, starting at 30 and ending at 60."

Display each number as students count.

Say, "Now, let's count 5, starting at 60 and ending at 90. Then let's count by 2, starting at 90 and ending at 110."

Ask, "What patterns do you see?"

2 Connect

Record students' responses as they share. Consider highlighting different patterns using different colors.

Ask, "Who can describe a pattern a classmate shared in their own words?"

Say, "You will use what you know about counting to organize and count collections of objects."

Students might say . . . ELPS 2.E

I notice that each number from 30 to 60 has a 0 at the end.

I notice that each number before 100 has 2 numbers.

I notice that when we count by 5, the numbers end in 0 or 5.

I notice that the numbers after 100 have 3 numbers.

Pairs | 15 min

Activity 1 Yara's Guitar Picks

Purpose: Students compare ways of organizing a collection of 40 objects to recognize that the total number is the same, regardless of how the objects are organized and counted.

Presentation Screens

Materials

- Display and read aloud page 4 of the Unit Story, *The Collectors*.

Manipulative Kit:

- Provide students with access to double 10-frames (optional).

Classroom materials:

- Distribute one collection of 40 small objects to each pair.

1 Launch

Display and read aloud page 4 of the Unit Story.

Say, "When Steph met Yara at the Briarcliff Flea Market, she asked her how many guitar picks were in her collection. Yara said she had just added some to her collection, so she would need to count them to know for sure."

EB **Emergent Bilinguals:** Consider sharing a picture of someone using a guitar pick to increase access to the task. **ELPS 3.F**

Display a collection of 40 objects.

Say, "These objects represent the guitar picks in Yara's collection."

Read aloud Problems 1 and 2.

Provide access to double 10-frames.

A **Accessibility: Executive functioning** Invite pairs to brainstorm a plan for how they will organize and count the objects before they begin. Circulate as they plan and ask clarifying questions, as needed.

2 Monitor

After students have completed **Problem 2**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "In your own words, what do you need to discuss?"
- Ask, "What tool could you use to organize the objects?"

3 Connect

Invite students to share how they organized and counted the objects. Select students to showcase a variety of ways of organizing and counting, using the *Differentiation* table as a guide. After each student shares, record the number 40 to show the total number of objects.

Use the Think-Pair-Share routine. Ask, "What is the same about how students organized and counted the objects? What is different?"

Key Takeaway: Say, "You can organize and count a collection in different ways and the total number of objects will be the same."

Student Edition

Unit 4
Lesson
2

Name

TEKS: 1.1.D, 1.5.B

Meeting Yara

Let's compare ways to organize and count collections.

I can be all of me in math class. Steph has an interest that makes her unique. How do you stand out from other mathematicians?

Warm-Up eyes on teacher

Activity 1

Yara's Guitar Picks

Hands-On

1 Discuss

Talk about how you could organize the collection to count the objects.

I think we should organize the collection _____ because _____.

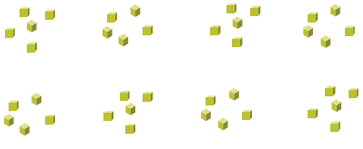
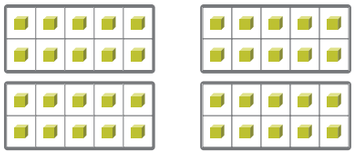
Oral activity: No writing expected.

2 Organize and count the collection.

Grade 1 Unit 4 Lesson 2 360 Warm-Up | Activity 1

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Organize the objects in a line.	1, 2, 3, ..., 40	**Support** Ask, "How could you organize the objects in a different way?"
Organize some or all of the objects in piles.	 5, 10, 15, ..., 40	**Strengthen** Ask, "How could you use double 10-frames to organize the objects?"
Organize the objects using 10-frames.	 10, 20, 30, 40	**Stretch** Ask, "How did organizing the objects in 10-frames help you find the total?"

Pairs | 15 min

Activity 2 PJ's Guitar Picks

Purpose: Students compare strategies for organizing and counting a collection of 80 objects to notice that counting by 10 is an efficient strategy for counting large quantities.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to double 10-frames (optional).

Classroom materials:

- Distribute one collection of 80 small objects to each pair.

Short on time? Consider modifying the activity so that groups share their responses to Problem 5 verbally.

1 Launch

Say, "After Steph helped Yara count her guitar picks, Yara's friend, PJ, arrived at the flea market. PJ had an even bigger collection of guitar picks than Yara! He asked Yara and Steph to help him count his collection."

Display a collection of 80 objects.

Say, "These objects represent the guitar picks in PJ's collection."

Read aloud Problems 3–5.

Provide access to double 10-frames.

2 Monitor

After students have completed **Problem 4**, refer to the **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What were some of the ways your classmates organized and counted the objects that represented Yara's guitar picks?"
- Ask, "What tool could you use to organize the objects to count them?"

3 Connect

MLR This Connect is structured using the *MLR7: Compare and Connect* routine. ELPS 1.E, 2.B, 2.D, 2.E

Invite pairs to share how they organized and counted the objects. Select and sequence their responses in the order shown in Rows 1 and 3 in the *Differentiation* table.

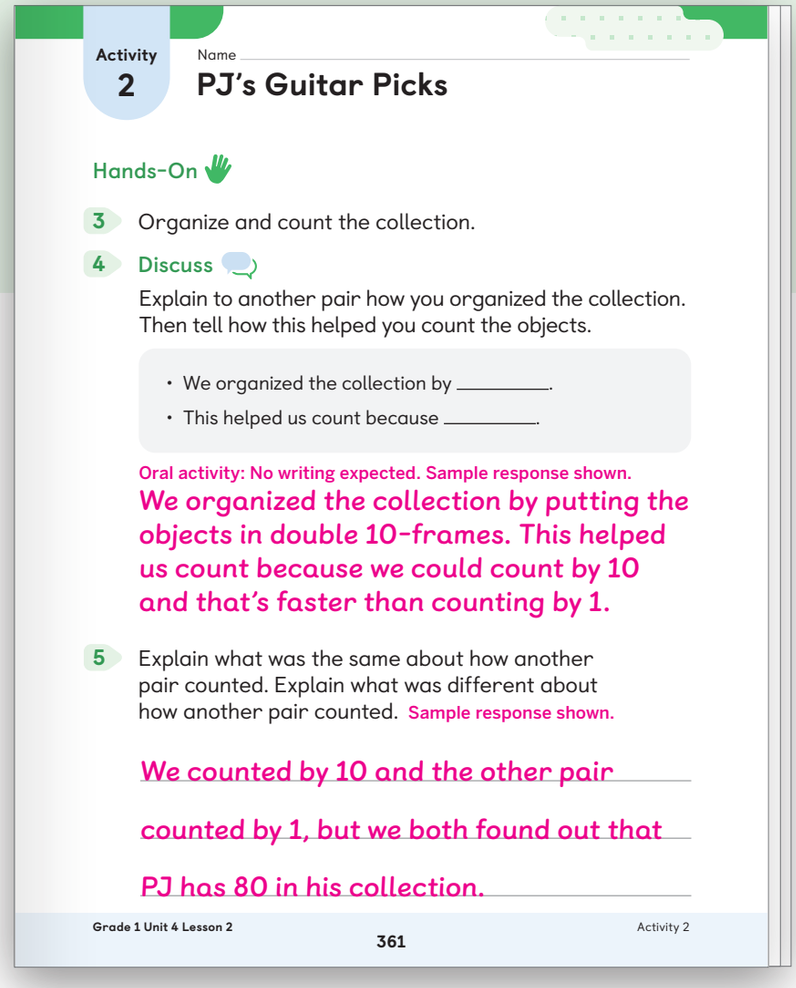
Use the Think-Pair-Share routine. Ask:

- "What is the same about these ways of counting?"
- "What is different about these ways of counting?"
- "Why might someone choose to organize objects into groups of 10?"

EB **Emergent Bilinguals** To support students in writing a response to Problem 5, invite them to use high-frequency words, such as "counted by", and vocabulary terms, such as "ten" or "one." ELPS 4.C

Key Takeaway: Say, "Organizing objects into groups of 10 is helpful because you can count by 10 to find how many."

Student Edition



Activity 2

Name _____

PJ's Guitar Picks

Hands-On

3 Organize and count the collection.

4 Discuss

Explain to another pair how you organized the collection. Then tell how this helped you count the objects.

- We organized the collection by _____.
- This helped us count because _____.

Oral activity: No writing expected. Sample response shown.

We organized the collection by putting the objects in double 10-frames. This helped us count because we could count by 10 and that's faster than counting by 1.

5 Explain what was the same about how another pair counted. Explain what was different about how another pair counted. Sample response shown.

We counted by 10 and the other pair counted by 1, but we both found out that PJ has 80 in his collection.

Grade 1 Unit 4 Lesson 2 361 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Explain how they organize and count by 1.	***We organized the objects into lines because we could make sure we counted each one.***	S **Strengthen** Ask, "How could you use double 10-frames to organize and count the collection?"
Explain how they organize and count by 10.	***We organized the objects into groups of 10 because we could count by 10.***	S **Strengthen** Ask, "Why did you choose to count by 10?"
Explain how they organize and count by 10, including their reasoning.	***We organized the objects into groups of 10 because we could count by 10, which is faster than counting by 1.***	S **Stretch** Ask, "When might you choose to count a collection by 1? When might you choose to count a collection by 10? Why?"

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: When counting large quantities of objects, organizing the objects into groups of 10 allows counting by 10.

Ask, "Both of these collections have the same amount. Which collection do you think you could count more easily? Why?"

Say, "When you are counting a large collection, organizing objects into groups of 10 can be helpful because you do not have to say every number as you count the objects."

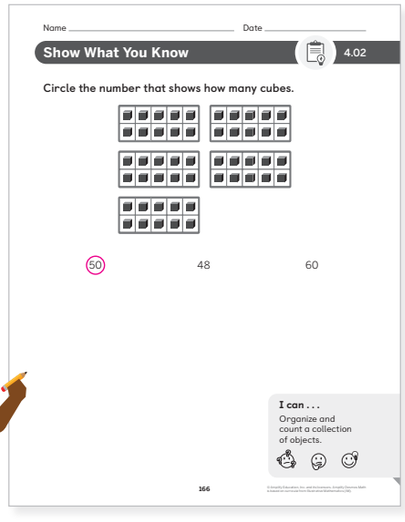
Say, "Count by tens to find the total number of objects. Then tell your partner how many."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.02

Circle the number that shows how many cubes.

50 48 60

I can . . .
Organize and count a collection of objects.

166

Today's Goals

1. **Goal:** Organize and count collections of objects that are multiples of 10 within 80.
   - In the *Show What You Know*, students counted a collection of 50 items.
2. **Language Goal:** Explain and compare strategies for organizing and counting a collection of objects. **(Listening, Speaking, and Writing)** ELPS 1.E, 2.E, 2.F, 4.D, 4.F

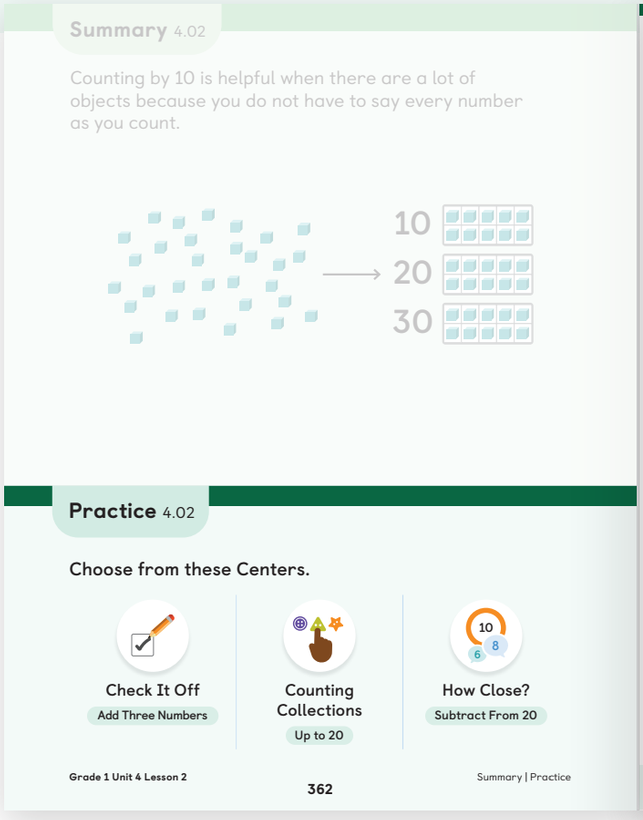
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.02

Counting by 10 is helpful when there are a lot of objects because you do not have to say every number as you count.

10
20
30

Practice 4.02

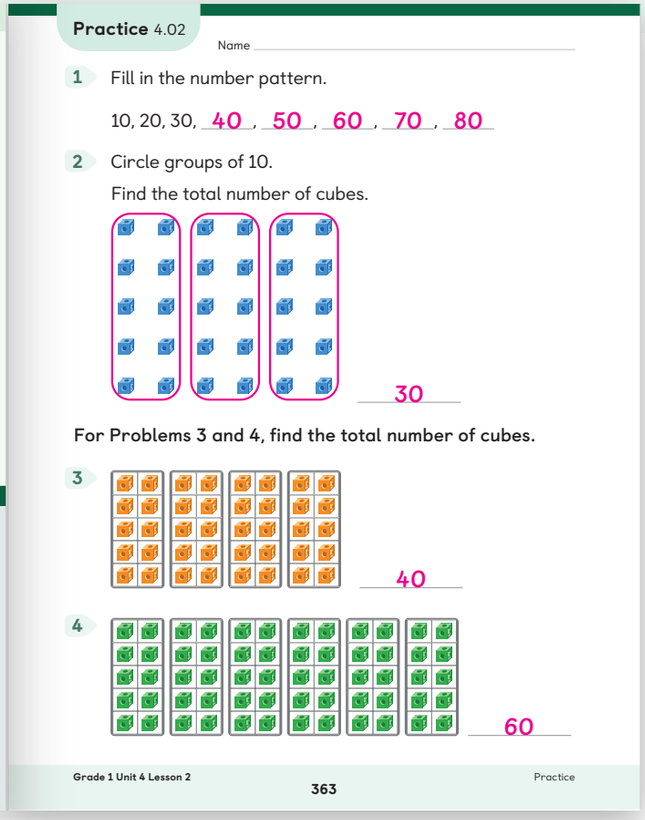
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 20

How Close?
Subtract From 20

Grade 1 Unit 4 Lesson 2 362 Summary | Practice



Practice 4.02

Name _____

1 Fill in the number pattern.

10, 20, 30, 40, 50, 60, 70, 80

2 Circle groups of 10.

Find the total number of cubes.

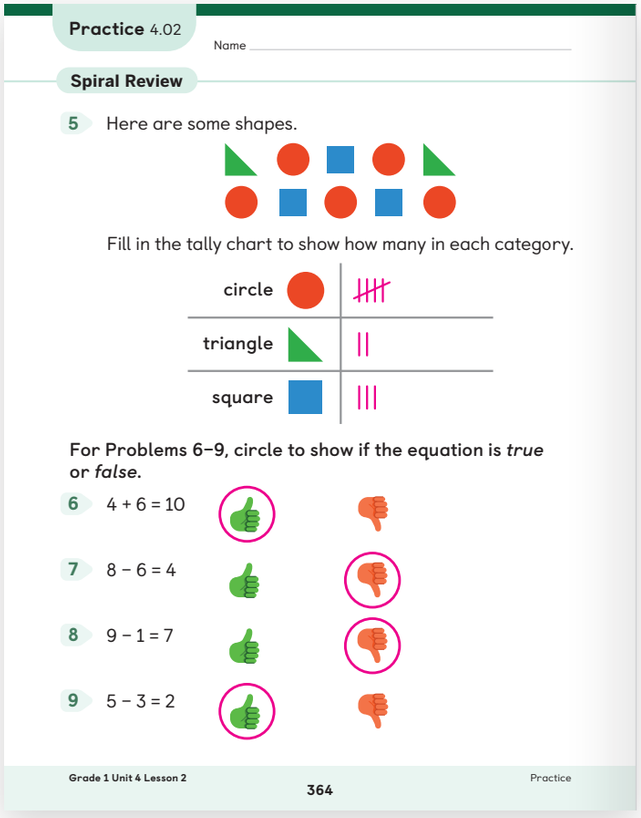
30

For Problems 3 and 4, find the total number of cubes.

3 40

4 60

Grade 1 Unit 4 Lesson 2 363 Practice



Practice 4.02

Name _____

Spiral Review

5 Here are some shapes.

Fill in the tally chart to show how many in each category.

circle	𝍸
triangle	||
square	|||

For Problems 6–9, circle to show if the equation is *true* or *false*.

6 4 + 6 = 10

7 8 − 6 = 4

8 9 − 1 = 7

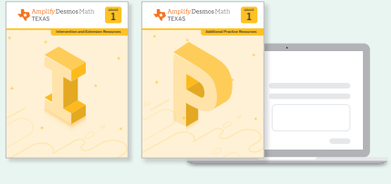
9 5 − 3 = 2

Grade 1 Unit 4 Lesson 2 364 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	1.5.B
Spiral Review			
	5	1	1.8.A
Fluency	6–9	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Check It Off

Add 3 Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-unit 3.

Counting Collections

Up to 20

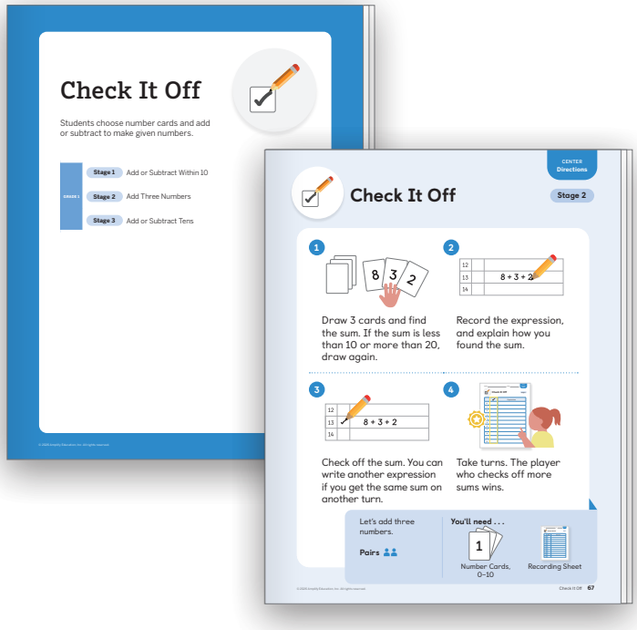
Pairs | 15 min | K.2.A, K.2.B, K.2.C

Students count a collection of up to 20 objects.

Materials

- 5-frames, 10-frames **(Manipulative Kit)**
- collections of objects (up to 20 per pair) **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

How Close?

Subtract From 20

Pairs **15 min** | **1.3.D, 1.5.G, 2.4.A**

Students subtract 3 numbers to practice subtracting within 20.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 4.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 2

Lesson Goal: Organize and count collections of objects that are multiples of 10 within 80.

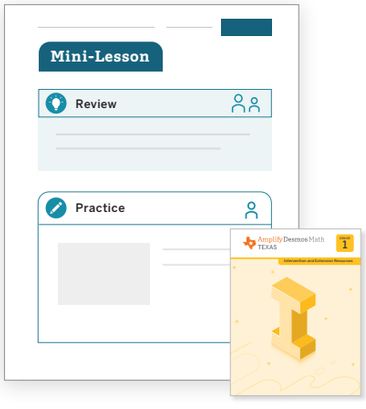
Support

Provide targeted intervention for students by using these resources.

If students organize the objects in a line and count by 1:

Respond:

- Assign the *Counting Groups of 10* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 1 *Differentiation: Teacher Moves* table.



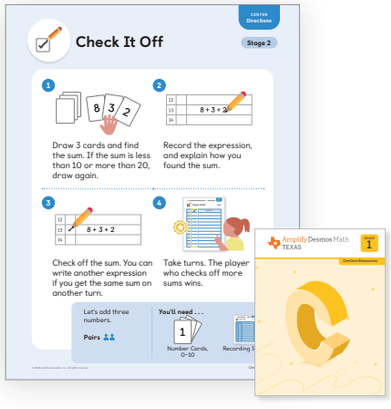
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students organize some or all of the objects in equal groups, count some by the number in each group, and count on by 1 for the remaining objects:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  How Close?: Add to 20
  Math Stories: Unknown Numbers
- Have students complete **Lesson 2 Practice**. | 15 min
- **Item Bank**



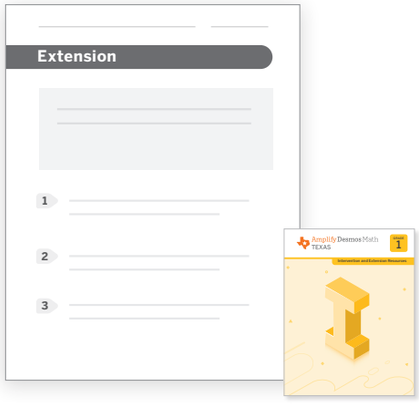
Stretch

Challenge students and extend their learning with these resources.

If students organize objects in groups of 10 and count all by 10:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

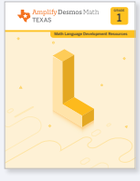


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines

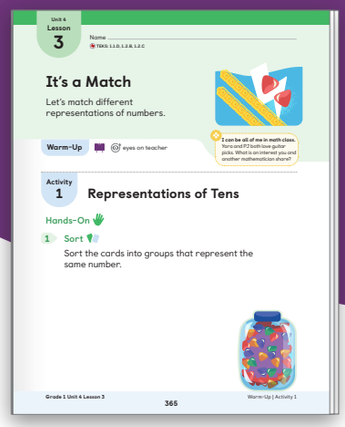


Professional Learning

Identify who has been sharing their ideas in class lately. Make note of students whose ideas have not been shared and look for an opportunity for those students to share their thinking in the next lesson.

Unit 4
Lesson
3

Student Edition pages, Manipulatives, and Presentation Screens support learning in this lesson.



It's a Match

Matching Different Representations of the Same Multiple of 10

Let's match different representations of numbers.

Key Concepts

Today's Goals

1. **Goal:** Interpret base-ten representations of two-digit multiples of 10.
2. **Language Goal:** Explain how different base-ten representations show the amount of tens in a multiple of 10. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students explore and interpret different base-ten representations of multiples of 10, including pictures of towers of 10, connecting cubes, numbers, and words. They sort representations based on the numbers they represent to recognize that multiples of 10 are made up of an amount of **tens**. Students explain how different representations show the same amount of tens. **(TEKS 1.1.D)**

Prior Learning

In Lesson 2, students organized and counted large collections of objects in different ways. They compared counting strategies and discussed how it can be helpful to organize and count a quantity by 10.

Future Learning

In Lesson 4, students will explore strategies for adding 10 and subtracting 10 from multiples of 10 within 100. In Lesson 8, students will be introduced to the term *digit* and begin to explore and formally discuss the values of the digits in two-digit numbers.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of the base-ten structure of multiples of 10.

Vocabulary

New Vocabulary

estimate

tens

Review Vocabulary

a ten

TEKS

Addressing

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Also Addressing: **1.2.B**

Math Process Standards: 1.1.D, 1.1.G

ELPS: 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 3.E, 3.F

Building Toward

2.2.B

Building Math Identity

I can be all of me in math class.
Yara and PJ both love guitar picks. What is an interest you and another mathematician share?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

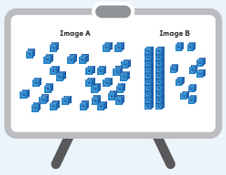
60 min

TEKS: 1.1.D, 1.1.G, 1.2.B, 1.2.C

Warm-Up

Whole Class | 10 min

Students are introduced to the **Estimation Exploration** routine, in which they are asked to **estimate** a quantity. This routine gives students a low-stakes opportunity to share a mathematical claim and the thinking behind it, as well as an opportunity to revise their estimates when given more information. **(TEKS 1.1.G)**



Activity 1

Small Groups | 15 min

Students sort cards to make connections between different representations of multiples of 10. During the Connect, the class creates a *Representations of Tens* chart to discuss the matches. Students can refer to this chart during activities throughout Sub-Unit 1.

Materials: Activity 1 PDF, chart paper, markers, *Representations of Tens* chart (teacher made)

Additional Prep Cut out: Activity 1 PDF

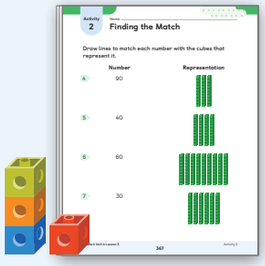
Prepare: *Representations of Tens chart*

Activity 2

Pairs | 15 min

Students match pictures of towers of 10 cubes with the multiple of 10 the picture represents. Then they use towers of 10 cubes to represent 50. Students notice they can determine the amount of tens in a number by counting by 10 or by noticing a relationship between the amount of tens and the written number.

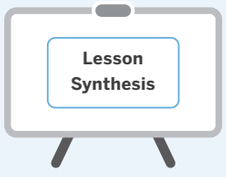
Manipulative Kit: connecting cubes



Synthesis

Whole Class | 5 min

Students review and reflect on how different representations show the same multiple of 10.

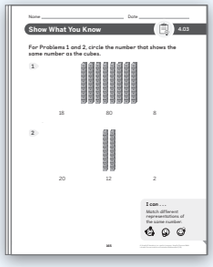


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by selecting the number that matches the representation.

Materials: *Show What You Know* PDF

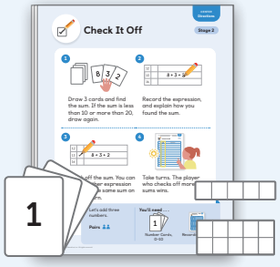


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Check it Off
- Counting Collections
- How Close?



Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

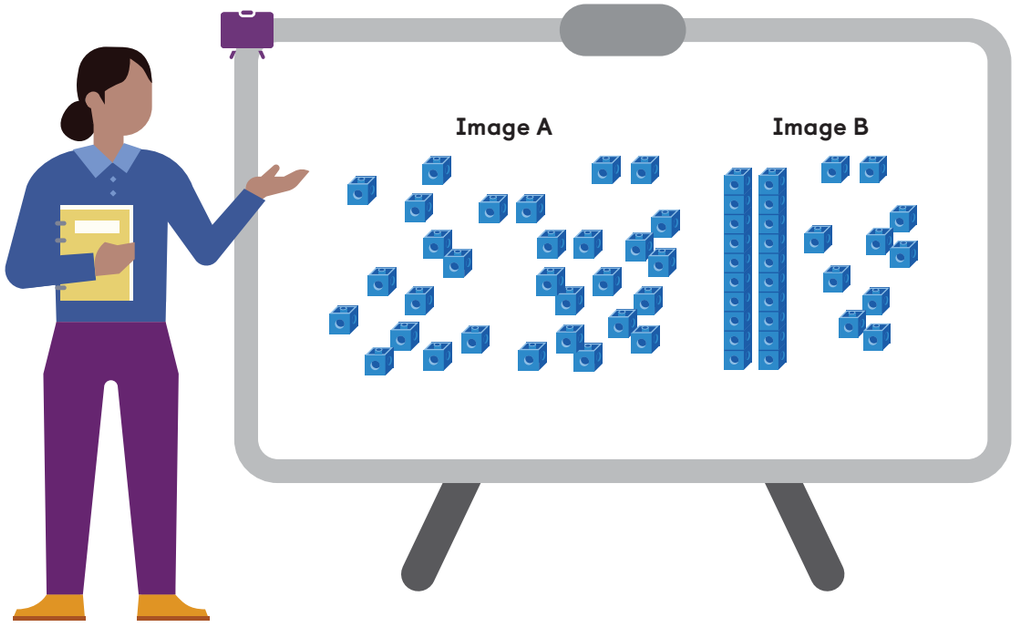
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Estimation Exploration

Purpose: Students estimate the number of connecting cubes represented first as individual cubes in a scattered arrangement and then organized as tens and ones to begin thinking about how to represent and count tens.



1 Launch

Display Image A.

Use the Estimation Exploration routine.

Say, "Today, we are doing a new warm-up called *Estimation Exploration*. Look at the image and make a guess about how many cubes there are without counting."

Ask, "About how many cubes do you think are in this image? How did you come up with your guess?"

2 Connect

Record students' responses as they share.

Say, "When you make a guess about how many using what you notice, you are making an **estimate**."

Display Image B.

Ask, "Images A and B show the same number of cubes. Based on Image B, does anyone want to revise their estimate? What made you change your mind?"

Say, "You will see many different representations of numbers as you work today, including connecting cube representations."

Students might say . . . ELPS 2.C, 2.D

A: I think there are about 25 cubes because it looks like a lot.

A: I see more than 10 cubes, so I think there are probably about 20.

B: At first, I thought there were 25, but the 2 towers make 20, and there are more than 5 other cubes. My new estimate is 28.

B: First, I guessed 20, but now I see there are more than 20. I want to change my estimate to 30.

Small Groups | 15 min

Activity 1 Representations of Tens

Purpose: Students match different representations of the same number to build their understanding of the structure of multiples of 10.

Presentation Screens

Materials

Lesson Resources:

- Distribute one set of pre-cut cards from the Activity 1 PDF to each group.

Classroom materials:

- Use chart paper, markers, and the Visual Display PDF, *Representations of Tens* (sample) **(Lesson Resources)** to create the *Representations of Tens* chart. Display the chart during the Connect.

Short on time? Consider omitting Problem 2 and having students share their responses for Problem 3 as a class.

1 Launch

Arrange students in groups of 3.

Distribute the Activity 1 PDF cards.

Use the Notice and Wonder routine. Have students describe what they notice and what questions they have about the cards.

Read aloud Problems 1 and 2.

A **Accessibility: Memory and attention** Chunk this task into smaller, more manageable parts by having pairs start with only the cards showing cube towers and tens. After matching those cards, provide the third sub-set of cards showing the numbers written in words.

2 Monitor

After students have completed **Problem 1**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "Describe what this card shows. What number is represented?"
- Ask, "Find a card that is like this card in some way. Does that card represent the same number?"

MLR **MLR1: Stronger and Clearer Each Time** ELPS 1.E, 2.E

After groups complete Problems 1 and 2, read aloud Problem 3. As groups meet to discuss Problem 3, encourage listeners to ask clarifying questions, such as:

- "Can you tell me more about . . .?"
- "How did you know . . .?"

EB **Emergent Bilinguals** Invite students to begin group interactions by restating another groups' response, in their own words, before adding their own ideas to the discussion. ELPS 1.E, 2.D, 2.F

3 Connect

Display the *Representations of Tens* chart, and say, "Let's use this chart to record cards that represent the same number."

Invite pairs to share their card groupings, starting with 10. For each group of cards, have students explain how they know the cards represent the same number. Continue recording all of the representations in order from 20 to 90. Consider attaching the cards that show cube towers directly to the chart, rather than drawing cube towers.

Say, "A ten is a group of 10 ones. When there is more than 1 ten, we call them **tens**."

Ask, "How do each of these representations show the amount of tens?"

Note: Keep the *Representations of Tens* chart displayed for the remainder of the unit.

Key Takeaway: Say, "The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 are all amounts of tens. The number of tens in each number can be represented in different ways."

Student Edition

Unit 4 Lesson 3

Name

TEKS: 1.1.D, 1.2.B, 1.2.C

It's a Match

Let's match different representations of numbers.

Warm-Up eyes on teacher

I can be all of me in math class. Yara and PJ both love guitar picks. What is an interest you and another mathematician share?

Activity 1 Representations of Tens

Hands-On

1 Sort

Sort the cards into groups that represent the same number.

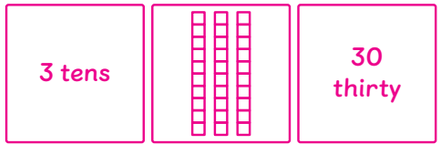
Activity 1 Name

Representations of Tens (continued)

2 Select **1** group of cards that represent the same number. Record what is shown on each card.

Draw

Answers may vary. Sample response shown.



3 Discuss

Share your answer to Problem 2 with another group. Explain how you know the cards represent the same number.

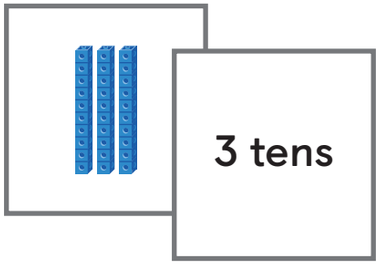
We know all of these cards represent the same number because _____.

Oral activity: No writing expected. Sample response shown.

We know all of these cards represent the same number because they all equal 30. 3 towers of 10, 3 tens, and 30 are all the same.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Sort cards into groups with some cards remaining unsorted.	 *Both of these cards have 3 tens, so they have the same value.*	**Support** Ask, "Look at one of the cards you have not sorted yet. What do you notice about this representation that seems similar to another group of cards you have sorted?"
Sort cards into the same group based on a common digit.	*This card has 3 towers. This card has 3 tens. 30 has a 3 in it. So, all of these cards belong in the same group.*	**Strengthen** Ask, "You matched these cards because they each have a 3. What does the 3 represent on each of these cards?"
Sort cards into the same group by recognizing that each card shows the same amount of tens.	*This card shows 3 towers of 10. This card says "3 tens." When you count by tens 3 times — 10, 20, 30 — you get 30. So, all of these cards have 3 tens.*	**Stretch** Ask, "If you wanted to add a fourth card to each group, can you think of another way that you could represent each number?"

Pairs | 15 min

Activity 2 Finding the Match

Purpose: Students match numerical representations of multiples of 10 with pictures showing amounts of tens and represent 50 with cube towers to recognize and represent the base-ten structure of multiples of 10.

Presentation Screens

Materials

Manipulative Kit:

- Distribute connecting cubes to each pair.

1 Launch

Read aloud the directions for Problems 4–7. Have students work for 2–3 minutes. Then read aloud Problems 8 and 9.

A **Accessibility: Conceptual processing** Guide processing by having students refer to the *Representations of Tens* chart to support or check their thinking.

2 Monitor

After students have completed **Problem 8**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "In your own words, what is the activity asking you to do?"
- Ask, "How can you figure out how many cubes are shown in each representation?"

3 Connect

Invite pairs to share strategies for Problem 8. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Ask (after each pair shares),"How did this pair figure out how many tens are in 50?"

Key Takeaway: Say, "You can figure out how many tens are in a number by counting by tens or by representing the number with towers of 10 connecting cubes and then counting the number of towers."

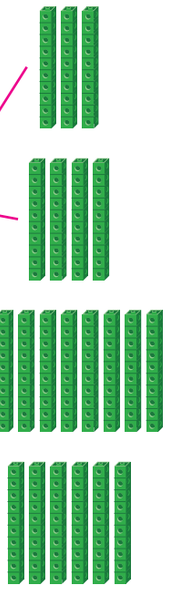
Activity 2

Name

Finding the Match

Draw lines to match each number with the cubes that represent it.

	Number	Representation
4	90	
5	40	
6	60	
7	30	



Activity 2

Name

Finding the Match (continued)

Hands-On

8 Show 50 using cube towers with 10 in each tower.

9 **Discuss**

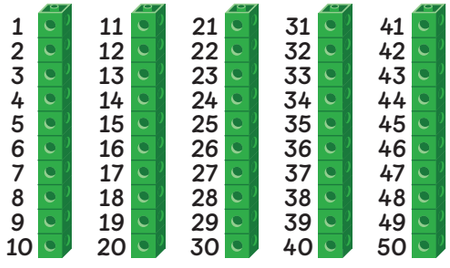
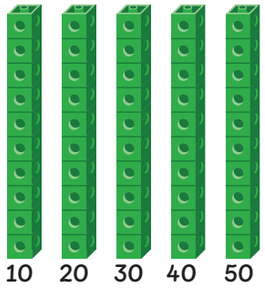
Explain to your partner how you know your cubes represent 50.

Oral activity: No writing expected. Sample response shown.

50 has 5 tens, so I built 5 towers of 10 cubes. I counted the towers by 10 to check, and I counted 50 cubes.

Presentation Screens

D Differentiation | Teacher Moves

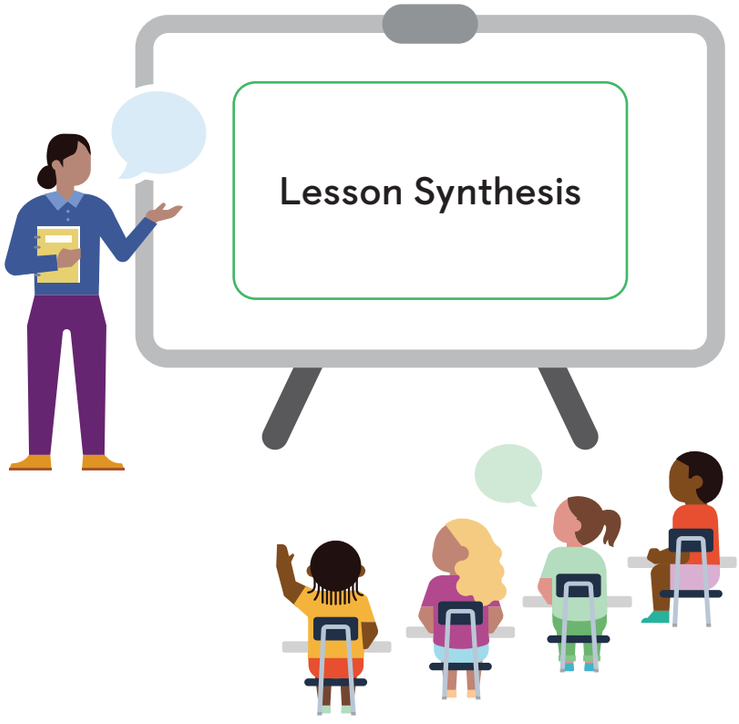
Look for students who . . .	For example . . .	Provide support . . .
Build 5 towers of 10 cubes by counting by 1.		**S Strengthen** Ask, "How many cubes are in each tower? What is another way you can count as you build to show 50?"
Build 5 towers of 10 cubes by counting by 10.		**S Strengthen** Ask, "You counted by 10 and figured out there are 5 tens in 50. What is another way you can figure out how many tens are in 50?"
Build 5 towers of 10 cubes by recognizing that 50 has 5 tens.	*I know the 5 in 50 means 5 tens, so I built 5 towers of 10 cubes.*	**S Stretch** Say, "You said the 5 in 50 means 5 tens. Talk with your partner about what the 0 in 50 might represent."

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 can be decomposed using pictures and objects to show the number of **tens**.



Use the Think-Pair-Share routine. Ask, "In what other ways could you represent the number of tens in 70?"

Say, You can represent the number of tens in 70 with drawings or connecting cubes to show 7 towers of 10.

Formalize vocabulary: estimate, tens

(optional) **Consider using the Frayer Model routine** with one or more of the new vocabulary words. **ELPS 3.E, 3.F**

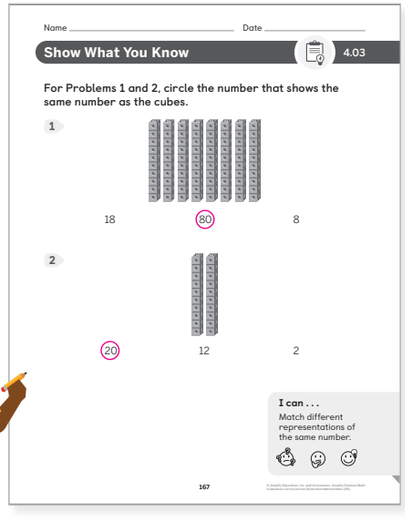
Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.03

For Problems 1 and 2, circle the number that shows the same number as the cubes.

1

18 80 8

2

20 12 2

I can . . .
Match different representations of the same number.

167

Today's Goals

1. **Goal:** Interpret base-ten representations of two-digit multiples of 10.
   - In Problems 1 and 2 in the *Show What You Know*, students matched the base-ten representation with the two-digit numeral.
2. **Language Goal:** Explain how different base-ten representations show the amount of tens in a multiple of 10. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**

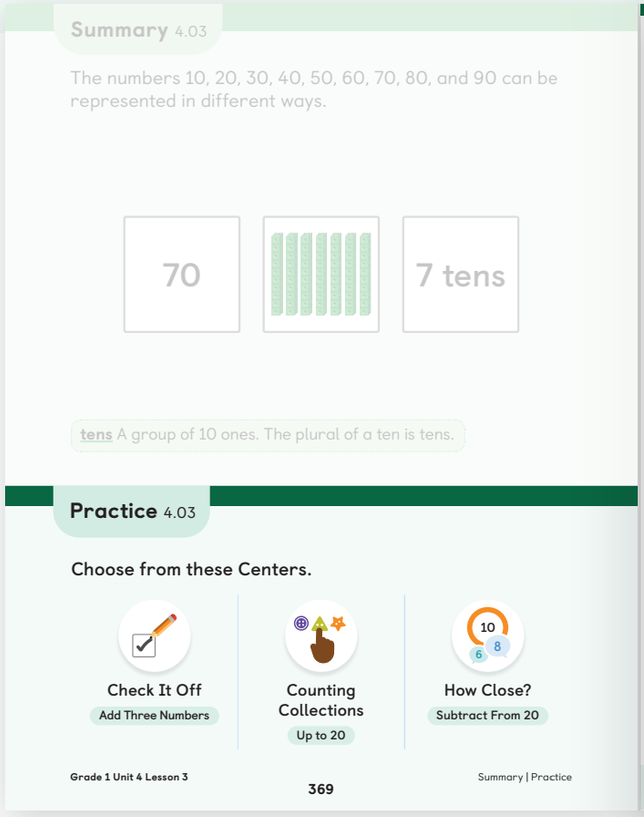
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.03

The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 can be represented in different ways.

70

7 tens

tens A group of 10 ones. The plural of a ten is tens.

Practice 4.03

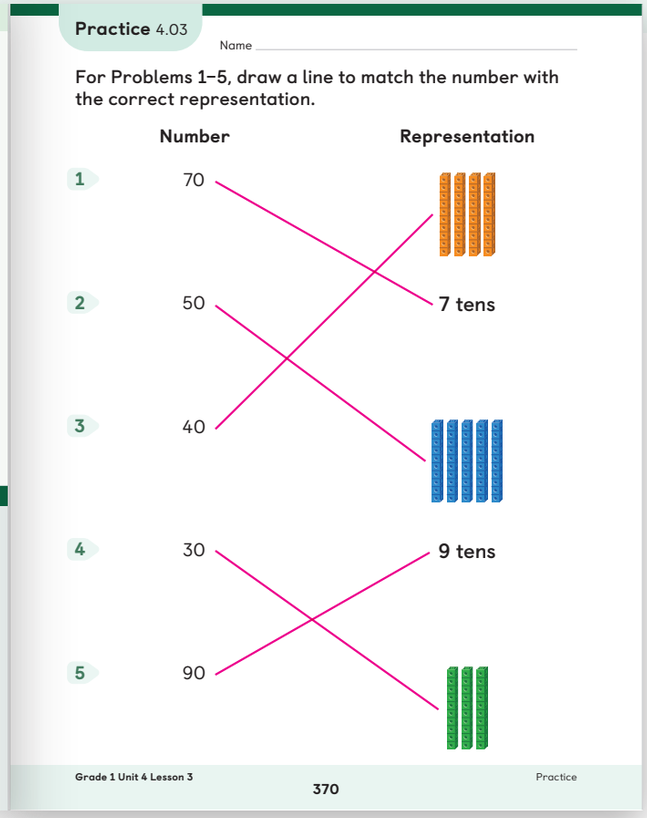
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 20

How Close?
Subtract From 20

Grade 1 Unit 4 Lesson 3 369 Summary | Practice



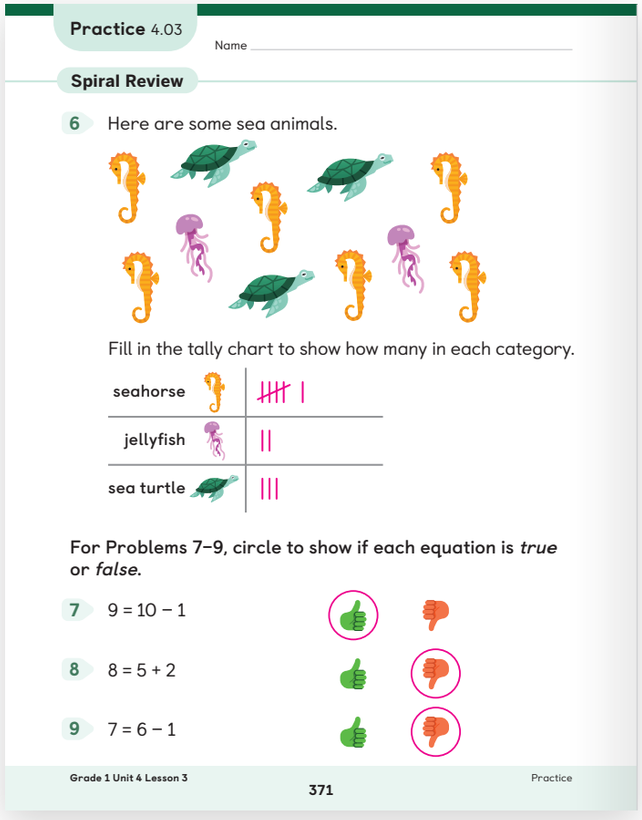
Practice 4.03

Name

For Problems 1–5, draw a line to match the number with the correct representation.

	Number	Representation
1	70	
2	50	7 tens
3	40	
4	30	9 tens
5	90	

Grade 1 Unit 4 Lesson 3 370 Practice



Practice 4.03

Name

Spiral Review

6 Here are some sea animals.

Fill in the tally chart to show how many in each category.

seahorse	𝍸 |
jellyfish	||
sea turtle	|||

For Problems 7–9, circle to show if each equation is *true* or *false*.

7 $9 = 10 - 1$

8 $8 = 5 + 2$

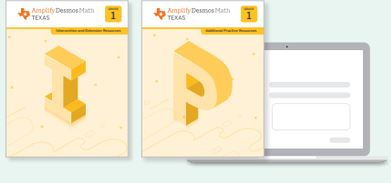
9 $7 = 6 - 1$

Grade 1 Unit 4 Lesson 3 371 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–5	1	1.2.C
Spiral Review			
	6	1	1.8.A
Fluency	7–9	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in centers, gather formative assessment data, or work with a small group of students on targeted skills.

Check It Off

Add 3 Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 3.

Counting Collections

Up to 20

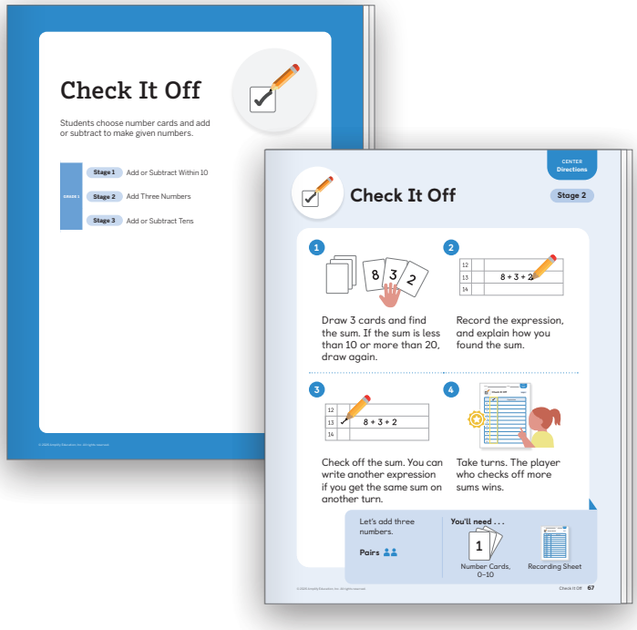
Pairs | 15 min | K.2.A, K.2.B, K.2.C

Students count a collection of up to 20 objects.

Materials

- 5-frames, 10-frames **(Manipulative Kit)**
- collections of objects (up to 20 per pair) **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

How Close?

Subtract From 20

Pairs **15 min** | **1.3.D, 1.5.G, 2.4.A**

Students subtract 3 numbers to practice subtracting within 20.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 4.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 3

Lesson Goal: Interpret base-ten representations of two-digit multiples of 10.

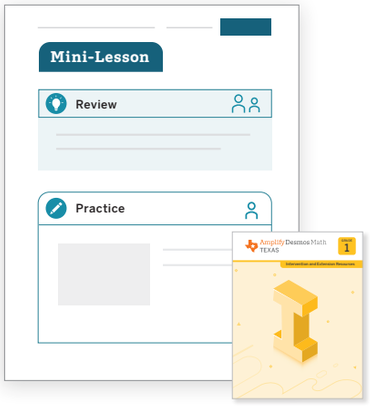
Support

Provide targeted intervention for students by using these resources.

If students determine if some of the given base-ten representations are the same:

Respond:

- Assign the *Matching Different Representations of the Same Number of Tens* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 1 *Differentiation: Teacher Moves* table.



Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students determine that different base-ten representations are the same based on a common digit:

Respond:

- Invite students to play these **Centers**. | 15 min
  Counting Collections: Up to 20
  How Close?: Subtract from 20
- Have students complete **Lesson 3 Practice**. | 15 min
- **Item Bank**

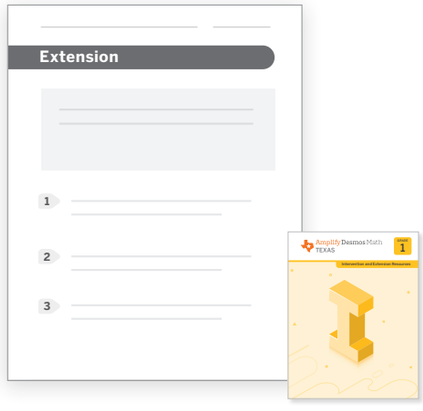
Stretch

Challenge students and extend their learning with these resources.

If students determine that different base-ten representations are the same by recognizing that they have the same amount of tens:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

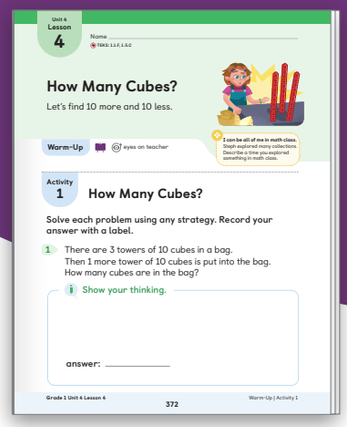
- English/Spanish cognates, e.g., **estimate/estimado**
- Frayer Model templates
- Vocabulary routines

Professional Learning

Are students counting the connecting cubes in each tower to confirm there are 10 cubes? How can you provide opportunities for students to develop an understanding of *a ten* at their own pace?

Unit 4
Lesson
4

Student Edition pages and Presentation Screens support learning in this lesson.



How Many Cubes?

Finding 10 More and 10 Less

Let's find 10 more and 10 less.

Key Concepts

Today's Goals

1. **Goal:** Find 10 more and 10 less than multiples of 10 within 100.
2. **Goal:** Recognize that counting on or back by 10 can be used to find 10 more or 10 less than a multiple of 10.
3. **Language Goal:** Describe patterns in a series of multiples of 10 as they increase or decrease by 10. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students solve *Add To* and *Take From, Result Unknown* story problems involving towers of cubes to explore strategies for determining 10 more and 10 less than a multiple of 10 within 100. They first discuss how it can be helpful to think of each multiple as an amount of tens. Then students find 10 more or 10 less than a given number to notice patterns in the resulting numbers, recognizing that they can count on or back by 10. Students have opportunities to explore story problems in this unit so that they engage with place value concepts in and out of context. **(TEKS 1.1.F)**

Prior Learning

In Lesson 3, students interpreted different base-ten representations of two-digit multiples of 10 and explained how the different representations showed the same amount of tens.

Future Learning

In Sub-Unit 2, students will continue their work with tens and multiples of tens and also include ones. They will begin exploring two-digit numbers and different ways to represent them.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of finding 10 more and 10 less than a multiple of 10 within 100.
- Students **apply** their understanding of the base-ten structure of numbers to find patterns when finding 10 more and 10 less.

Vocabulary

Review Vocabulary

a ten/tens

TEKS

Addressing

1.5.C

Use relationships to determine the number that is 10 more and 10 less than a given number up to 120.

Also Addressing: **1.2.A**

Math Process Standards: 1.1.D, 1.1.F

ELPS: 1.C, 1.D, 1.E, 2.C, 2.D, 2.E, 2.F

Building On	Building Toward
K.2.C	2.7.B

Building Math Identity

I can be all of me in math class.
Steph explored many collections.
Describe a time you explored something in math class.

Invite students to reflect on this question as they complete this lesson.

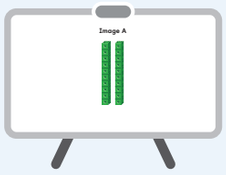
Lesson at a Glance 60 min

TEKS: 1.1.D, 1.1.F, 1.2.A, 1.5.C

Warm-Up Fluency

Whole Class | 10 min

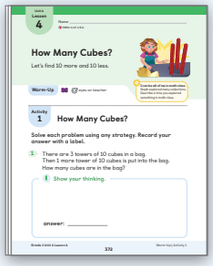
Students use the **How Many Do You See?** routine, in which they develop fluency by looking at and describing the different ways they see the total amount of cubes in base-ten representations of multiples of 10. **(TEKS 1.1.D)**



Activity 1

Pairs | 15 min

Students solve *Add To* and *Take From, Result Unknown* story problems involving towers of 10 cubes to explore and share strategies for determining 10 more and 10 less than a multiple of 10. They notice that multiples of 10 can be described as number of tens and number of ones.

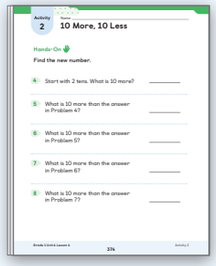


Activity 2

Pairs | 15 min

Students repeatedly find 10 more and then repeatedly find 10 less than multiples of 10. They look for patterns in finding 10 more or 10 less to count forward or backward by 10.

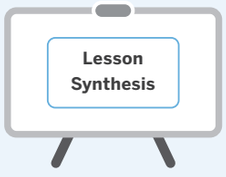
Manipulative Kit: connecting cubes (optional)
Materials: *Representations of Tens* chart (from Lesson 3)



Synthesis

Whole Class | 5 min

Students review and reflect on strategies for finding 10 more and 10 less than a multiple of 10.

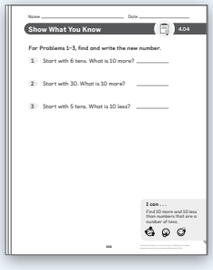


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by determining 10 more or 10 less than a given multiple of 10.

Materials: *Show What You Know* PDF

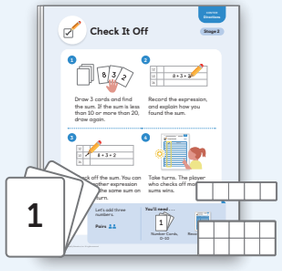


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Check it Off
- Counting Collections
- How Close?



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

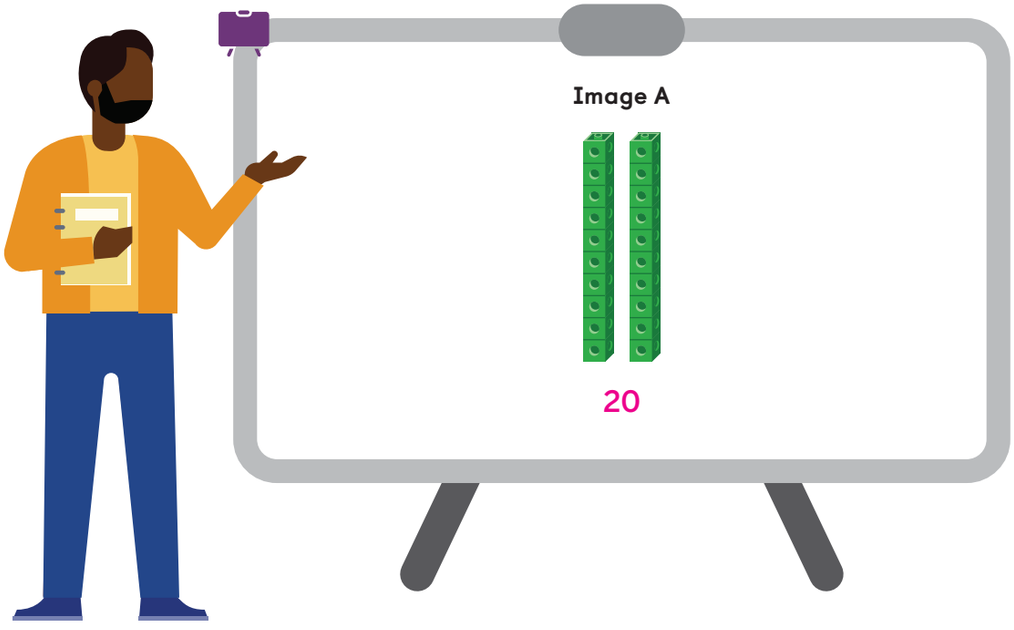
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

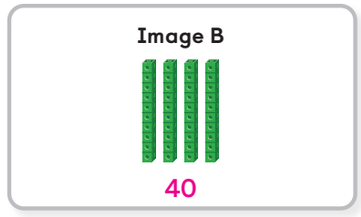
Whole Class | 10 min

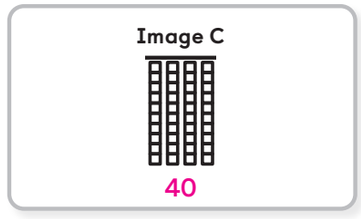
Presentation Screens

Warm-Up How Many Do You See?

Purpose: Students determine the number of cubes shown in each image to focus on the base-ten structure of the representations and notice that they can count by 10 or use the number of tens they see to find the total.







Why these images? These images lend themselves to subitizing with units of 10 or counting by tens.

1 Launch

Use the How Many Do You See? routine.

Flash Image A for 2–5 seconds, and ask, "How many do you see?"

Say, "Give me a signal when you have an answer."

Display the image again, leaving it displayed to discuss.

2 Connect

Record 2 or 3 students' responses, and ask, "How did you see them?"

Repeat for each image, spending the most time discussing Images B and C.

Ask, "How are the 4 tens in Image B different from the 4 tens in Image C?"

Say (if not yet mentioned during discussion), "Image B shows the 4 tens as towers of cubes, and Image C shows the 4 tens as drawings of cube towers."

Students might say . . . ELPS 2.C, 2.D

A: 20. I see 2 towers of 10 cubes.

B: 40. I counted 10, 20, 30, 40.

C: 40. It has 4 towers of 10, just like the last one.

Pairs | 15 min

Activity 1 How Many Cubes?

Purpose: Students apply their understanding of the base-ten structure of numbers to solve *Add To* and *Take From, Result Unknown* story problems involving multiples of 10.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Display the *Representations of Tens* chart (from Lesson 3) throughout the lesson.

1 Launch

Say, "You have been exploring different ways to represent the number of tens in the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90. In this activity, you will use what you know about these numbers to solve some story problems."

Read aloud the directions and Problems 1–3.

Provide access to connecting cube towers of 10.

A **Accessibility: Executive functioning** Vary the task demands by having students solve Problems 1 and 2. Then have students solve the additional problem when they have more processing time.

MLR **Multilingual/English Learners** Encourage students to make sense of the story problems by discussing their similarities and differences in their primary language before discussing them in English. **ELPS 1.C, 1.E, 2.C, 2.F**

2 Monitor

After students have completed **Problem 2**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What are you trying to find?"
- Ask, "What part of the story could you represent first to help you solve?"

3 Connect

Display Problem 2.

Invite students to share their responses and strategies for Problem 2. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "What is different about these strategies?"

Say (if not yet mentioned during discussion), "You can choose to think about the numbers in the problem as a number of tens, 6 tens – 1 ten, or as a number of ones, 60 – 10, 1 ten less than 6 tens, or as a number of ones, 10 less than 60."

Key Takeaway: Say, "When working with the numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90, you can think about and describe the numbers as a number of tens or as a number of ones."

Student Edition

Unit 4 Lesson 4

Name

TEKS: 1.1.F, 1.5.C

How Many Cubes?

Let's find 10 more and 10 less.

Warm-Up eyes on teacher

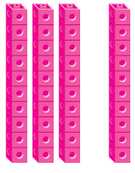
I can be all of me in math class. Steph explored many collections. Describe a time you explored something in math class.

Activity 1 How Many Cubes?

Solve each problem using any strategy. Record your answer with a label. Sample work shown.

1 There are 3 towers of 10 cubes in a bag.
Then 1 more tower of 10 cubes is put into the bag.
How many cubes are in the bag?

Show your thinking.



answer: 40 cubes

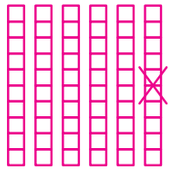
Activity 1

Name

How Many Cubes? (continued)

Show your thinking.

2 A bag has 6 towers of 10 cubes.
Then 1 tower of 10 cubes is taken out of the bag.
How many cubes are left in the bag?



answer: 50 cubes

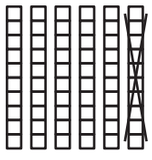
3 A bag has 3 towers of 10 cubes.
Then someone takes out 1 tower of 10 cubes.
How many cubes are in the bag now?

3 – 1 = 2
2 tens is 20.

answer: 20 cubes

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Represent the story problem with cubes or a base-ten drawing and count the number of remaining cubes to find the difference.	 *I took 10 away and counted the cubes that were left.*	**S Strengthen** Ask, "How could you figure out how many cubes are left without counting by ones?"
Count back 10 to find the difference.	*I counted back by 10 from 60. 60, 50*	**S Strengthen** Ask, "How could you use what you know about the number of tens in the problem to help you find the difference?"
Use base-ten reasoning to find the difference.	*6 tens take away 1 ten is 5 tens, and 5 tens is 50.*	**S Stretch** Ask, "How would the number change if you added 2 tens?"

Pairs | 15 min

Activity 2 10 More, 10 Less

Purpose: Students determine 10 more and 10 less than a multiple of 10 to notice the relationship between 10 more and counting on by 10, and between 10 less and counting back by 10.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Refer to the *Representations of Tens* chart (from Lesson 3) during the Connect.

Short on time? Consider having half the class solve Problems 4–8 and the other half solve Problems 9–12. Share responses to Problem 13 as a whole group.

1 Launch

Read aloud the directions.

Say, "Problems 4–12 build on each other. You will use your answer for Problem 4 to solve Problem 5. Then you will use your answer for Problem 5 to solve Problem 6. You will keep doing this until you finish Problem 12. Then you and your partner will discuss Problem 13."

Read aloud Problems 4–13.

Provide access to connecting cube towers of 10.

A **Accessibility: Memory and attention** Chunk this task into smaller, more manageable parts by checking in with and providing students feedback on Problems 4–8 before moving them on to Problems 9–12.

2 Monitor

After students have completed **Problem 13**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "Act out this problem with cube towers. How many cubes do you have if you get 1 more 10?"
- For Problems 5–12, ask, "How is this problem like the problem before it? Can you use the same strategy to solve this problem?"

3 Connect

Display Problems 4–12 with the answers recorded.

Invite students to share their responses for Problem 13.

MLR **MLR8: Discussion Supports — Revoicing** ELPS 1.D, 1.E, 2.E

As students share the patterns they notice, revoice their ideas in the form of a question using mathematical language or language from the context to invite them to add more detail to their response. For example:

- If a student says, "I noticed the numbers are counting by 10." . . .
- Revoice their ideas by asking, "Is 10 more than a number the next number you say when you count by 10? Is 10 less than a number the next number you say when you count back by 10?" Refer to the sequence of numbers on the *Representations of Tens* chart.

EB **Emergent Bilinguals:** Invite students to turn to a partner and restate one of the patterns that was shared in their own words. ELPS 1.E, 2.C, 2.D, 2.F

Key Takeaway: Say, "10 more than a number is the next number you say when you count by 10. 10 less is the number you say when you count back by 10."

Activity 2

Name _____

10 More, 10 Less

Hands-On

Find the new number.

4 Start with 2 tens. What is 10 more? 30

5 What is 10 more than the answer in Problem 4? 40

6 What is 10 more than the answer in Problem 5? 50

7 What is 10 more than the answer in Problem 6? 60

8 What is 10 more than the answer in Problem 7? 70

Activity 2

Name _____

10 More, 10 Less (continued)

Hands-On

Find the new number.

9 What is 10 less than the answer in Problem 8? 60

10 What is 10 less than the answer in Problem 9? 50

11 What is 10 less than the answer in Problem 10? 40

12 What is 10 less than the answer in Problem 11? 30

13 Discuss

What patterns do you notice as you find 10 more and 10 less?

Oral activity: No writing expected. Sample response shown.

I notice when I find 10 more, it's the numbers I say when I count up by 10. When I find 10 less, it's the numbers I say when I count back by 10.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Recognize that 10 more shows an increase and 10 less shows a decrease.	*When we do 10 more the number gets bigger. When we do 10 less the number gets smaller.*	**Support** Ask, "How much does the number change each time you find 10 more or 10 less?"
Recognize a pattern in the number of tens.	*The 10 more problems each have 1 more ten. The 10 less problems each have 1 less ten.*	**Strengthen** Ask, "What happens to the value of the number when there is 1 more or 1 less ten?"
Recognize 10 more and 10 less as numbers said when skip counting by 10.	*The 10 more numbers are the numbers I say when I count by 10. The 10 less numbers are the numbers I say when I count back by 10.*	**Stretch** Ask, "How would the number change if you found 2 more tens?"

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: To determine 10 more or 10 less, you can count up 10 or back 10, or say the number that comes before or after when counting by 10.

Use the Think-Pair-Share routine. Ask, "What number is 10 more than 60? What number is 10 less than 60?"

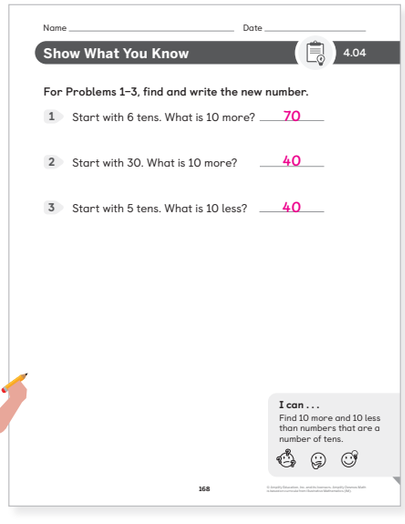
Say, "To find a number that is 10 more or 10 less than a number you can count forward 10 or backward 10. You can also think of the number that comes next when you skip count forward or backward by 10."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.04

For Problems 1–3, find and write the new number.

1 Start with 6 tens. What is 10 more? 70

2 Start with 30. What is 10 more? 40

3 Start with 5 tens. What is 10 less? 40

I can . . .
Find 10 more and 10 less than numbers that are a number of tens.

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Today's Goals

1. **Goal:** Find 10 more and 10 less than multiples of 10 within 100.
   - In Problems 1 and 2 in the *Show What You Know*, students found 10 more than a multiple of 10.
   - In Problem 3 in the *Show What You Know*, students found 10 less than a multiple of 10.
2. **Goal:** Recognize that counting on or back by 10 can be used to find 10 more or 10 less than a multiple of 10.
3. **Language Goal:** Describe patterns in a series of multiples of 10 as they increase or decrease by 10. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

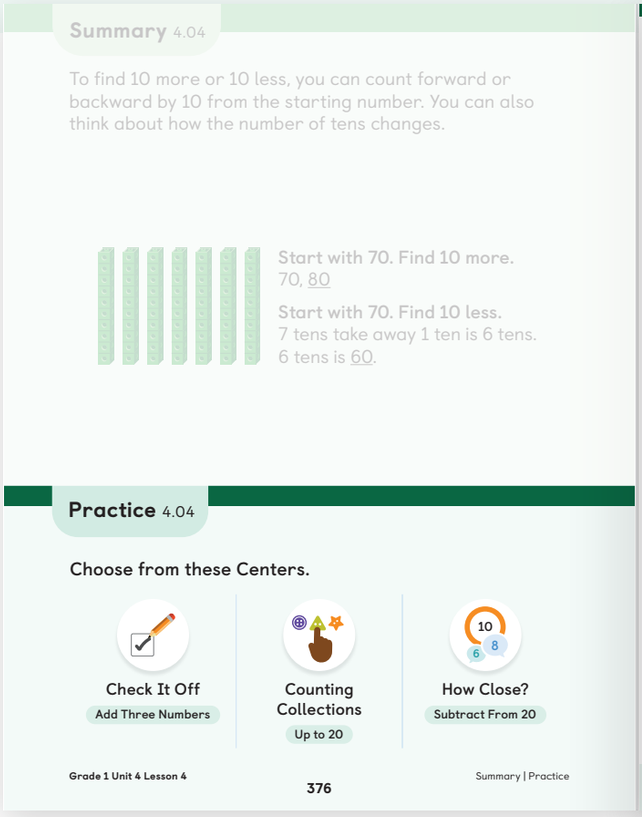
Differentiation See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.04

To find 10 more or 10 less, you can count forward or backward by 10 from the starting number. You can also think about how the number of tens changes.

Start with 70. Find 10 more.
70, 80

Start with 70. Find 10 less.
7 tens take away 1 ten is 6 tens.
6 tens is 60.

Practice 4.04

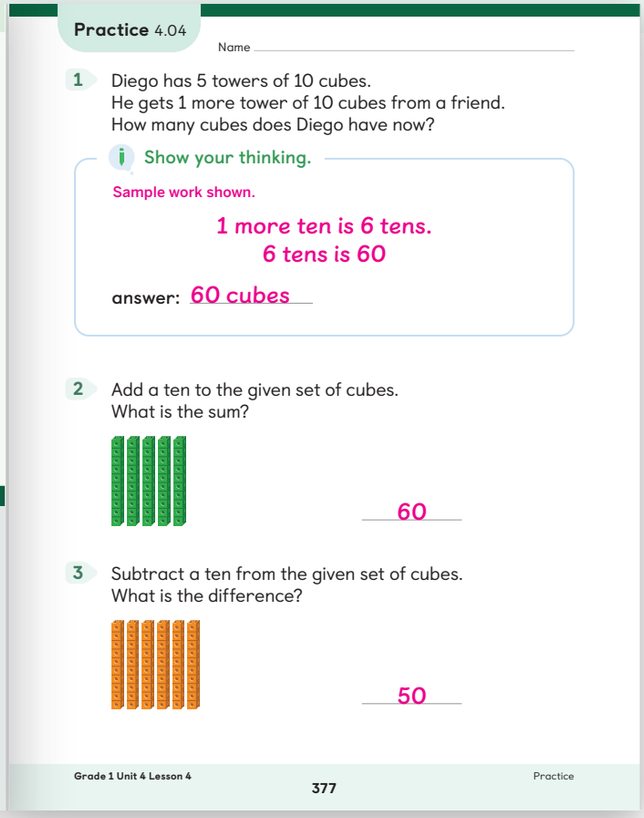
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 20

How Close?
Subtract From 20

Grade 1 Unit 4 Lesson 4 376 Summary | Practice



Practice 4.04

Name _____

1 Diego has 5 towers of 10 cubes.
He gets 1 more tower of 10 cubes from a friend.
How many cubes does Diego have now?

Show your thinking.

Sample work shown.

1 more ten is 6 tens.
6 tens is 60

answer: 60 cubes

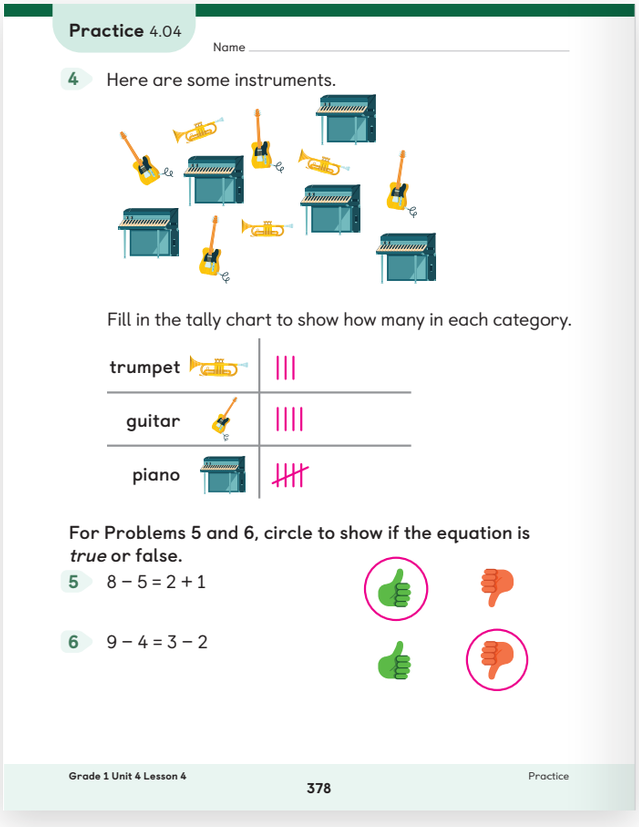
2 Add a ten to the given set of cubes.
What is the sum?

60

3 Subtract a ten from the given set of cubes.
What is the difference?

50

Grade 1 Unit 4 Lesson 4 377 Practice



Practice 4.04

Name _____

4 Here are some instruments.

Fill in the tally chart to show how many in each category.

trumpet	|||
guitar	||||
piano	𝍸 |

For Problems 5 and 6, circle to show if the equation is *true* or false.

5 $8 - 5 = 2 + 1$

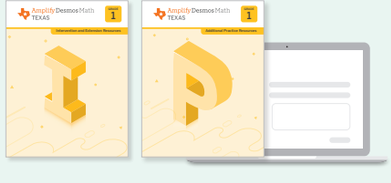
6 $9 - 4 = 3 - 2$

Grade 1 Unit 4 Lesson 4 378 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	1.5.C
Spiral Review			
	4	2	1.8.A
Fluency	5, 6	1	1.3.D, 1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Check It Off

Add 3 Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 3.

Check It Off

Up to 20

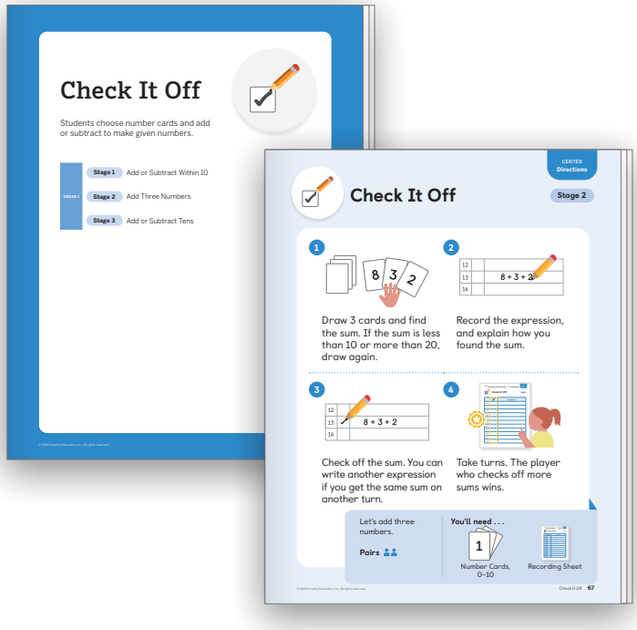
Pairs | 15 min | K.2.A, K.2.B, K.2.C

Students count a collection of up to 20 objects.

Materials

- 5-frames, 10-frames **(Manipulative Kit)**
- collections of objects (up to 20 per pair) **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

How Close?

Subtract From 20

Pairs **15 min** | **1.3.D, 1.5.G, 2.4.A**

Students subtract 3 numbers to practice subtracting within 20.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 4.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

D Differentiation Use after Lesson 4

Lesson Goal: Find 10 more and 10 less than multiples of 10 within 100.

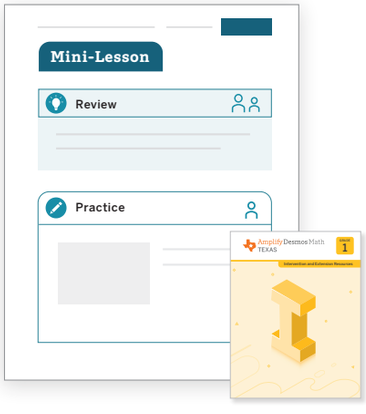
Support

Provide targeted intervention for students by using these resources.

If students count by ones to find 10 more or 10 less:

Respond:

- Assign the *Adding and Subtracting 10* Mini-Lesson. | 15 min
- Review Row 2 of the Activity 1 *Differentiation: Teacher Moves* table.



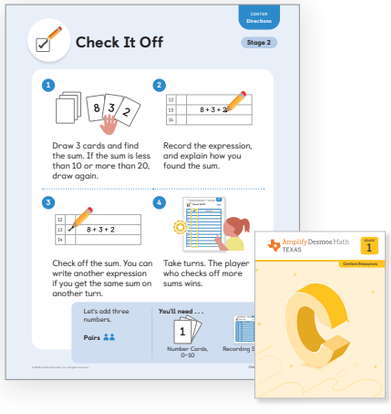
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students count up or back by 10 to find 10 more or 10 less than the starting number of tens for each problem:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  Counting Collections: Up to 20
  How Close?: Subtract From 20
- Have students complete **Lesson 4 Practice**. | 15 min
- **Item Bank**



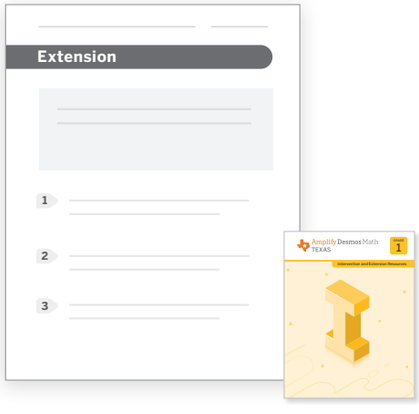
Stretch

Challenge students and extend their learning with these resources.

If students work flexibly with strategies such as counting up or back by 10 and finding 1 more or less than the starting number of tens:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

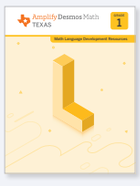


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines



Professional Learning

Reflect on how students listened to one another's ideas today in class. What norms could help each student better attend to their classmates' ideas in future lessons?

Notes:

Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Quiz: Sub-Unit 1

Independent | 20 min

Facilitation: Assign this Sub-Unit Quiz at the end of Sub-Unit 1 to evaluate students' proficiency with the key concepts and skills addressed in this sub-unit. Read aloud the problems to students as needed.

Classroom materials: Provide access to connecting cubes.

TEKS
(S) = Supporting standard
(R) = Readiness standard

Item Analysis

Problem	Concept or skill	DOK	TEKS
1	Interpreting the value of a representation of a multiple of 10	1	1.2.C 1.1.D
2	Subtracting multiples of 10	2	1.3.B 1.1.B

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources

Intervention and Extension Resources includes:
- Mini-Lessons
- Extensions

Centers Resources includes:
- Centers

Practice

During Sub-Unit 2, if students need further review or practice with concepts or skills, consider the following resources:

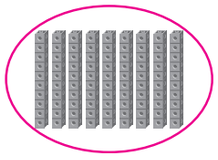
- Lesson Practice (Print and Digital)
- Item Bank (Digital)

PDF *Assessment Resource PDF*

Name _____ Date _____

Quiz: Sub-Unit 1 Unit 1.4

1 Circle **TWO** representations that have the same value.



8 tens (90)

2 There are 3 towers of 10 cubes in a bag. Then 1 tower of 10 cubes is taken out of the bag. How many cubes are left in the bag? Sample work shown.

Show your thinking.

1 less ten is 2 tens.
2 tens is 20.

answer: 20 cubes

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D Differentiation (Quiz: Sub-Unit 1)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Sub-Unit.

Sub-Unit Goals	Problem	Respond to Student Thinking
Sub-Unit 1: Represent the base-ten structure of two-digit multiples of 10.	1	**Support** • **Mini-Lesson:** *Matching Different Representations of the Same Number of Tens* (ML 4.03) • **Teacher Move:** Review the problem. Provide another opportunity for students to match representations of tens that have the same value.
Sub-Unit 1: Use relationships to determine 10 more and 10 less than a multiple of 10 for numbers up to 120.	2	**Support** • **Mini-Lesson:** *Adding and Subtracting 10* (ML 4.04) • **Center:** *Cover Up, Add or Subtract 10*

Notes:

Sub-Unit 2

Tens and Ones

Sub-Unit 2 Goals

- Understand that the 2 digits of a two-digit number present amounts of tens and ones.
- Use relationships to determine 10 more and 10 less than a multiple of 10 for numbers up to 120.

Progression of TEKS in Sub-Unit 2

- **Lessons 5–6:** Students use objects and drawings to organize and represent two-digit numbers with tens and ones.
- **Lessons 7–9:** Students interpret and connect representations of two-digit numbers, including expanded form and standard form.
- **Lesson 10:** Students add ones to a multiple of 10 within 100.

Sub-Unit 2 Progression	Lesson 5	Lesson 6	Lesson 7*	Lesson 8	Lesson 9	Lesson 10
Subheader text here						
TEKS 1.2.C	●	●	●	●	●	○
TEKS 1.3.A	○	○	○	○	○	●
Subheader text here						
TEKS 1.5.A	●	○	○	○	○	○
TEKS 1.5.B	●	○	○	○	○	○

*This lesson builds toward the standard shown.

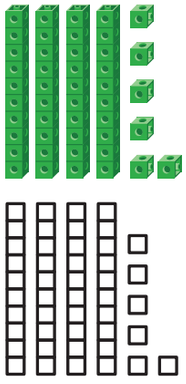
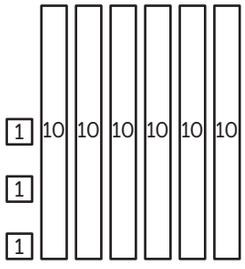
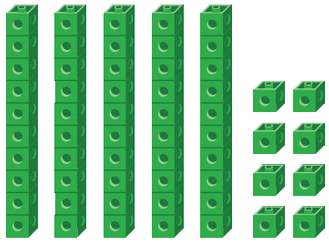
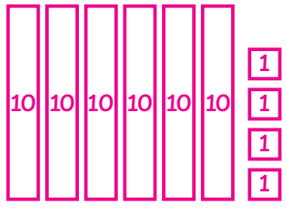
Coming Up Next

- **Sub-Unit 3, Lessons 11–16**
  - » Numbers and Operations: **TEKS 1.2.D, 1.2.E, 1.2.F, 1.2.G**
  - » Algebraic Reasoning: **TEKS 1.5.E, 1.5.G**
- **Sub-Unit 4, Lessons 17–19:**
  - » Numbers and Operations: **TEKS 1.3.D**
  - » Algebraic Reasoning: **TEKS 1.5.A**
  - » Personal Financial Literacy: **TEKS 1.9.A, 1.9.B, 1.9.C, 1.9.D**

Math That Matters Most

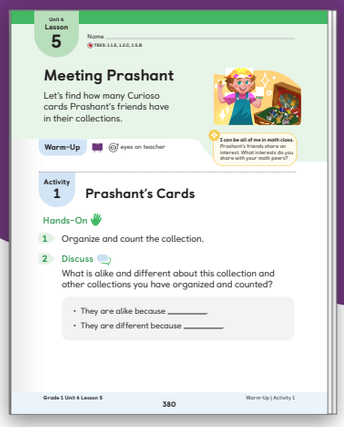
Sub-Unit 2: Understand that two-digit numbers represent amounts of tens and ones and use that understanding to add multiples of ten and find 10 more and 10 less than a given number.

Progression of Strategies, Skills, or Language

Progression	For example . . .		
Representing two-digit numbers as amounts of tens and remaining ones in multiple ways.	cubes or drawings 	words **4 tens 6 ones**	expanded form **6 + 40**
Interpreting representations to write two-digit numbers.	 **63**	2 ones 8 tens **82**	80 + 9 **89**
Adding a one-digit number and a multiple of 10 using objects.	**50 + 8**	 answer: 58	
Adding a one-digit number and a multiple of 10 using pictorial models.	**4 + 60**	 answer: 64	

Unit 4
Lesson
5

Student Edition pages and Presentation Screens support learning in this lesson.



Meeting Prashant

Organizing and Counting a Collection in Tens and Remaining Ones

Let's find how many Curioso cards Prashant's friends have in their collections.

Key Concepts

Today's Goals

1. **Goal:** Organize a collection of up to 99 objects into groups of 10 and remaining ones.
2. **Goal:** Count collections of up to 99 objects that are organized into groups of 10 and remaining ones.
3. **Language Goal:** Explain strategies for organizing and counting collections of up to 99 objects with totals that are not multiples of 10. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students organize and count a collection of objects to notice that the number of objects can be grouped into tens and remaining ones. They practice counting collections that have been organized into groups of 10 and remaining ones to recognize that they can count by 10 and then count on by 1 to determine the total amount in each collection. **(TEKS 1.1.E)**

Prior Learning

In Sub-Unit 1, students represented multiples of 10 with objects, drawings, and words and found sums and differences of multiples of 10. In Lesson 2, students counted collections that were multiples of 10 to practice organizing and counting the objects by 10 to find the total.

Future Learning

In Lesson 6, students will read two-digit numbers and represent them with cubes and drawings. They will explore and discuss the meaning of the digits in two-digit numbers and notice that changing the order of the digits changes the value of the number.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of strategies for counting quantities within 100.

Vocabulary

Review Vocabulary

a one/ones

a ten/tens

TEKS

Addressing

1.5.B

Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.

Also Addressing: **1.2.C, 1.5.A**

Math Process Standards: 1.1.E, 1.1.F

ELPS: 1.C, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Building On

K.5.A

Building Math Identity

I can be all of me in math class.
Prashant's friends share an interest. What interests do you share with your math peers?

Invite students to reflect on this question as they complete this lesson.

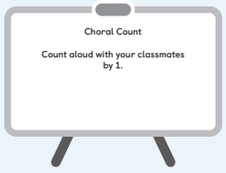
Lesson at a Glance 60 min

TEKS: 1.1.E, 1.1.F, 1.2.C, 1.5.A, 1.5.B

Warm-Up Fluency

Whole Class | 10 min

Students use the **Choral Count** routine, in which they count as a class by 1, starting at 50 and ending at 84, and then count by 2. As the count is displayed, students may notice patterns or structures in the count, such as repeating digits or how the numbers are composed of tens and ones. **(TEKS 1.1.F)**

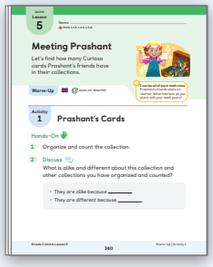


Activity 1

Pairs | 10 min

Students organize and count collections of objects to notice that when the objects are organized in groups of 10, there are some remaining ones. Students show how many tens are in their collection to prepare for a **Gallery Tour** in Activity 2.

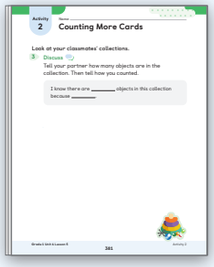
Manipulative Kit: double 10-frames (optional)
Materials: collections of objects
Additional Prep Assemble: collections of objects in amounts of two-digit numbers but not a multiple of 10 (one per pair)



Activity 2

Pairs | 20 min

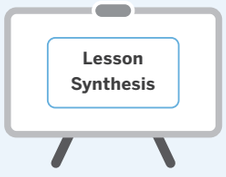
Students participate in a **Gallery Tour** as they practice counting the organized collections from Activity 1. Students recognize that collections that are organized into tens and ones can be counted by 10 and then by 1.



Synthesis

Whole Class | 5 min

Students review and reflect on how they can use what they know about counting by 10 and by 1 to determine the total number of objects that are organized and represented into groups of 10 and remaining ones.

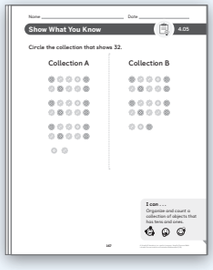


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by counting 2 sets of objects and determining which shows 32.

Materials: *Show What You Know* PDF

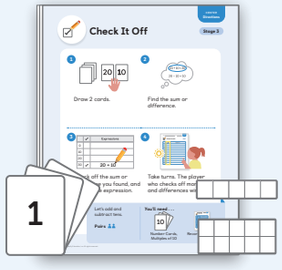


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Check It Off
- Counting Collections
- How Close?



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

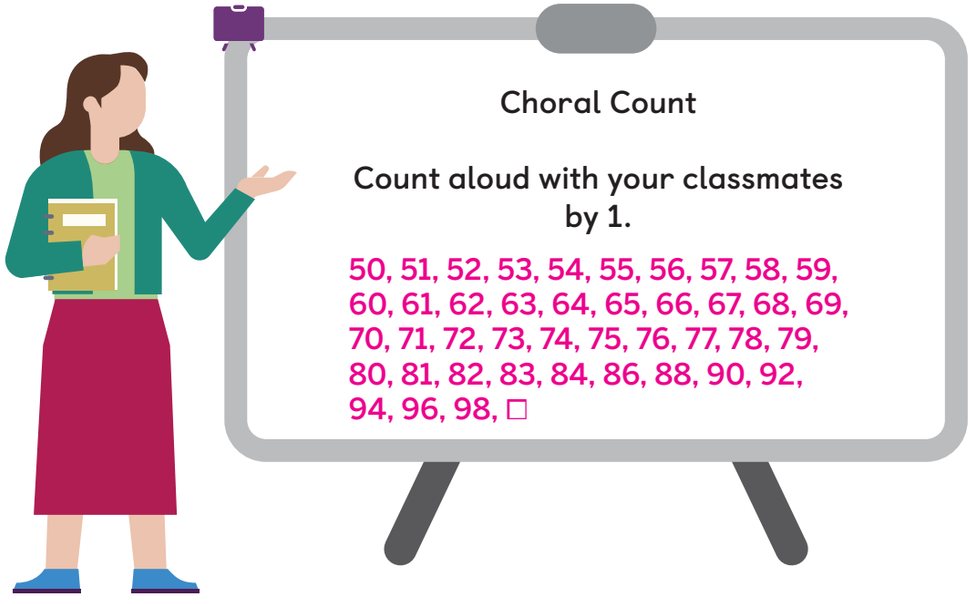
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screen

Warm-Up Choral Count

Purpose: Students count by 1, starting at 50 and ending at 84, and then count by 2 to 100 to prepare for counting a collection of objects that represents a two-digit number that is not a multiple of 10.



1 Launch

Use the Choral Count routine.

Say, "Let's count by 1, starting at 50 and ending at 84. Then we will count by 2."

Display each number as students count.

Ask:

- "What patterns do you see?"
- "Why do you think this pattern is happening here?"

2 Connect

Record students' responses as they share. Consider highlighting different patterns using different colors.

Say, after adding a box at the end of the displayed count, "Make a prediction about the number that will go in the box."

Ask, "How do you know?"

Say, "You will count collections that represent Curioso cards today."

Students might say . . . ELPS 2.E

I notice that every number is made up of 2 numbers.

The numbers get bigger faster when we count by 2.

All the numbers are made up of 2 numbers.

The first number in each row when we're counting by 1 all go up by 1.

Pairs | 10 min

Activity 1 Prashant's Cards

Purpose: Students organize and count a collection of objects to notice that sometimes there are remaining ones that do not make a ten.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to double 10-frames (optional).

Classroom materials:

- Distribute a collection of small objects, given in amounts of two-digit numbers but not a multiple of 10, to each pair.

1 Launch

Say, "When Steph met Prashant, she could not believe how many Curioso cards he had in his collection. She noticed Prashant had friends in his booth who were showing their Curioso cards to each other. They seemed to have large collections, too!"

Display 2–3 collections of objects.

Say, "The objects in these collections represent the different amounts of Curioso cards that Prashant's friends have in their collections."

Read aloud Problems 1 and 2.

Provide access to double 10-frames.

Note: Students will share how they organized their collections in a **Gallery Tour** in Activity 2.

2 Monitor

After students have completed **Problem 1**, refer to the **D Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How have you seen a collection of objects organized in the past?"
- Ask, "How could you organize the objects to help count the collection?"

A **Accessibility: Conceptual processing** Display students' responses to the above questions and encourage them to use ideas from the generated list to help count and organize the collection.

3 Connect

Invite pairs to share how they organized their collection. Select 2–3 pairs who organized their collection as shown in Row 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "What do you notice about how these collections are organized?"
- "What do you notice about the groups of 10? What do you notice about the group of ones?"

EB **Emergent Bilinguals** Provide students with wait time to formulate and rehearse a response with a partner before sharing with the class. If possible, encourage students to rehearse in their primary language before discussing in English. **ELPS 1.E, 2.C, 2.D**

Say, "If you have not already, work with your partner to organize your collection into as many groups of 10 as you can."

Key Takeaway: Say, "Sometimes, when you organize objects into groups of 10, there are remaining ones that do not make a full group of 10."

Student Edition

Unit 4
Lesson
5

Name _____

TEKS: 1.1.E, 1.2.C, 1.5.B

Meeting Prashant

Let's find how many Curioso cards Prashant's friends have in their collections.

I can be all of me in math class. Prashant's friends share an interest. What interests do you share with your math peers?

Warm-Up eyes on teacher

Activity 1

Prashant's Cards

Hands-On

1. Organize and count the collection.

2. **Discuss**

What is alike and different about this collection and other collections you have organized and counted?

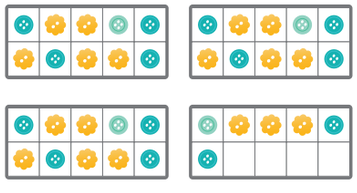
- They are alike because _____.
- They are different because _____.

Oral activity: No writing expected.

Grade 1 Unit 4 Lesson 5 380 Warm-Up | Activity 1

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Organize the objects into groups of amounts other than 10.		**S Strengthen** Ask, "How did organizing the objects this way help you count the collection?"
Organize the objects into groups of 10, with more than 10 remaining ones.		**S Strengthen** Ask, "You made groups of 10. How could you figure out if you can make any more groups of 10?"
Organize the objects into all possible groups of 10 and remaining ones.		**S Stretch** Ask, "How could you prove to someone that you made as many groups of 10 as possible?"

Pairs | 20 min

Presentation Screens

Activity 2 Counting More Cards

Purpose: Students participate in a **Gallery Tour** of their classmates' organized collections from Activity 1 to notice that they can count the groups of objects by 10 and then count the remaining ones by 1.

1 Launch

Say, "You counted 1 collection of objects in Activity 1 and noticed that after you put the objects into groups of 10, there were some remaining ones. Now you will figure out how many objects are in other collections."

Read aloud the directions and Problem 3.

Use the Gallery Tour routine. Say, "Each partner will count the collection independently first. Then you will talk together about how you counted." Monitor for student use of high-frequency words, such as "I know," "objects", and "because." ELPS 2.B

Note: Students should visit 2–3 representations as time allows.

EB **Emergent Bilinguals** If possible, pair students with different levels of English language proficiency together as they complete the **Gallery Tour** routine. This will provide a structured opportunity for multilingual learners to interact with and receive feedback from their peers with varied language backgrounds.
ELPS 1.C, 1.E, 2.C, 2.D

2 Monitor

While students have complete the activity, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How is this collection organized?"
- Ask, "How could the way the collection is organized help you find the total?"

A **Accessibility: Conceptual processing** Provide questions students can ask themselves, such as, "How many groups of 10 do I see? How many objects are in groups of 10?"

3 Connect

MLR This Connect is structured using the MLR7: Compare and Connect routine.
ELPS 1.E, 2.B, 2.D, 2.E

Invite students to share the strategies they used to count the collection. Select pairs to share using Rows 2 and 3 in the *Differentiation* table.

Say, "The collection is organized into 4 groups of 10 and 3 remaining ones. You could count by 10 to count the groups of 10 and then count on by 1 to count the remaining ones. You may know that 4 groups of 10 is 40 and count on by 1 to count the remaining ones."

Key Takeaway: Say, "When a collection is organized into groups of 10 and remaining ones, you can find the total by counting by tens and then ones.

Student Edition

Activity 2

Name _____

Counting More Cards

Look at your classmates' collections.

3 Discuss

Tell your partner how many objects are in the collection. Then tell how you counted.

I know there are _____ objects in this collection because _____.

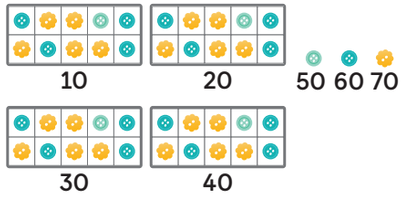
Oral activity: No writing expected. Sample response shown.

I know there are 42 objects in this collection because I counted 10, 20, 30, 40, 41, 42.

Grade 1 Unit 4 Lesson 5 381 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Count the tens and ones by 10.		**Support** Ask, "You counted by 10. Where do you see groups of 10 in this collection? Where do you see ones in this collection?"
Count tens by 10 and count on by 1 for each of the remaining ones.	10, 20, 30, 40, 41, 42, 43	**Stretch** Ask, "When would you count a collection of objects by 10 only and when would you count by 10 and 1?"
Use place value reasoning to find the value of the tens and count on by 1 for each of the remaining ones.	4 tens is 40. 40, 41, 42, 43	**Stretch** Ask, "What addition expression could represent the value of the tens and the value of the ones?"

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: When counting large quantities, it is helpful to organize and count by 10 and then count on by 1 for the remaining ones.

Say, "Prashant organized his collection of Curioso cards and then represented the total with this drawing of tens and ones."

Use the Think-Pair-Share routine. Ask, "How many Curioso cards are in Prashant's collection?"

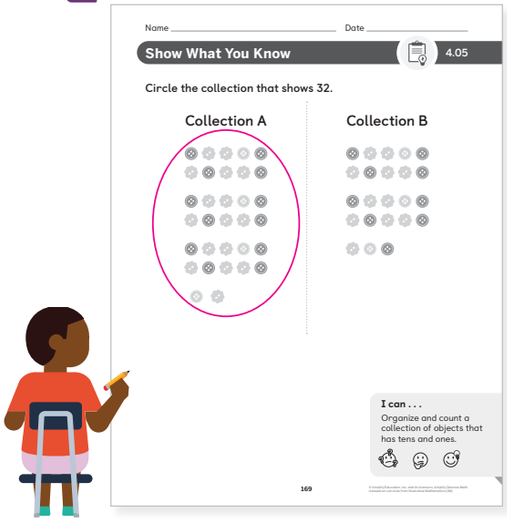
Say, "When a collection has groups of tens and remaining ones, you can use what you know about counting by 10 and 1 to find the total."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.05

Circle the collection that shows 32.

Collection A

Collection B

I can . . .
Organize and count a collection of objects that has tens and ones.

169

Today's Goals

1. **Goal:** Organize a collection of up to 99 objects into groups of 10 and remaining ones.
2. **Goal:** Count collections of up to 99 objects that are organized into groups of 10 and remaining ones.
   - In the *Show What You Know*, students counted collections of objects.
3. **Language Goal:** Explain strategies for organizing and counting collections of up to 99 objects with totals that are not multiples of 10. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

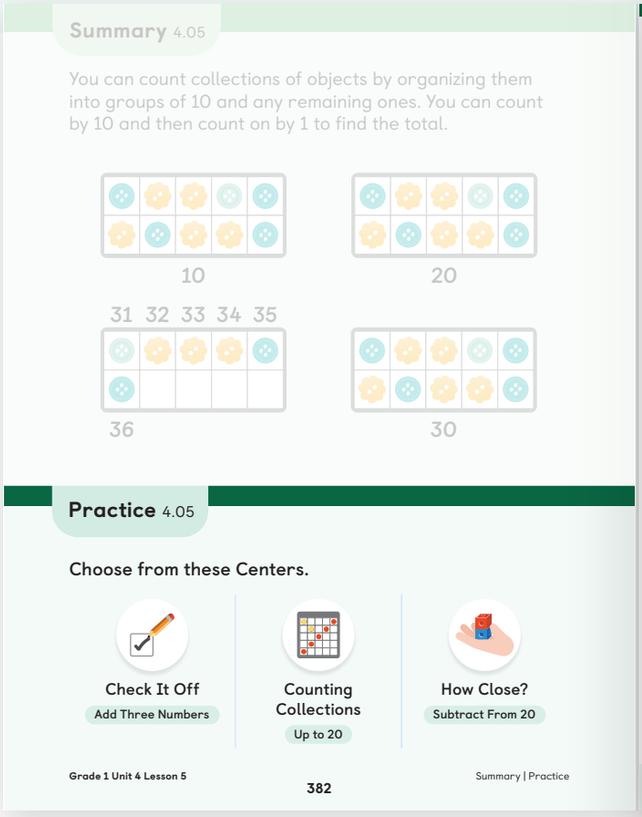
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.05

You can count collections of objects by organizing them into groups of 10 and any remaining ones. You can count by 10 and then count on by 1 to find the total.

10

20

31 32 33 34 35

36

30

Practice 4.05

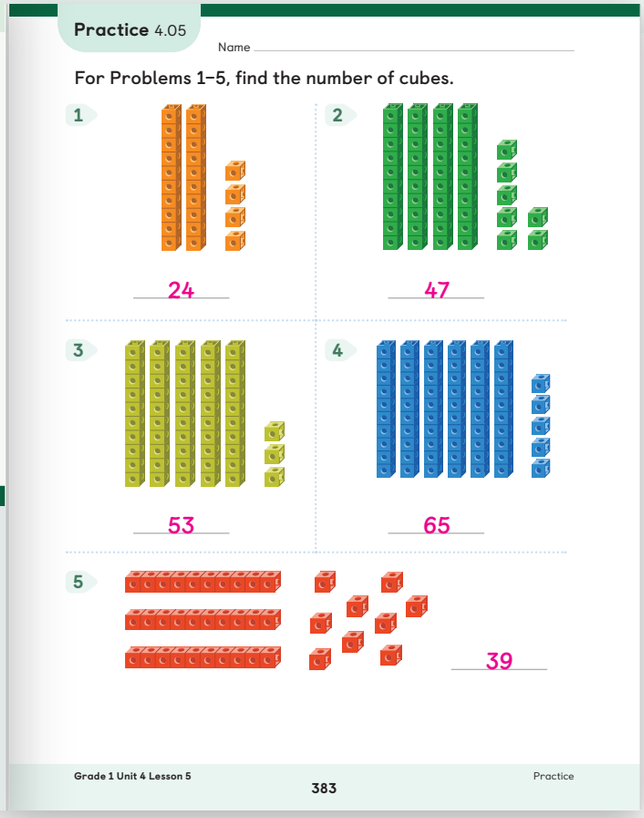
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 20

How Close?
Subtract From 20

Grade 1 Unit 4 Lesson 5 382 Summary | Practice



Practice 4.05

Name

For Problems 1–5, find the number of cubes.

1 24

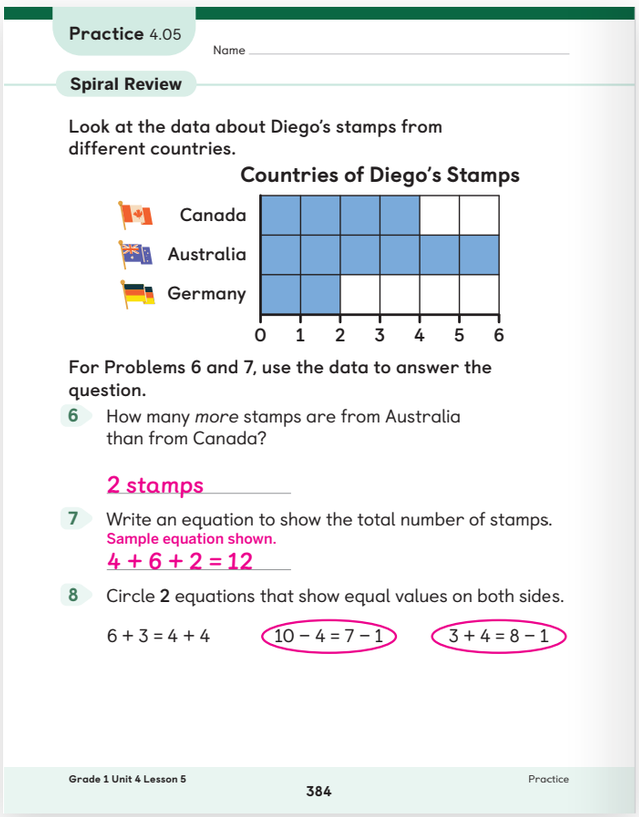
2 47

3 53

4 65

5 39

Grade 1 Unit 4 Lesson 5 383 Practice



Practice 4.05

Name

Spiral Review

Look at the data about Diego's stamps from different countries.

Countries of Diego's Stamps

Canada
Australia
Germany

0 1 2 3 4 5 6

For Problems 6 and 7, use the data to answer the question.

6 How many *more* stamps are from Australia than from Canada?

2 stamps

7 Write an equation to show the total number of stamps.
Sample equation shown.
4 + 6 + 2 = 12

8 Circle **2** equations that show equal values on both sides.

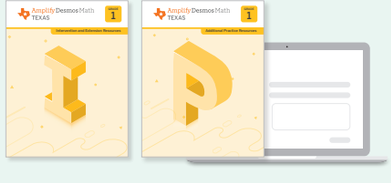
6 + 3 = 4 + 4 10 − 4 = 7 − 1 3 + 4 = 8 − 1

Grade 1 Unit 4 Lesson 5 384 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–5	1	1.5.B
Spiral Review			
	6, 7	1	1.8.C
Fluency	8	1	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Presentation Screen

Short on time? Consider omitting the Center Choice Time.

Check It Off

Add 3 Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 3.

Counting Collections

Up to 20

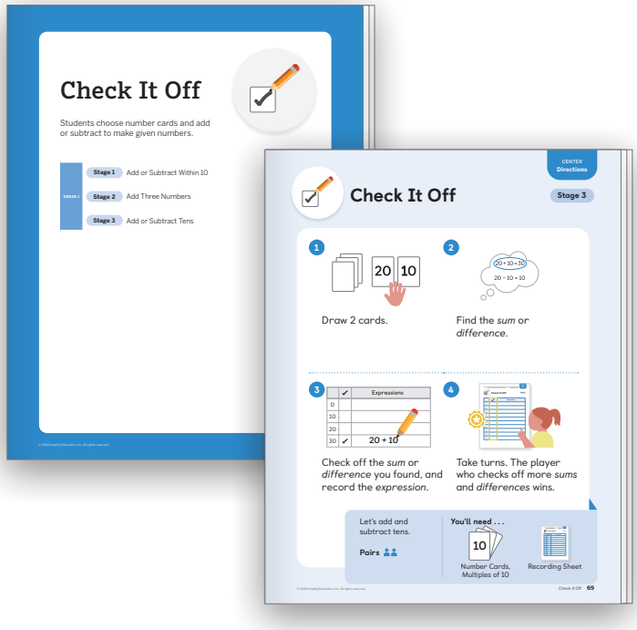
Pairs | 15 min | K.2.A, K.2.B, K.2.C

Students count a collection of up to 20 objects.

Materials

- 5-frames, 10-frames **(Manipulative Kit)**
- collections of objects (up to 20 per pair) **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

How Close?

Subtract From 20

Pairs | 15 min | 1.3.D, 1.5.G, 2.4.A

Students subtract 3 numbers to practice subtracting within 20.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 4.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 5

Lesson Goal: Count collections of up to 99 objects that are organized into groups of 10 and remaining ones.

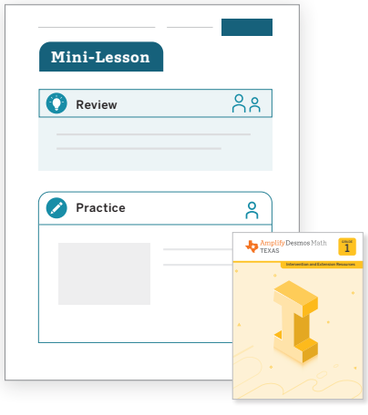
Support

Provide targeted intervention for students by using these resources.

If students count the tens and ones by 10:

Respond:

- Assign the *Counting a Collection With Tens and Ones* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 2 *Differentiation: Teacher Moves* table.



Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students find the value of the tens by counting by 10 or using place value reasoning and count on by 1 for each remaining one:

Respond:

- Invite students to play these **Centers**. | 15 min
  Compare: Add and Subtract Within 10
  Cover Up: Add 7, 8, or 9
  Shake and Spill: Cover (Up to 10)
- Have students complete **Lesson 5 Practice**. | 15 min
- **Item Bank**

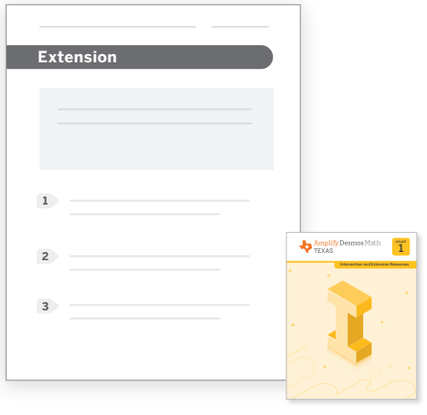
Stretch

Challenge students and extend their learning with these resources.

If students use place value reasoning to determine the total value:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

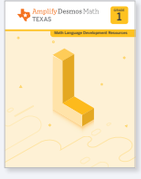


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines



Professional Learning

How effective were your questions in supporting students' thinking about amounts of ten today? What did students say or do that showed they were effective?

Unit 4
Lesson
6

Student Edition pages, Manipulatives, and Presentation Screens support learning in this lesson.

Curioso Collections

Representing Two-Digit Numbers With Tens and Ones

Let's represent numbers with tens and ones.

Key Concepts

Today's Goals

1. **Goal:** Represent a two-digit number as amounts of tens and ones using objects and drawings.
2. **Language Goal:** Describe a two-digit number as amounts of tens and ones. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E
3. **Language Goal:** Justify if a given base-ten drawing represents a two-digit number by reasoning about the values of the digits. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students interpret two-digit numbers that are not multiples of 10 written in standard form for the first time and are introduced to the term **digit**. They represent two-digit numbers using connecting cubes and drawings to recognize that the digits in two-digit numbers represent the amounts of tens and ones. Students then determine what number is represented by a given base-ten drawing to notice that writing the same digits in a different order changes the value of a two-digit number. They recognize that when objects or drawings are used to represent a two-digit number, the order in which the tens and ones are represented does not affect the value of the number. **(TEKS 1.1.E)**

Prior Learning

In Unit 3, students explored teen numbers and described them as a ten and a number of ones. In Lesson 7, they counted collections of objects to notice they could group and count by 10, and then count on by 1.

Future Learning

In Lessons 7 and 8, students will interpret, create, and compare different base-ten representations of two-digit numbers and explore how addition expressions can be used to show the values of the digits.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of the meanings of the tens and ones digits in a two-digit number.

Vocabulary

New Vocabulary

digit

Review Vocabulary

a one/ones

a ten/tens

TEKS

Addressing

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Math Process Standard: 1.1.E

ELPS: 1.B, 1.C, 1.E, 1.F, 2.B, 2.C, 2.D, 2.E, 2.F, 3.C, 3.D, 3.E, 3.F, 4.F

Building Toward

2.2.B

Building Math Identity

I can be all of me in math class.
What do you already know about numbers with tens and ones?

Invite students to reflect on this question as they complete this lesson.

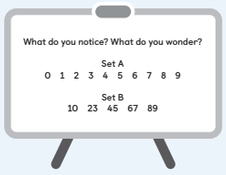
Lesson at a Glance 60 min

TEKS: 1.1.E, 1.2.C

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about 2 sets of numbers — a set of one-digit numbers and a set of two-digit numbers. The term **digit** is introduced.



Activity 1

Pairs | 15 min

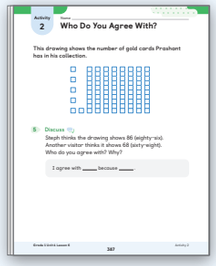
Students develop their conceptual understanding of two-digit numbers by representing two-digit numbers as amounts of tens and ones with cubes and drawings.

Manipulative Kit: connecting cubes
Materials: Unit Story, *The Collectors*, chart paper, markers, *Words to Describe Numbers* chart (teacher made)
Additional Prep Assemble: 9 towers of 10 cubes and 9 single cubes per pair; Prepare: *Words to Describe Numbers* chart

Activity 2

Pairs | 15 min

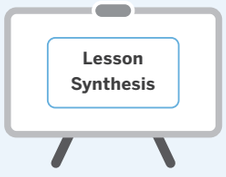
Students analyze a base-ten drawing in which the ones are represented on the left and the tens on the right. They consider 2 interpretations of the amount and justify which they agree with to recognize that the order of tens and ones does not matter when representing a two-digit number with a drawing.



Synthesis

Whole Class | 5 min

Students review and reflect on how two-digit numbers represent amounts of tens and ones, with the left digit showing the amount of tens and the right digit showing the amount of remaining ones.

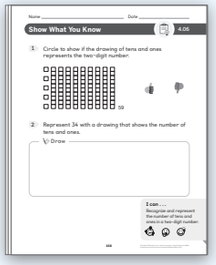


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by recognizing and representing a number of tens and ones as a two-digit number.

Materials: *Show What You Know* PDF



Center Choice Time

Small Groups | 15 min

Students are introduced to the Center, *Counting Collections, Up to 99*, in which they count collections, represent how many, and explain how they counted.

Additional Prep Assemble: collections of objects (up to 99, one per pair)

Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

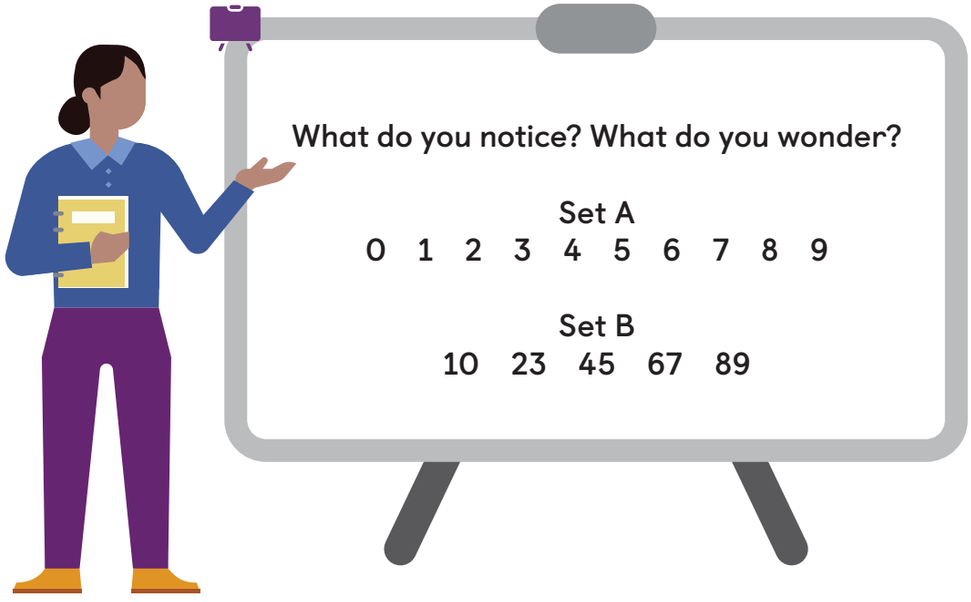
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students compare 2 sets of numbers to notice differences between one-digit and two-digit numbers and to develop formal mathematical language for describing these numbers.



1 Launch

Display the image.

Use the Notice and Wonder routine.

Use the Think-Pair-Share routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Record students' responses as they share.

Say, "One way to represent numbers is to use **digits**, which are any of the numbers 0-9. The numbers in Set A are *one-digit numbers*. The numbers in Set B are *two-digit numbers*."

Display the number 37, and ask, "With which set does the number 37 belong? Why?"

Students might say . . . ELPS 2.B

I notice the numbers in Set A are all written as 1 number and the numbers in Set B are written as 2 numbers.

I notice the sets have the same numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

I wonder if there are more numbers that can go in Set B.

I wonder what these numbers represent.

Pairs | 15 min

Activity 1 Special Edition Cards

Purpose: Students read and interpret two-digit numbers and represent them using cubes and drawings to develop their conceptual understanding of the meaning of the digits in a two-digit number.

Presentation Screens

Materials

- Display and read aloud page 8 of the Unit Story, *The Collectors* during the Launch.

Manipulative Kit:

- Distribute 9 towers of 10 connecting cubes and 9 single cubes to each pair.

Classroom materials:

- Use chart paper and markers to create the *Words to Describe Numbers* chart before the activity.

Short on time? Consider having students represent 2 numbers with cubes and 2 numbers with drawings.

1 Launch

Read aloud page 8 of the Unit Story.

Say:

- "While Steph and her mom visited Prashant's booth, they saw that he and his collector friends were looking at Curioso cards that Steph had never seen before. They were shiny, gold, special edition cards! Prashant explained that the reason that special edition cards are special is because they only come in certain packs."
- "You will work in pairs to represent each collector's number of special edition cards."

Read aloud the directions and display Problems 1–4.

A **Accessibility: Executive functioning** Vary the task demands by giving students a choice to solve 2 problems. Have students complete the remaining 2 problems when they have more processing time.

2 Monitor

After students have completed **Problem 3**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you need to do first?"
- Ask, "How could you figure out how many towers of 10 you need to build this number?"

MLR **MLR2: Collect and Display** ELPS 2.B, 3.C, 3.D, 3.E, 3.F

- Collect students' language used to describe the numbers, such as *ones*, *tens*, *digit*, and *two-digit number*, on the *Words to Describe Numbers* chart.
- Display and update the chart during the Connect. Invite students to use language from the chart as needed throughout Unit 4 activities.

EB **Emergent Bilinguals** Add and connect visual examples to the *Words to Describe Numbers* chart, and make explicit connections to referenced materials. ELPS 1.F, 3.F, 4.F

Note: Display the *Words to Describe Numbers* chart for the remainder of the unit.

3 Connect

Invite students to share their drawings for Problem 3 and how they determined the number of tens and ones to represent the number. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "What is different about how each pair figured out how many tens and ones to use to represent 35?"

Key Takeaway: Say, "Two-digit numbers can be represented as a number of tens and a number of ones. There are different ways to figure out how many tens and ones represent a two-digit number."

Unit 4 Lesson 6

Name

TEKS: 1.1.E, 1.2.C

Curioso Collections

Let's represent numbers with tens and ones.

Warm-Up eyes on teacher

I can be all of me in math class. What do you already know about numbers with tens and ones?

Activity 1 Special Edition Cards

Hands-On

Build each two-digit number using towers of 10 and single cubes to show the number of tens and ones.
Then create a drawing that shows the tens and ones.

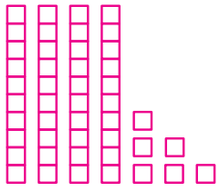
Activity 1 Name

Special Edition Cards (continued)

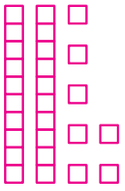
Create a drawing that shows the tens and ones.
Sample drawings shown.

Draw

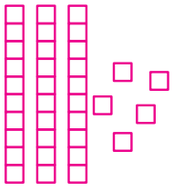
1. 46



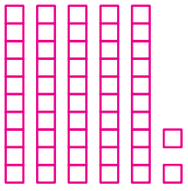
2. 27



3. 35

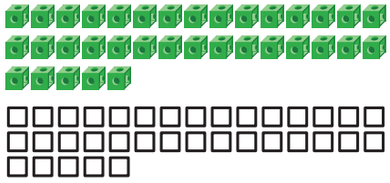
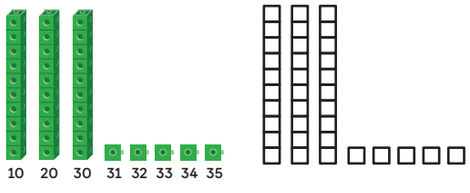
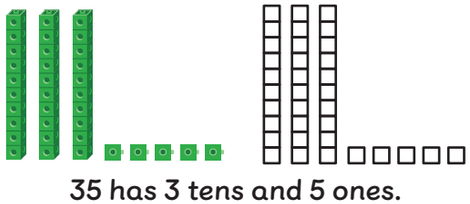


4. 52



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Build the number with all single cubes and create a drawing that matches.	 1, 2, 3, ..., 35	**Support** Ask, "You represented 35 as 35 ones. What is another way you could represent 35 to show how many tens there are in the number?"
Build the number using cubes to count by 10 and by 1 and create a drawing that matches.	 10 20 30 31 32 33 34 35	**Strengthen** Ask, "What do you notice about the digits in the number 35 and the number of tens and ones?"
Build the number using place value reasoning and create a drawing that matches.	 35 has 3 tens and 5 ones.	**Stretch** Ask, "You found the number of tens and ones without counting. Could you find the number of tens and ones in any two-digit number without counting? Why or why not?"

Pairs | 15 min

Activity 2 Who Do You Agree With?

Purpose: Students interpret a base-ten drawing of a two-digit number with ones on the left of the tens to recognize that tens and ones can be represented in any order with objects and drawings without changing the value of a number.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

1 Launch

Say, "When Steph asked Prashant how many special edition Curioso cards he had in his collection, he showed her a drawing that represented how many he had."

Read aloud the directions and Problems 5 and 6.

A **Accessibility: Executive functioning** Chunk this task into smaller, more manageable parts by having students complete Problem 5 in 2 steps. Have students determine the value of the representation first and then consider who they agree with and why.

Provide access to connecting cube towers of 10 and single cubes.

2 Monitor

After students have completed **Problem 5**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What is the problem asking you to think about?"
- Ask, "Describe the drawing. What is represented?"

3 Connect

Invite students to share their responses to Problem 5. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Display the image from Problem 5. Label it with the number 86. Display a student's drawing for Problem 6. Label it with the number 68.

Use the Think-Pair-Share routine. Ask:

- "What do you notice about the digits in each number?"
- "Are these the same number? Why or why not?"

EB **Emergent Bilinguals** Invite students to begin partner interactions by restating their partner's description, in their own words, before adding their own ideas to the discussion. **ELPS 1.E, 2.C, 2.D, 2.F**

Say (if not yet mentioned during discussion), "In the number 86, the digit on the left, the 8, shows the tens, and the digit on the right, the 6, shows the ones. In the drawing in Problem 5, even though the ones are drawn before the tens, the drawing still shows 8 tens and 6 ones."

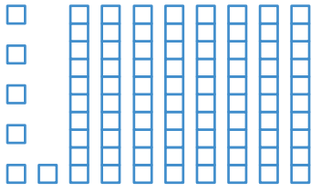
Key Takeaway: Say, "When representing tens and ones with objects or drawings, they can be represented in any order and the value will not change. When representing tens and ones with a two-digit number, the order of the digits matters."

Activity 2

Name _____

Who Do You Agree With?

This drawing shows the number of gold cards Prashant has in his collection.



5 Discuss

Steph thinks the drawing shows 86 (eighty-six).
Another visitor thinks it shows 68 (sixty-eight).
Who do you agree with? Why?

I agree with _____ because _____.

Oral activity: No writing expected. Sample response shown.

I agree with Steph because I see 8 tens and 6 ones. Even though it shows the ones first and then the tens, it shows 86.

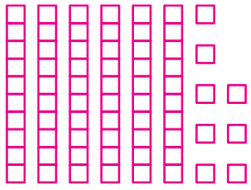
Activity 2

Name _____

Who Do You Agree With? (continued)

6 Draw tens and ones to show the other number from Problem 5. Sample response shown.

Draw



Presentation Screens

D Differentiation | Teacher Moves

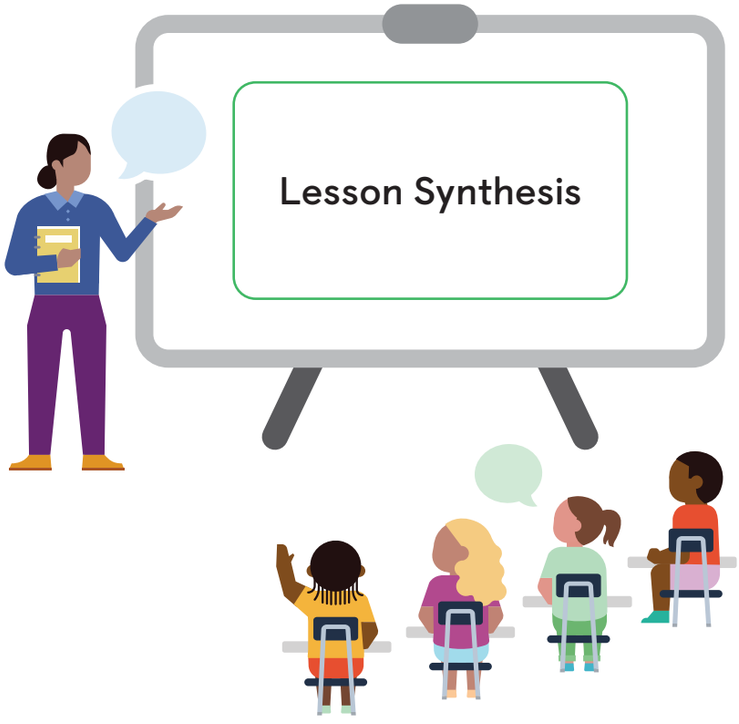
Look for students who . . .	For example . . .	Provide support . . .
Almost there Agree with the visitor, and justify their thinking using the order in which the quantities are shown.	*I agree with the visitor. I see 6 and then 8, so the value is 68.*	**Support** Ask, "How many tens do you see in the drawing? How many ones do you see?"
Agree with Steph, and justify their thinking by counting to find the value of the tens and ones shown in the drawing.	*I agree with Steph because I counted the cubes 10, 20, 30, 40, 50, 60, 70, 80, 81, 82, 83, 84, 85, 86.*	**Strengthen** Ask, "You counted to find the number represented. What is another way you could figure out how many cards are shown?"
Agree with Steph, and justify their thinking using place value reasoning.	*I agree with Steph because the drawing shows 8 tens and 6 ones, which is 86.*	**Stretch** Say, "Talk with your partner about what addition expression could represent the number of gold cards Prashant has in his collection."

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: The **digits** in a *two-digit* number indicate how many tens and ones there are in the number. The left digit represents the tens and the right digit represents the ones. When representing a two-digit number with objects or drawings, changing the order of the tens and ones does not change the value of the number.



Say, "This is a two-digit number. The sticky note is covering one of the digits in the number."

Ask:

- "Could this number be 26? Why or why not?"
- "What number could this be? How do you know?"

Say, "In two-digit numbers, the left digit represents the amount of tens and the right digit represents the amount of ones."

Formalize vocabulary: A **digit** is any number 0–9.

(optional) **Consider using the Word Connections: Words With Multiple Meanings routine** with the new word **digit**. Use the *Words With Multiple Meanings* PDF from the *Math Language Development Resources* to invite students to draw a picture or write in words the math meaning and another meaning of the term. ELPS 3.E, 3.F

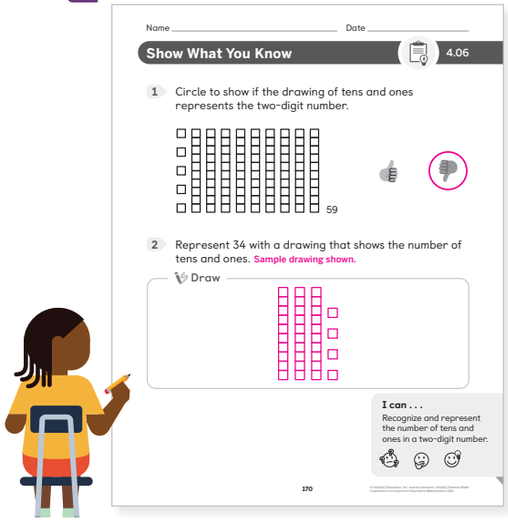
Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.06

1 Circle to show if the drawing of tens and ones represents the two-digit number.

59

2 Represent 34 with a drawing that shows the number of tens and ones. Sample drawing shown.

Draw

I can . . .
Recognize and represent the number of tens and ones in a two-digit number.

170

Today's Goals

1. **Goal:** Represent a two-digit number as amounts of tens and ones using objects and drawings.
   - In Problem 1 in the *Show What You Know*, students determined if a drawing of tens and ones matched a two-digit number.
   - In Problem 2 of the *Show What You Know*, students represented a two-digit numeral with a drawing using tens and ones.
2. **Language Goal:** Describe a two-digit number as amounts of tens and ones. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E
3. **Language Goal:** Justify if a given base-ten drawing represents a two-digit number by reasoning about the values of the digits. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

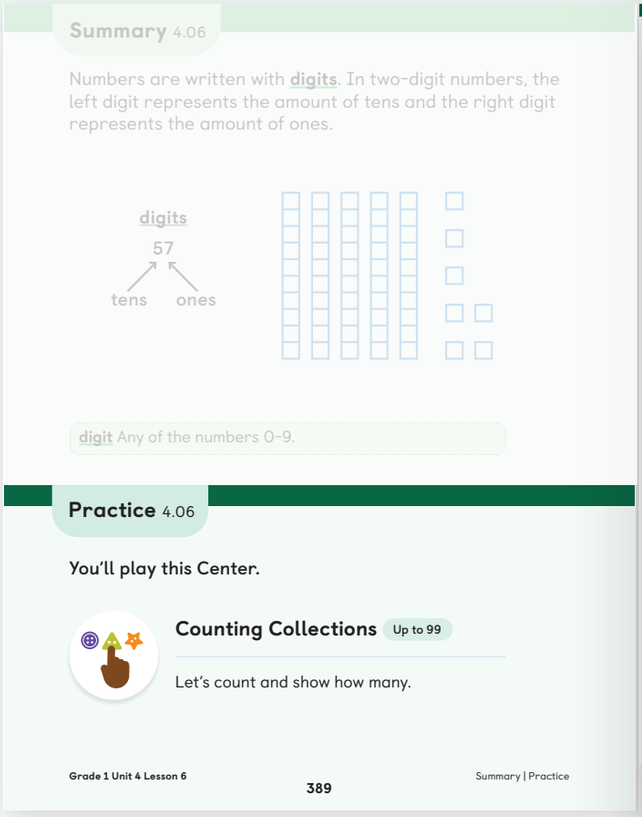
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.06

Numbers are written with **digits**. In two-digit numbers, the left digit represents the amount of tens and the right digit represents the amount of ones.

digits
57
tens ones

digit Any of the numbers 0–9.

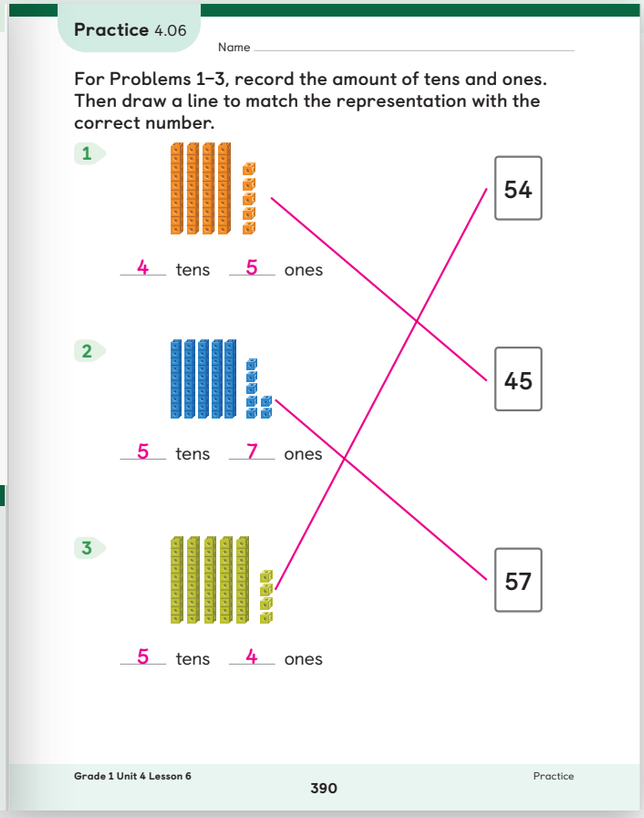
Practice 4.06

You'll play this Center.

Counting Collections Up to 99

Let's count and show how many.

Grade 1 Unit 4 Lesson 6 389 Summary | Practice



Practice 4.06

Name _____

For Problems 1–3, record the amount of tens and ones. Then draw a line to match the representation with the correct number.

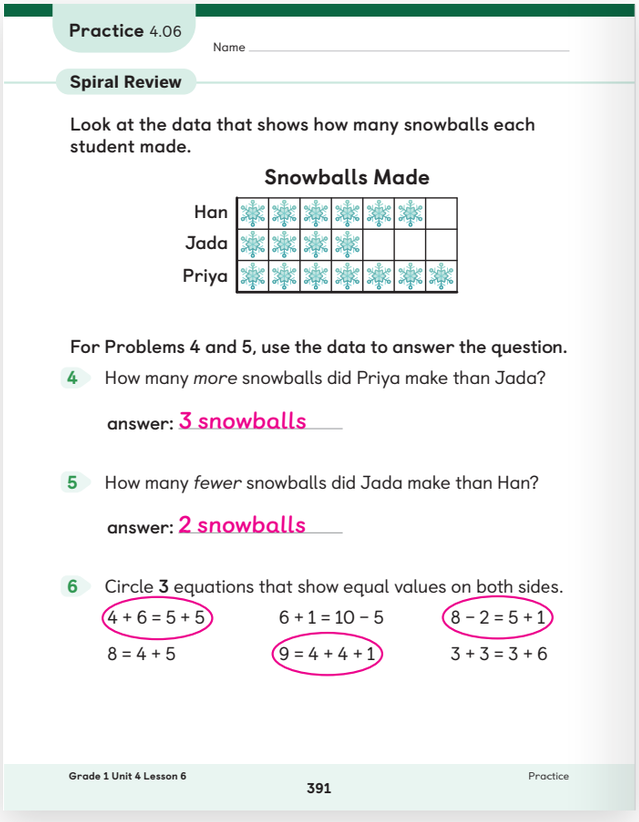
1 4 tens 5 ones

2 5 tens 7 ones

3 5 tens 4 ones

54
45
57

Grade 1 Unit 4 Lesson 6 390 Practice



Practice 4.06

Name _____

Spiral Review

Look at the data that shows how many snowballs each student made.

Snowballs Made

Han	❄❄❄❄❄❄
Jada	❄❄❄❄
Priya	❄❄❄❄❄❄❄

For Problems 4 and 5, use the data to answer the question.

4 How many *more* snowballs did Priya make than Jada?

answer: 3 snowballs

5 How many *fewer* snowballs did Jada make than Han?

answer: 2 snowballs

6 Circle **3** equations that show equal values on both sides.

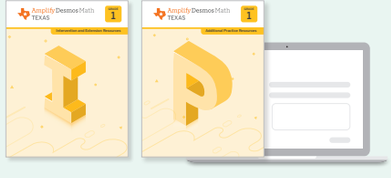
4 + 6 = 5 + 5 (circled)
6 + 1 = 10 − 5
8 − 2 = 5 + 1 (circled)
8 = 4 + 5
9 = 4 + 4 + 1 (circled)
3 + 3 = 3 + 6

Grade 1 Unit 4 Lesson 6 391 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	1.2.C
Spiral Review			
	4, 5	2	1.8.B
Fluency	**6**	1	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Pairs | 15 min

Let's Play Counting Collections, Up to 99

Purpose: Students count collections of up to 99 objects and represent the total amount and how they counted.

Presentation Screen

Materials

Manipulative Kit:

- Distribute 10-frames to each pair.

Classroom materials:

- Distribute cups and collections of up to 99 objects to each pair.

Centers Resources:

- Display the Directions and Recording Sheet during the Launch.
- Distribute a Recording Sheet to each student.

1 Launch

Display the Center materials, Directions, and Recording Sheet.

Demonstrate how to play *Counting Collections, Up to 99*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Counting Collections* today."
- **Say**, "First, I will talk with a partner about how to organize and count the objects in the collection."
- **Use the Think-Pair-Share routine.** Ask, "How would you organize and count this collection to find how many?"
- **Say**, "I will use the 10-frame to organize and count the objects, create a representation to show how I counted, and then record the total."
- **Say**, "After counting a collection and recording the amount, you will count the same collection again in a different way. You will represent how you counted on the back of the Recording Sheet."
- **Say**, "Now, you will play the Center with a partner. After counting a collection twice and recording the amount, choose another collection to count."

2 Monitor

Observe how students are organizing and counting objects. They may count by ones, use 10-frames to organize and count by 10 and then by 1, or make groups of 10 and count by 10 and then by 1. Observe how students are recording their count. They may draw pictures or write numbers to represent their collection.

3 Connect

Invite students to share how they organized and counted their collections.

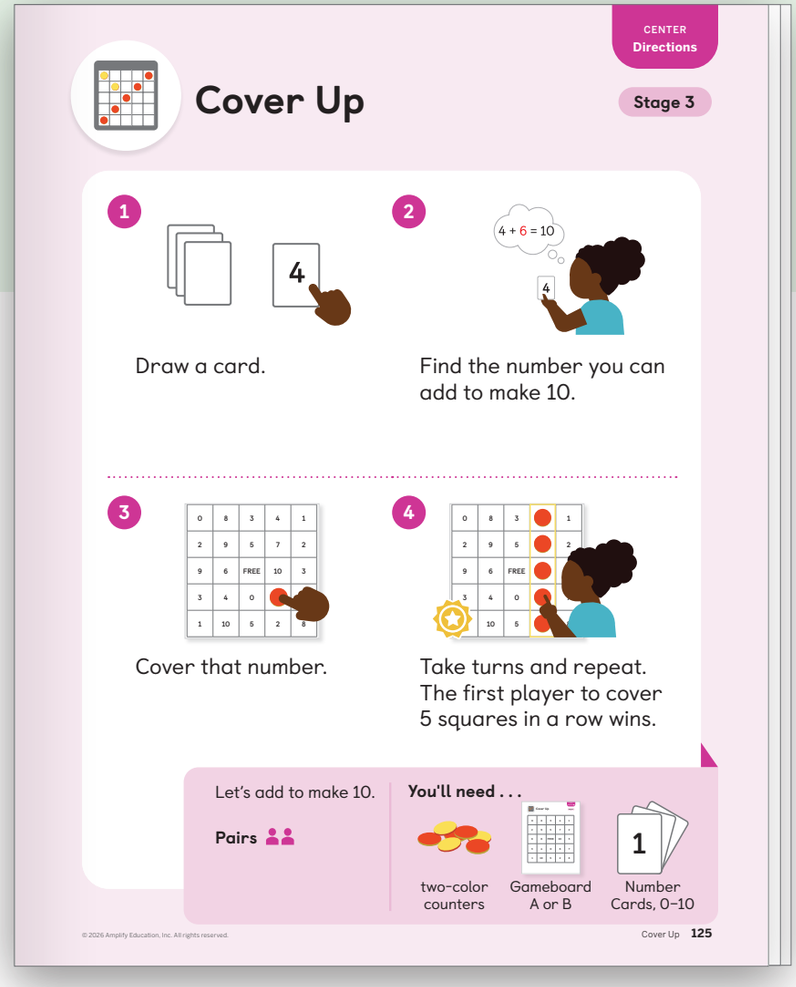
Ask (for each collection), "Why did you choose to count your collection in this way?"

Display a collection that is organized into groups of 10 and remaining ones, or display a Recording Sheet that shows this.

Ask:

- "How is this collection organized?"
- "How many objects are in this collection? How do you know?" Select and sequence students' responses using Rows 2 and 3 in the *Differentiation* table.

Key Takeaway: Say, "You can organize and count collections of objects into groups of ten and ones and choose a strategy for finding the total amount."



CENTER Directions

Cover Up

Stage 3

1 Draw a card.

2 Find the number you can add to make 10.

3 Cover that number.

4 Take turns and repeat. The first player to cover 5 squares in a row wins.

Let's add to make 10.

Pairs

You'll need . . .

two-color counters

Gameboard A or B

Number Cards, 0–10

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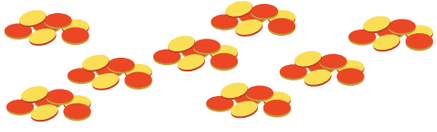
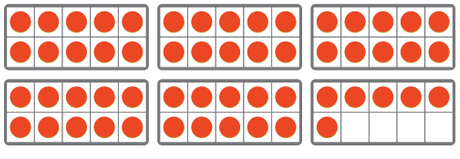
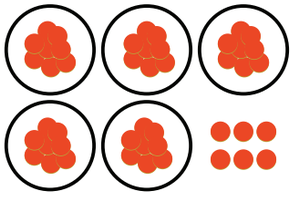
Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Count the objects by 1.	 1, 2, 3, 4, 5, ..., 56	**S Strengthen** Ask, "You counted by 1. What is another way you could count this collection?"
Group the objects (with or without 10-frames) and count by 10 and then count on by 1.	 10, 20, 30, 40, 50, 51, 52, 53, 54, 55, 56	**S Strengthen** Ask, "How many tens are in this collection? How many ones? How could you use the amounts of tens and ones to find the total without counting?"
Group the objects by tens and remaining ones and use place value reasoning to find the total.	 5 tens and 6 ones is 56.	**S Stretch** Ask, "How did organizing your objects in this way help you find the total? Would your strategy work to find the total of a larger collection? Why or why not?"

Differentiation Use after Lesson 6

Lesson Goal: Represent a two-digit number as amounts of tens and ones using objects and drawings.

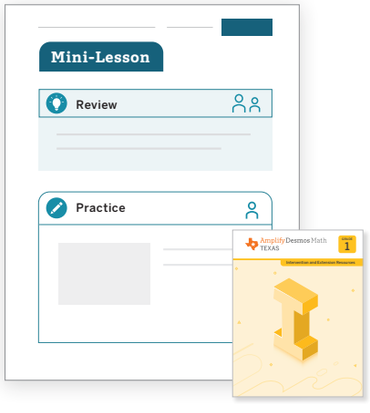
Support

Provide targeted intervention for students by using these resources.

If students represent a two-digit number with all ones:

Respond:

- Assign the *Representing Two-Digit Numbers With Tens and Ones* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 1 *Differentiation: Teacher Moves* table.



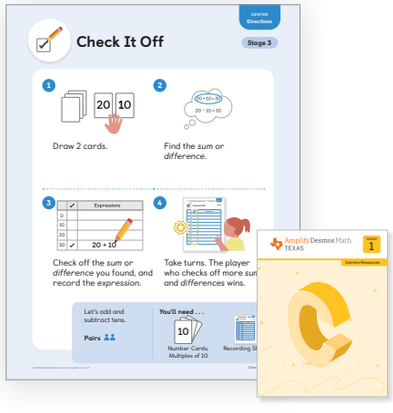
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students represent a two-digit number by counting out tens by 10 and ones by 1:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  Counting Collections: Up to 99
  Cover Up: Add 7, 8, or 9
- Have students complete **Lesson 6 Practice**. | 15 min
- **Item Bank**



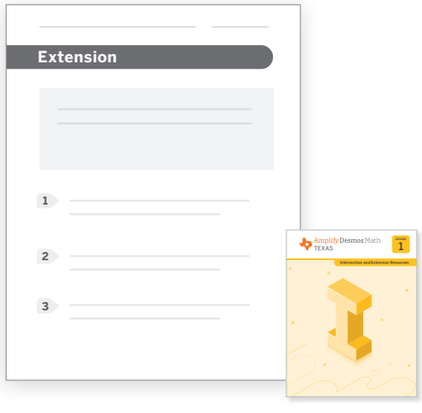
Stretch

Challenge students and extend their learning with these resources.

If students represent a two-digit number using place value reasoning:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

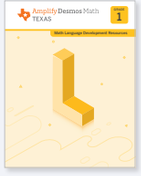


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., **digit/dígito**
- Frayer Model templates
- Vocabulary routines



Professional Learning

What opportunities are you giving students to reflect on their understanding of the base-ten structure of two-digit numbers?

Unit 4
Lesson
7

Student Edition pages and Presentation Screens support learning in this lesson.

Do They Show the Same Number?

Interpreting Representations of Two-Digit Numbers

Let's explore different ways to represent two-digit numbers.

Key Concepts

Today's Goals

1. **Goal:** Interpret base-ten representations of two-digit numbers, including standard form and expanded form.
2. **Language Goal:** Justify if 2 different base-ten representations show the same number. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students interpret a variety of base-ten representations of two-digit numbers, including drawings and written numerals in **standard form** and words, to determine if 2 representations show the same number. They are formally introduced to **expanded form**, in which the addends represent the values of the tens and ones digits. They then deepen their understanding of two-digit numbers through a matching activity and reason about the amounts of tens and ones to make connections between different representations of the same number. **(TEKS 1.1.E)**

Prior Learning

In Unit 3, students represented teen numbers with *10 + n* expressions. In Lesson 6, students represented two-digit numbers with cubes and drawings and discussed how representations showed the amounts of tens and ones in each number.

Future Learning

In Lesson 8, students will continue to develop their conceptual understanding of the base-ten structure of two-digit numbers as they represent two-digit numbers in multiple ways.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of place value.

Vocabulary

New Vocabulary

standard form

expanded form

Review Vocabulary

digit

equal

TEKS

Building Toward

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Math Process Standards: 1.1.E, 1.1.F, 1.1.G

ELPS: 1.B, 1.D, 1.E, 2.B, 2.C, 2.D, 2.E. 2.F, 3.E, 3.F

Building Math Identity

I can be all of me in math class.
How do you keep track of your thinking in math class?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

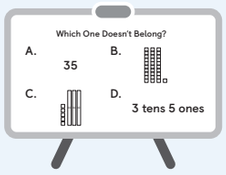
60 min

TEKS: 1.1.E, 1.1.F, 1.1.G, Building Toward 1.2.C

Warm-Up

Whole Class | 10 min

Students use the **Which One Doesn't Belong?** routine to find similarities and differences in 4 base-ten representations of two-digit numbers. They should be encouraged to use precise language as they give their reasons for the one they chose. **(TEKS 1.1.F, 1.1.G)**



Activity 1

Small Groups | 15 min

Students interpret different base-ten representations of two-digit numbers, including drawings, words, and expanded form, to determine if pairs of representations show the same number.

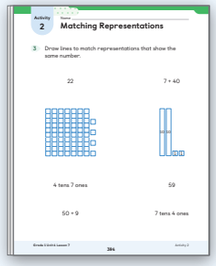
Materials: Activity 1 PDF

Additional Prep Display: 2 sets of Posters A–F from the Activity 1 PDF in order by letter in various places in the classroom

Activity 2

Independent | 15 min

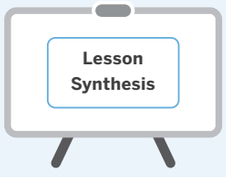
Students match representations of the same two-digit number to make connections between different representations. They recognize that two-digit numbers could be represented with **expanded form**, which shows the value of each digit.



Synthesis

Whole Class | 5 min

Students review and reflect on how different representations of two-digit numbers show the amounts of tens and ones.

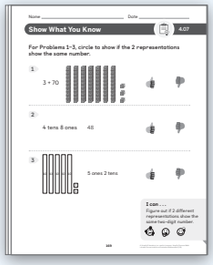


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by determining if 2 representations show the same two-digit number.

Materials: *Show What You Know* PDF

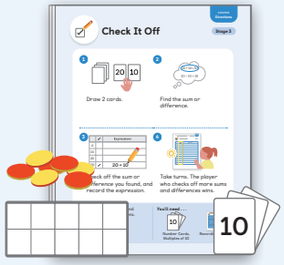


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Check It Off
- Counting Collections
- Cover Up



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

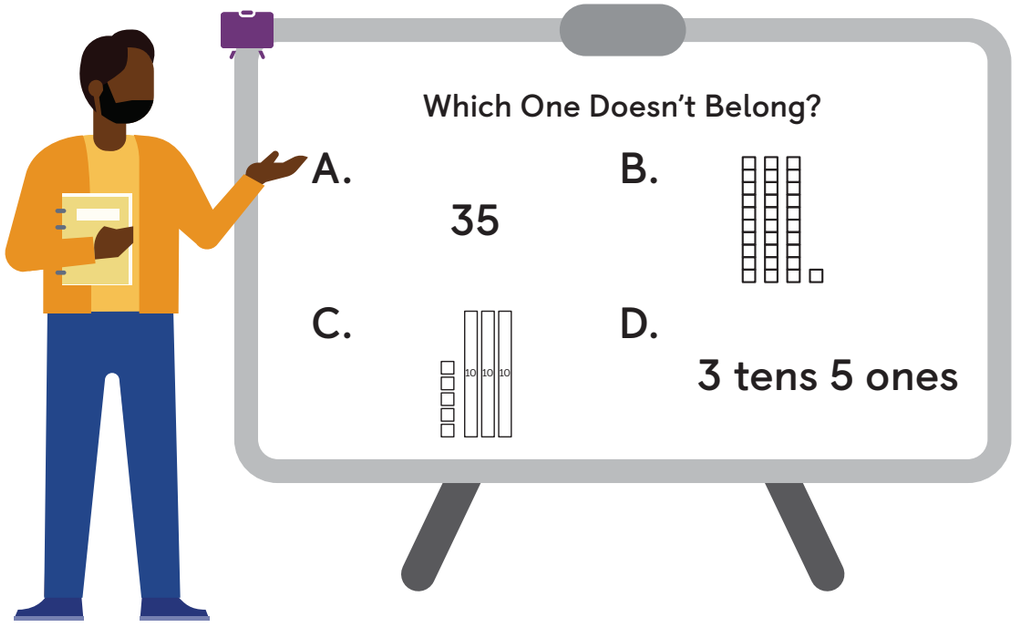
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Which One Doesn't Belong?

Purpose: Students analyze and compare 4 base-ten representations to build precision with place-value related mathematical terms including *tens*, *ones*, *digit*, and *two-digit number*.



1 Launch

Display the 4 representations.

Use the Which One Doesn't Belong? routine.

Say, "Choose one that doesn't belong. Be ready to share your reasoning."

2 Connect

Record students' responses as they share.

Ask, "Look at Representations B and C. Why might a person choose to draw a ten by labeling a rectangle with '10' instead of drawing a stack of 10 ones?"

Say, "You will continue to think about different representations of two-digit numbers."

Students might say . . . ELPS 2.C, 2.D, 2.E

A: *It is the only one written as a two-digit number.*

B: *It is the only one that doesn't show 35.*

C: *It is the only one that shows the ones on the left and the tens on the right.*

D: *It is the only one that tells how many tens and ones with words.*

Small Groups | 15 min

Activity 1 Representation Tour

Purpose: Students apply their understanding of place value to interpret different representations of two-digit numbers and determine if they show the same number.

Presentation Screens

Materials

Lesson Resources:

- Display two sets of Posters A–F from the Activity 1 PDF in order by letter in various places around the classroom with enough space for students to gather.

Short on time? Consider modifying the activity so that groups visit 4 posters rather than 6 posters.

1 Launch

Arrange students in groups of 3.

Say, "Two-digit numbers can be represented in more than 1 way."

EB **Emergent Bilinguals** Invite students to share different meanings of the term booth. Clarify which meaning this word will have for this lesson. ELPS 1.D

Read aloud the directions and Problems 1 and 2.

Say, "When you finish discussing, rotate to the next poster. For example, if you are visiting Poster C, you will visit Poster D next."

Note: As an alternative, determine when students should rotate to the next poster.

2 Monitor

While students complete the activity, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about this representation?"
- Ask, "What do you notice about the number of tens in this representation? The number of ones?"

3 Connect

MLR This Connect is structured using the *MLR7: Compare and Connect* routine. ELPS 1.B, 1.E, 2.B, 2.D, 2.E

Ask, "How did you know if 2 representations were showing the same number?"

Display the different representations of 52.

Use the Think-Pair-Share routine. Ask:

- "How are the representations alike?"
- "How are the representations different?"

A **Accessibility: Visual-spatial processing** Annotate the representations to highlight the similarities and differences students notice between the representations.

Key Takeaway: Say, "There is more than 1 way to represent the number of tens and the number of ones in a two-digit number."

Unit 4 Lesson 7

Name

TEKS: 1.1.E, Building Toward 1.2.C

Do They Show the Same Number?

Let's explore different ways to represent two-digit numbers.

I can be all of me in math class. How do you keep track of your thinking in math class?

Warm-Up eyes on teacher

Activity 1

Representation Tour

Discuss each representation with your group.

1 Discuss

Do the representations show the same number? How do you know?

- I know the representations show the same number because _____.
- I know the representations do not show the same number because _____.

Oral activity: No writing expected. Sample response shown.

I know the representations do not show the same number because one has 2 tens and the other has 4 tens.

Activity 1

Name

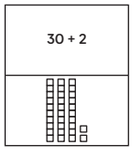
Representation Tour (continued)

2 Circle to show if each poster shows representations of the same number.

Representation poster	Do they show the same number?	
A	👍	👎
B	👍	👎
C	👍	👎
D	👍	👎
E	👍	👎
F	👍	👎

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . Poster B	Provide support . . .
Almost there Reason that different numbers are shown because the representations look different.	 *The top shows an expression and the bottom shows a drawing.*	**Support** Ask, "You noticed a difference in the representations. What do you notice is the same about the representations?"
Reason that the numbers are the same or different by figuring out the number shown in each representation.	*The top shows 30 plus 2, which is 32, and the bottom shows 10, 20, 30, 31, 32.*	**Strengthen** Ask, "You figured out that both representations show the same number. What other connections can you make between the representations?"
Reason that the numbers are the same or different by comparing the amount of tens and ones shown in each representation.	*The drawing shows 3 tens. The expression shows 3 tens represented by the number 30. Both representations show 2 ones.*	**Stretch** Ask, "When might you want to use each type of representation?"

Independent | 15 min

Activity 2 Matching Representations

Purpose: Students match representations that show the same two-digit number, including expanded form that shows the values of the digits, to deepen their understanding of the values of the digits in two-digit numbers.

Presentation Screens

Materials

Classroom materials:

- Display the *Words to Describe Numbers* chart (from Lesson 8) during the Launch.

1 Launch

Read aloud Problem 3.

Have students work on Problem 3 independently for 5 minutes.

Read aloud Problem 4.

A **Accessibility: Memory and attention** Clarify vocabulary by encouraging students to review the *Words to Describe Numbers* chart before discussing the problems. Provide time for students to ask clarifying questions about the language displayed on the chart.

2 Monitor

While students complete the activity, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "In your own words, what do you need to do to complete the problem?"
- Ask, "What do you notice about the tens in this representation? The ones?"

EB **Emergent Bilinguals** Foster metalinguistic awareness by using a think-aloud routine to demonstrate how to complete Problem 4. Then have students choose a different pair of matching representations to explain to their partner. **ELPS 1.E, 2.F**

3 Connect

Record the number 59 and the expression 50 + 9.

Use the Think-Pair-Share routine. Ask, "How do you know these representations show the same number?"

Say (if not yet mentioned during discussion), "The 5 in 59 represents 5 tens, and 5 tens is 50. The 9 in 59 represents 9 ones. When the expression shows the value of each digit, 50 + 9, it is called **expanded form**. When it is represented using only digits, it is called **standard form**."

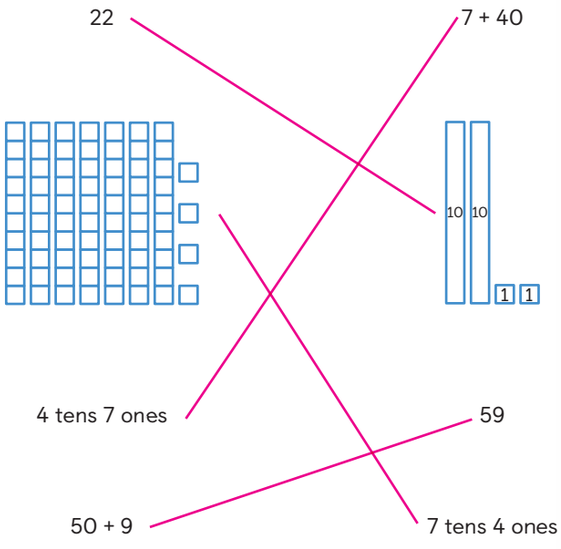
Key Takeaway: Say, "Two-digit numbers can be represented in many ways, including **standard form** and **expanded form**."

Activity 2

Name _____

Matching Representations

3 Draw lines to match representations that show the same number.



Activity 2

Name _____

Matching Representations (continued)

4 Discuss

Choose a pair of matching representations from Problem 3. Explain to a partner how you know the representations show the same number.

I know the representations show the same number because _____.

Oral activity: No writing expected. Sample response shown.

I know the representations show the same number because 22 has 2 tens and 2 ones and the drawing shows 2 tens and 2 ones.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Determine matches using the digits.	**4 tens 7 ones and 7 tens 4 ones have the same numbers.** or **4 tens 7 ones is a match with 7 + 40 because there is a 4 and 7.**	**Support** Ask, "What does the 4 represent in 4 tens 7 ones? What does the 4 represent in 7 tens 4 ones?"
Determine matches by counting to find each number.	**4 tens and 7 ones is 10, 20, 30, 40, 41, 42, . . . , 47. 7 + 40 is equal to 47 because 40, 41, 42, . . . , 47. Both representations show 47.**	**Strengthen** Ask, "You found that the 2 representations show 47. Where do you see the number of tens in these representations? Where do you see the number of ones?"
Determine matches by reasoning about the values of the tens and ones.	**4 tens is 40, and 7 ones is 7, so it matches 7 + 40. The 4 in 47 represents 4 tens and the 7 in 47 represents 7 ones.**	**Stretch** Ask, "How could you represent 47 in another way to help someone understand that these representations show the same number?"

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: A two-digit number can be represented in different ways, including with **expanded form** and **standard form**.

Use the Think-Pair-Share routine. Ask, "How could you represent the number 27 with expanded form? How else could you represent the number 27?"

Say, "When representing a two-digit number, you can show the number of tens and ones in different ways using drawings, numbers, words, expanded form and standard form."

Formalize vocabulary: expanded form, standard form

(optional) **Consider using the Frayer Model routine** with one or more of the new vocabulary words. **ELPS 3.E, 3.F**

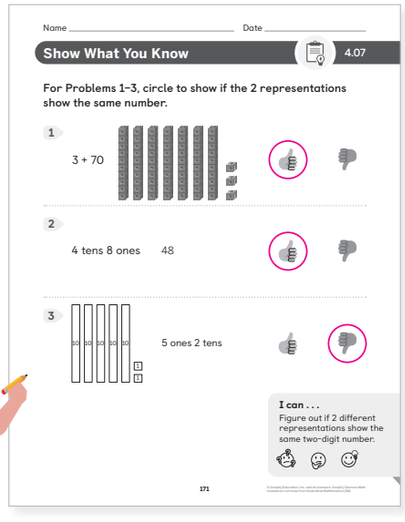
Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.07

For Problems 1–3, circle to show if the 2 representations show the same number.

1. 3 + 70
2. 4 tens 8 ones 48
3. 5 ones 2 tens

I can . . .
Figure out if 2 different representations show the same two-digit number.

171

Today's Goals

1. **Goal:** Interpret base-ten representations of two-digit numbers, including standard form and expanded form.
   - In Problems 1–3 in the *Show What You Know*, students determined if pairs of representations showed the same two-digit number.
2. **Language Goal:** Justify if 2 different base-ten representations show the same number. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**

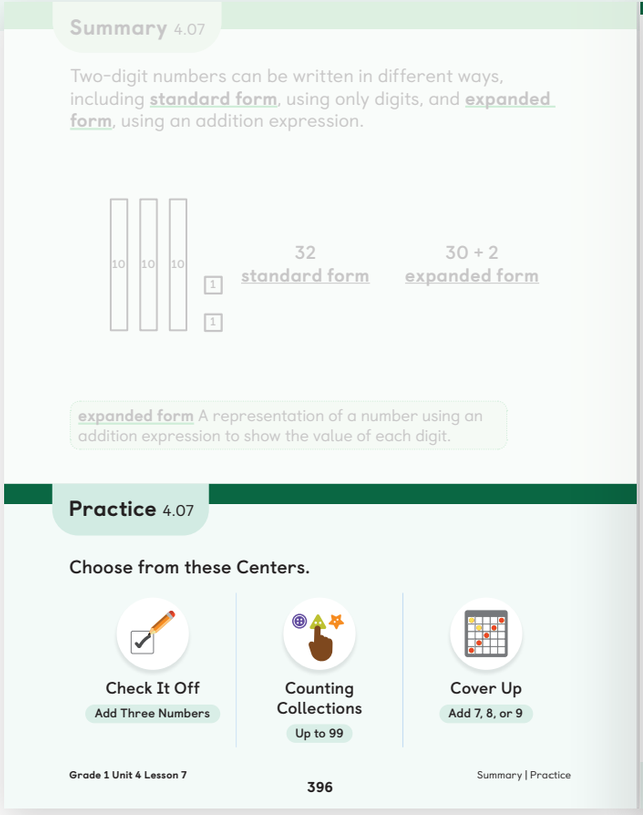
Differentiation See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.07

Two-digit numbers can be written in different ways, including **standard form**, using only digits, and **expanded form**, using an addition expression.

10 10 10 1 1

32
standard form

30 + 2
expanded form

expanded form A representation of a number using an addition expression to show the value of each digit.

Practice 4.07

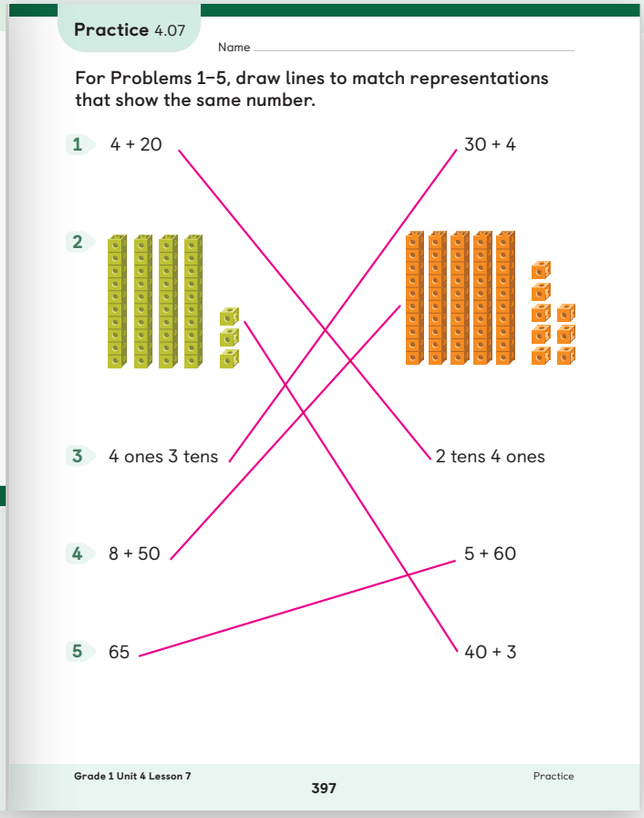
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 99

Cover Up
Add 7, 8, or 9

Grade 1 Unit 4 Lesson 7 396 Summary | Practice



Practice 4.07

Name _____

For Problems 1–5, draw lines to match representations that show the same number.

1 4 + 20

2

3 4 ones 3 tens

4 8 + 50

5 65

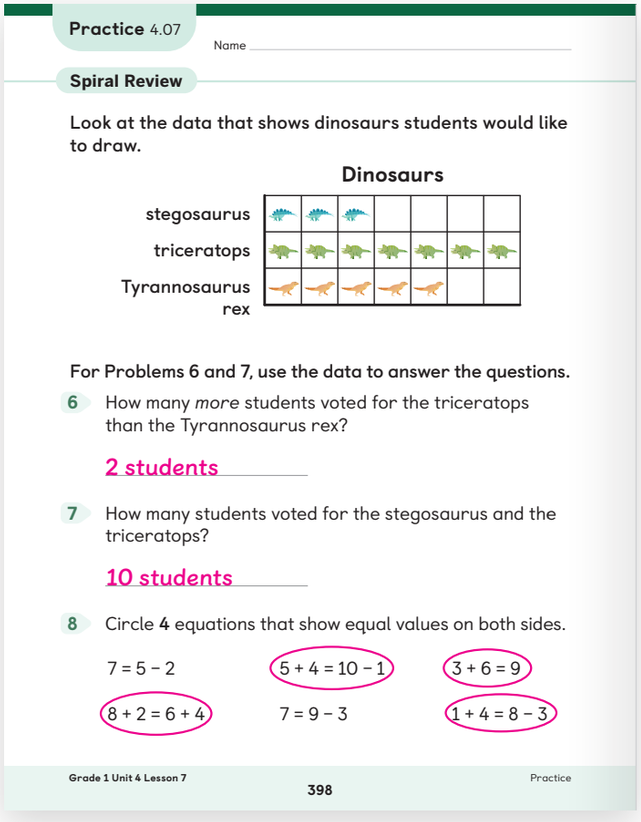
30 + 4

2 tens 4 ones

5 + 60

40 + 3

Grade 1 Unit 4 Lesson 7 397 Practice



Practice 4.07

Name _____

Spiral Review

Look at the data that shows dinosaurs students would like to draw.

Dinosaurs

stegosaurus	3
triceratops	7
Tyrannosaurus rex	5

For Problems 6 and 7, use the data to answer the questions.

6 How many *more* students voted for the triceratops than the Tyrannosaurus rex?

2 students

7 How many students voted for the stegosaurus and the triceratops?

10 students

8 Circle **4** equations that show equal values on both sides.

7 = 5 − 2

5 + 4 = 10 − 1

3 + 6 = 9

8 + 2 = 6 + 4

7 = 9 − 3

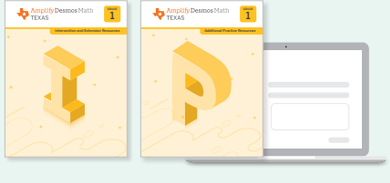
1 + 4 = 8 − 3

Grade 1 Unit 4 Lesson 7 398 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–5	1	1.2.C
Spiral Review			
	6, 7	2	1.8.C
Fluency	**8**	1	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Check It Off

Add Three Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 3.

Counting Collections

Up to 99

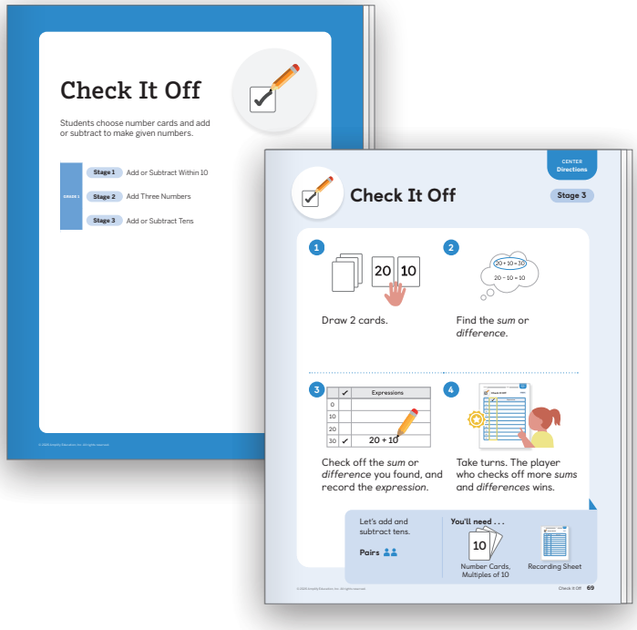
Pairs | 15 min | 1.2.C

Students count collections and represent how many and how they counted.

Materials

- 10-frames **(Manipulative Kit)**
- collections of objects (one per pair), cups **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Cover Up

Add 7, 8, or 9

Pairs | 15 min | 1.3.D, 1.5.G

Students add 7, 8, or 9 to a number between 0 and 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 1.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 7

Lesson Goal: Interpret base-ten representations of two-digit numbers, including standard form and expanded form.

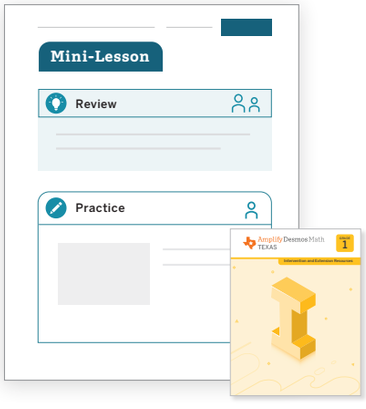
Support

Provide targeted intervention for students by using these resources.

If students interpret base-ten representations using the order in which the tens and ones are represented:

Respond:

- Assign the *Matching Representations of Two-Digit Numbers* Mini-Lesson. | 15 min
- Invite students to discuss the Activity 1 Monitor questions and reflect on which place value is represented first in a two-digit number.



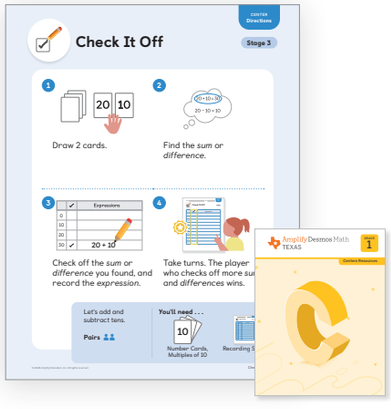
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students interpret a base-ten representation by counting or adding to identify the total value of the representation:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  Counting Collections: Up to 99
  Cover Up: Add 7, 8, or 9
- Have students complete **Lesson 7 Practice**. | 15 min
- **Item Bank**



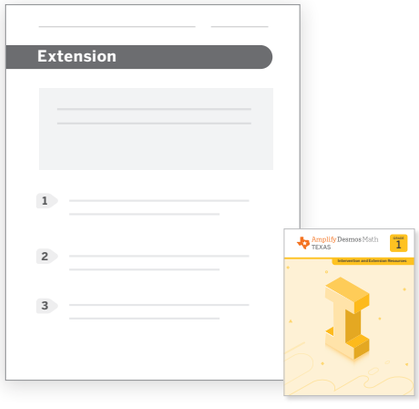
Stretch

Challenge students and extend their learning with these resources.

If students interpret a base-ten representation by identifying the amounts of tens and ones represented:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

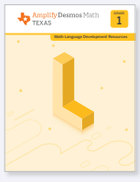


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., digit/dígito
- Frayer Model templates
- Vocabulary routines



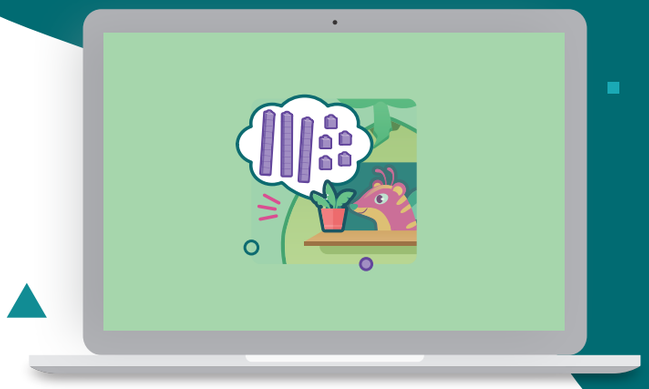
Professional Learning

Considering students' responses, what was the best question you asked students today and why?

Unit 4
Lesson
8

Student devices recommended

We recommend students use devices for this lesson. **Student Edition pages** are also available.



Curioso Customers

Connecting Representations of Two-Digit Numbers

Let's represent the same two-digit number in different ways.

Key Concepts

Today's Goals

1. **Goal:** Interpret different base-ten representations of two-digit numbers, including pictures, numbers, words, and expanded form, and represent the numbers with a different type of representation.
2. **Language Goal:** Compare different ways to represent two-digit numbers and describe how each shows the number as an amount of tens and ones. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students attend to the base-ten structure of two-digit numbers as they make connections between types of representations. They use the amounts of tens and ones in a given representation to represent the two-digit number in a different way. Students are introduced to the terms *tens place* and *ones place* to provide formal mathematical language they can use to describe the composition of two-digit numbers and recognize the importance of a digit's position in determining its value. **(TEKS 1.1.E)**

Prior Learning

In Lesson 7, students compared different base-ten representations of two-digit numbers, including standard form and expanded form, to determine if they had the same value.

Future Learning

In Lesson 9, students will write two-digit numbers to match different base-ten representations, using what they know about tens and ones to explain the values of the digits.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of the meanings of the digits in two-digit numbers.

Vocabulary

Review Vocabulary

digit

estimate

expanded form

standard form

TEKS

Addressing

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Math Process Standard: 1.1.E

ELPS: 1.E, 1.F, 2.B, 2.C, 2.D, 2.E, 2.F

Building Toward

2.2.B

Building Math Identity

I can be all of me in math class.

In the Unit Story, the characters are proud of collecting. What are you proud of in math class?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

60 min

TEKS: 1.1.E, 1.2.C

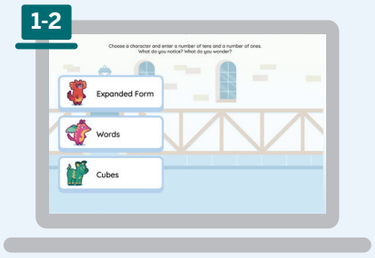
Why digital?

Students receive real-time feedback to help make connections between different types of base-ten representations.

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about different Curioso characters and the base-ten representations they use to communicate.



Activity 1

Pairs | 15 min

Students are given base-ten representations of two-digit numbers, including pictures of cubes, expanded form, numbers, and words. They interpret the representations by identifying the amounts of tens and ones and then represent each number in a different way.

Activity 2

Pairs | 15 min

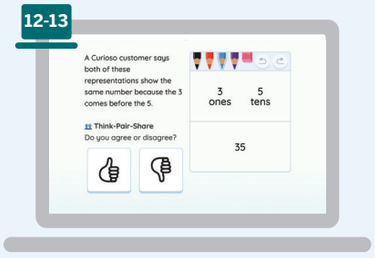
Students identify the two-digit number that matches different representations. They recognize that in a two-digit number, the digit in the tens place represents an amount of tens and the digit in the ones place represents an amount of ones.

Materials: *Words to Describe Numbers* chart (from prior lessons)

Synthesis

Whole Class | 5 min

Students review and reflect on the structure of two-digit numbers and how the location of a digit determines its value.

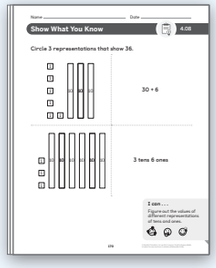


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by identifying the values of different representations of two-digit numbers.

Materials: *Show What You Know* PDF

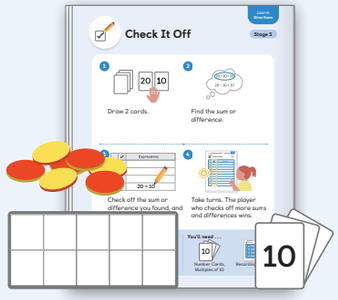


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice organizing, counting, and describing quantities.

- Counting Collections
- Check It Off
- Cover Up



Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

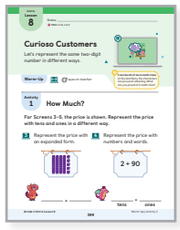
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

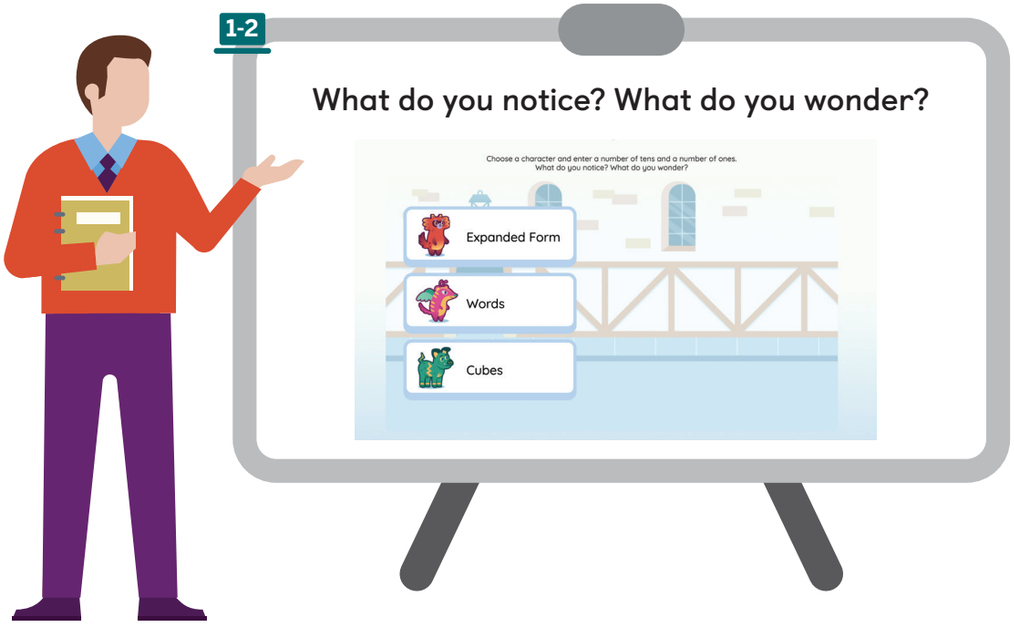
Whole Class | 10 min | Suggested Pacing: Screen 1, Screen 2

Warm-Up Notice and Wonder

Purpose: Students prepare for Activity 1 by exploring an interactive that introduces the characters and the base-ten representations the characters use to communicate.

Students using print





1 Launch

1. **Play** the animation. ELPS 1.F

   Say, "You just saw Curioso characters strolling around the market and looking for goods to buy."

2. **Read aloud** the directions and let students explore.

   Students using print: Have students choose a character to start. Demonstrate by having students suggest amounts to input and when to switch between characters.

   Use the Notice and Wonder routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Invite students to share their responses. Demonstrate translating the same number between all 3 characters.

Ask (if not yet mentioned during discussion), "What is the same about each of the character's representations?"

Say, "Today you will help these Curioso characters communicate with each other so they can buy and sell goods at the market."

Students might say . . . ELPS 2.B

I notice each character shows the number in a different way.

I notice that when I click on a different character, the numbers of tens and ones do not change.

I wonder why each Curioso thinks about the tens and ones in different ways.

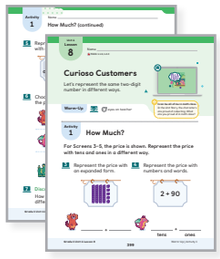
I wonder why the first number is not the same for all the Curiosos but the second number is the same.

Pairs | 15 min | Suggested Pacing: Screen 3, Screens 4-6, Screen 7

Activity 1 How Much?

Purpose: Students apply place value understanding to interpret base-ten representations and show the amounts of tens and ones in different ways.

Students using print



1 Launch

3 **Display** the Curioso customer at the fish stand.

Say, "This Curioso customer wants a fish. The sign shows how much a fish costs, but the customer needs help understanding the price."

Ask, "How much does a fish cost? Click the numbers to represent the price with expanded form, and notice what happens." Have students complete Screen 3.

Demonstrate a correct response, and ask, "How does the robot help customers know if they are paying the correct amount?"

4-5 **Read aloud** the directions. Say, "For each screen, explain to your partner how you figured out your answer before moving to the next screen."

Students using print: Have students complete Screens 4 and 5 independently for 4–5 minutes. Then have students compare responses with a partner. If students disagree about an answer, encourage them to work together to come to an agreement.

EB **Emergent Bilinguals** Provide sentence frames to support students with partner discussions. For example, display the frame, "I noticed. . ., so I matched. . ." ELPS 1.E, 2.C, 2.E

2 Monitor

After students have completed **Screen 4**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about the representation?"
- Ask, "What number represents the number of tens? What number represents the number of ones?"

MLR **MLR8: Discussion Supports—Sentence Frames** ELPS 1.E, 2.C, 2.E

While students work, display these sentence frames for them to use as they compare their responses to Problem 1.

- "I see the tens represented ____."
- "I see the ones represented ____."

3 Connect

6 **Read aloud** the directions. Have students complete Screen 6.

Say, "Tell your partner which customer you chose and how you represented the price."

7 **Display** the representations of 51.

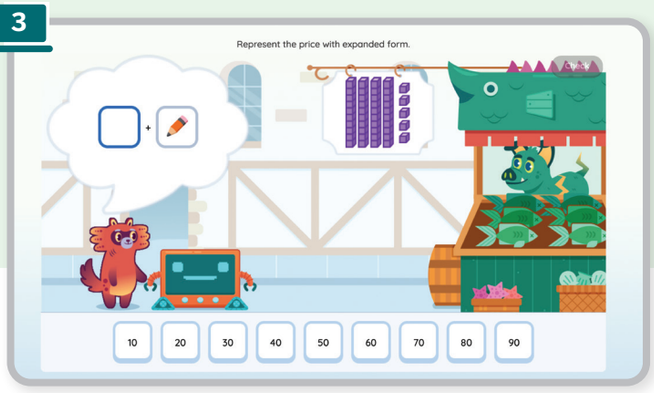
Ask, "How did you figure out how to represent 51 in a different way?"

Invite students to share their responses. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Key Takeaway: Say, "Pictures, numbers, words, and expanded form can be used to represent two-digit numbers. You can figure out the number of tens and ones shown to represent a two-digit number in a different way."

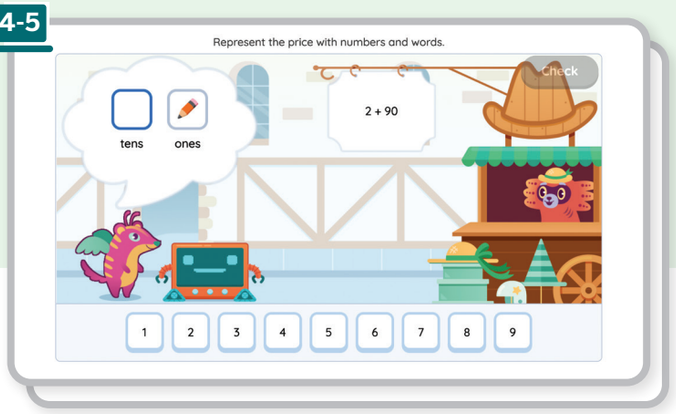
Students using digital

3



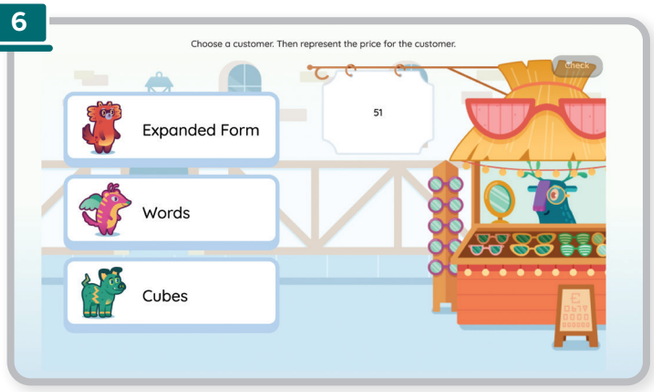
Students input the expression 40 + 5 to represent the number in expanded form.

4-5



Students input the numeral 92. Students build the number 23 with base-ten blocks.

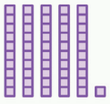
6



Students choose a representation type and then represent the number 51 in their chosen format.

7

Explain
How did you figure out how to represent 51 in a different way?



5 1
tens one

50 + 1

Students discuss how they interpreted the representation on Screen 6 to create different base-ten representations.

Students using print **will arrive at similar answers.**

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Use the order in which the amounts are represented to determine the order in which they enter the amounts.	The price is 2 + 90, so I entered 2 first and then 9.	**Support** Ask, "What do you notice about how many tens and ones are in your expanded form and how many tens and ones are in the price?"
Determine the amounts of tens and ones in the number represented, and enter the same amounts of tens and ones.	One of the addends in the expanded form is 2, so I entered 2 ones. Then I thought about how many tens are in 90, and that is 9 tens.	**Strengthen** Ask, "You matched the number of tens and the number of ones. What two-digit number did you represent?"
Determine the number represented and then enter the amounts of tens and ones.	2 + 90 is 92. I know 92 has 9 tens and 2 ones.	**Stretch** Ask, "The tens and ones in the price are in a different order than the tens and ones you entered. Could the tens and ones always be represented in a different order? How do you know?"

Pairs | 15 min | Suggested Pacing: Screens 8-10, Screen 11

Activity 2 The Price Is Right!

Purpose: Students apply place value understanding to interpret base-ten representations and identify the two-digit numbers they represent.

Students using print

Additional Print Materials

Classroom materials:

- Add new terms to the *Words to Describe Numbers* chart (from prior lessons) during the Connect.

1 Launch

8 **Display** the Curioso customer at the fish stand.

Say, "This Curioso customer wants to shop at all the stands at the market, but he only communicates using two-digit numbers. Help this customer understand the prices represented at each stand."

8-10 **Read aloud** the directions for Screens 8–10.

Say, "For each screen, talk with your partner about how you figured out your answer before moving to the next screen."

Students using print: Have students complete Screens 8–10 independently for 5–7 minutes. Then have students compare responses with a partner. If students disagree about an answer, encourage them to work together to come to an agreement.

2 Monitor

After students have completed **Screen 8**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about the representation?"
- Ask, "How many tens (ones) are in this representation? How could you use the number of tens (ones) to help you figure out the number?"

3 Connect

11 **Display** the representations of 76.

Use the Think-Pair-Share routine. Ask, "Where do you see tens and ones in each representation?"

EB **Emergent Bilinguals** Invite students to begin partner interactions by restating their partner's description, in their own words, before adding their own ideas to the discussion. **ELPS 1.E, 2.C, 2.D, 2.F**

Say (while pointing to the respective digits in 76), "In two-digit numbers, there is a digit in the *tens place* and in the *ones place*. The 7 in 76 represents 7 tens. The 6 in 76 represents 6 ones."

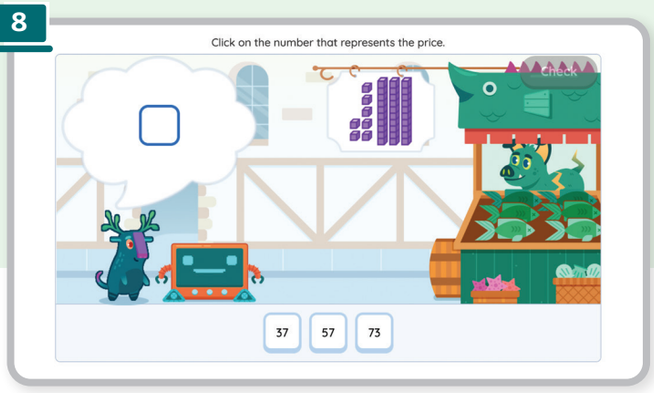
A **Accessibility: Visual-spatial processing** Use color-coding to emphasize and highlight the tens and ones in each representation. For example, circle or underline the tens in each representation with one color, and circle or underline the ones with a different color.

Record the terms *tens place* and *ones place* on the *Words to Describe Numbers* chart.

Key Takeaway: Say, "When a number is represented as numbers of tens and ones, you can figure out the two-digit number by using the number of tens as the digit in the tens place and the number of ones as the digit in the ones place."

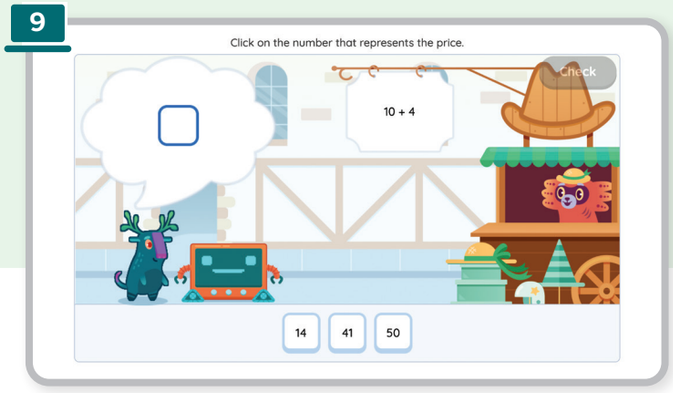
Students using digital

8



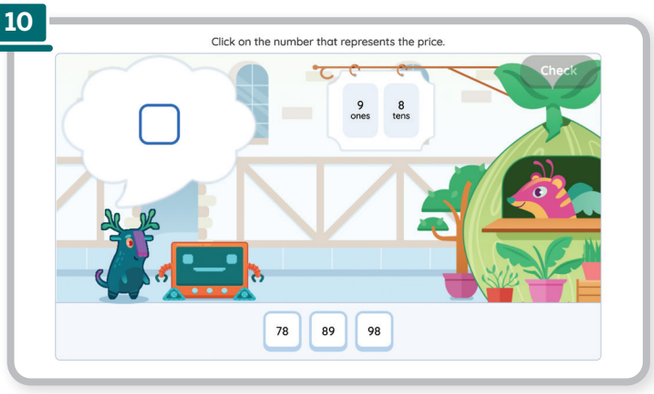
Students respond with the answer 37.

9



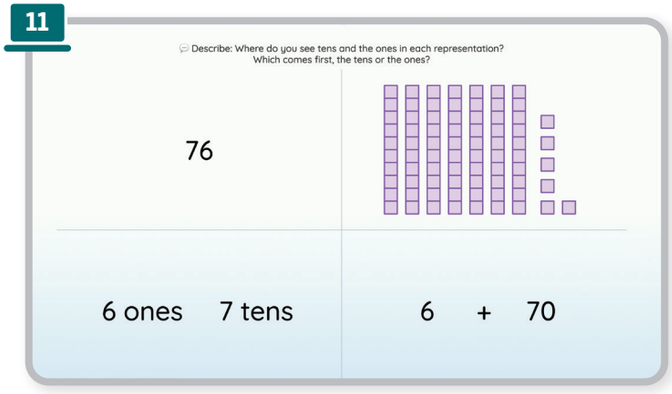
Students respond with the answer 14.

10



Students respond with the answer 89.

11



Students describe where they see amounts of tens and ones in 4 equivalent base-ten representations.

Students using print **will arrive at similar answers.**

D Differentiation | Teacher Moves

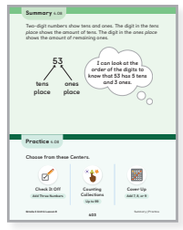
Look for students who . . .	For example . . .	Provide support . . .
Almost there Choose a number with digits that represent amounts of tens and ones that are different from what is shown.	I saw 53 so I chose 53.	**Support** Ask, "How many tens do you see? Which number has the same number of tens?"
Almost there Choose a number with digits that represent the amounts of tens and ones in reverse order.	I chose 73 because there are 7 ones and then 3 tens.	**Strengthen** Ask, "Where do you see tens represented in the price? How many tens are there?"
Choose the number with digits that represent the amounts of tens and ones.	I looked at the tens first and saw 3. Then I looked at the ones and saw 7 ones. I chose 37 because it has 3 tens and 7 ones.	**Stretch** Say, "73 also has the digits 3 and 7. Talk with your partner about how the representation for 73 would be different."

Whole Class | 5 min | Suggested Pacing: Screens 12-13

Synthesis

Lesson Takeaway: The digits in a two-digit number represent the number of tens and ones in the number. The digit on the left is in the tens place and represents a number of tens. The digit on the right is in the ones place and represents a number of ones.

Students using print



12 **Display** the Curioso customer's statement and the representations of 35.

Say, "A Curioso customer says both of these representations show the same number because the 3 comes before the 5."

Use the Think-Pair-Share routine. Ask, "Do you agree or disagree?"

Students using print: Have students show a thumb up if they think the equation is true or a thumb down if they think the equation is false.

13 **Play** the animation. ELPS 1.F

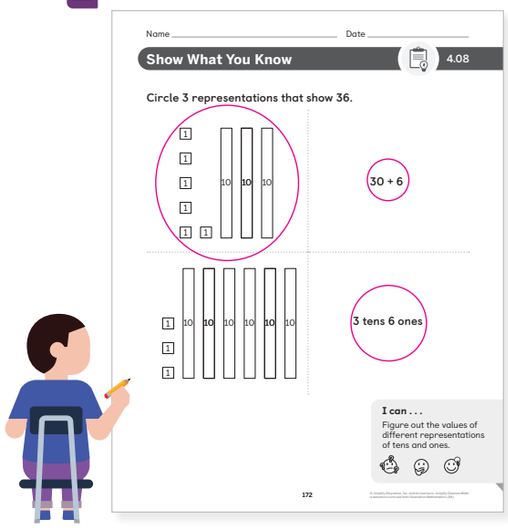
Say (if not yet mentioned during discussion), "In a two-digit number, the value of a digit depends on its place in the number. The digit in the tens place is always on the left. The digit in the ones place is always on the right."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF



Today's Goals

1. **Goal:** Interpret different base-ten representations of two-digit numbers, including pictures, numbers, words, and expanded form, and represent the numbers with a different type of representation.
   - In the *Show What You Know*, students interpreted different representations of two-digit numbers and identified which one matched the standard form.
2. **Language Goal:** Compare different ways to represent two-digit numbers and describe how each shows the number as an amount of tens and ones. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

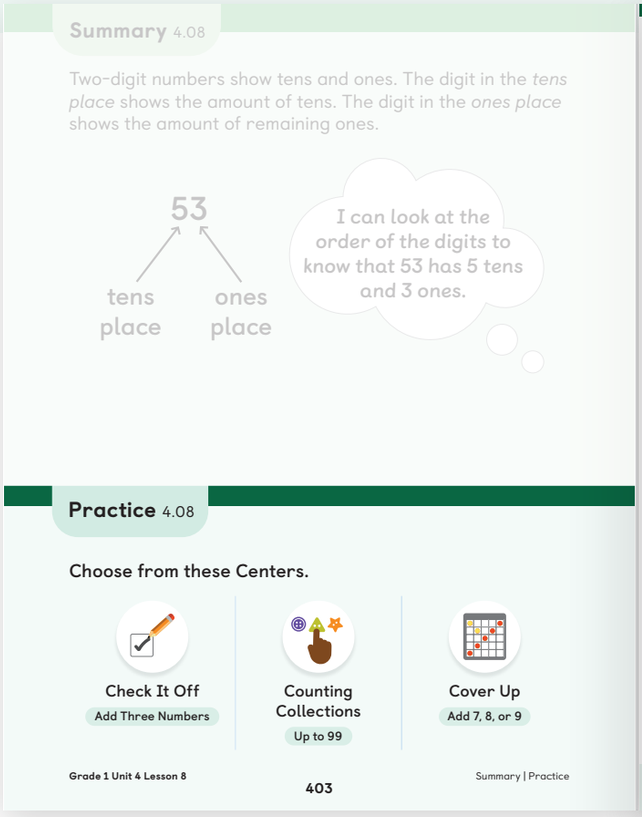
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.08

Two-digit numbers show tens and ones. The digit in the *tens place* shows the amount of tens. The digit in the *ones place* shows the amount of remaining ones.

53

tens place

ones place

I can look at the order of the digits to know that 53 has 5 tens and 3 ones.

Practice 4.08

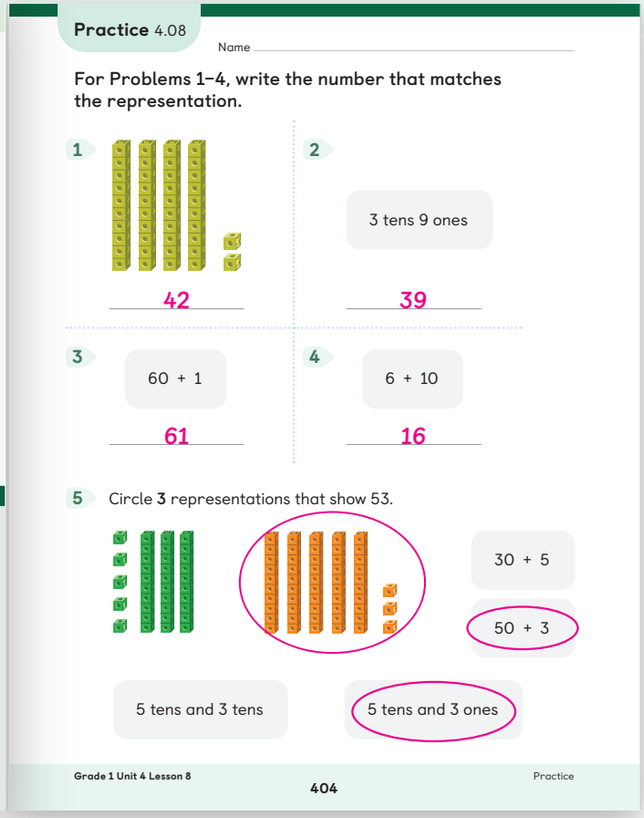
Choose from these Centers.

Check It Off
Add Three Numbers

Counting Collections
Up to 99

Cover Up
Add 7, 8, or 9

Grade 1 Unit 4 Lesson 8 403 Summary | Practice



Practice 4.08

Name

For Problems 1–4, write the number that matches the representation.

1

42

2 3 tens 9 ones

39

3 60 + 1

61

4 6 + 10

16

5 Circle 3 representations that show 53.

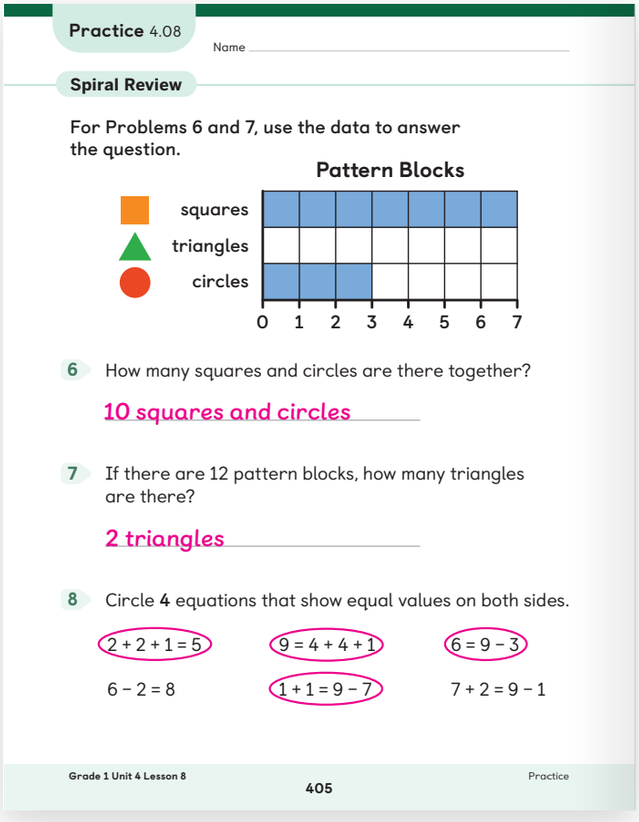
30 + 5

50 + 3

5 tens and 3 tens

5 tens and 3 ones

Grade 1 Unit 4 Lesson 8 404 Practice



Practice 4.08

Name

Spiral Review

For Problems 6 and 7, use the data to answer the question.

Pattern Blocks

6 How many squares and circles are there together?

10 squares and circles

7 If there are 12 pattern blocks, how many triangles are there?

2 triangles

8 Circle 4 equations that show equal values on both sides.

2 + 2 + 1 = 5

9 = 4 + 4 + 1

6 = 9 − 3

6 − 2 = 8

1 + 1 = 9 − 7

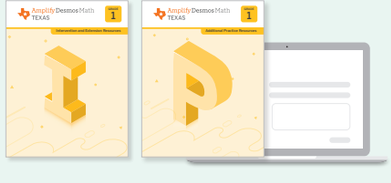
7 + 2 = 9 − 1

Grade 1 Unit 4 Lesson 8 405 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–5	1	1.2.C
Spiral Review			
	6, 7	2	1.8.C
Fluency	8	1	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Presentation Screen

Check It Off

Add Three Numbers

Pairs | 15 min | 1.5.G

Students add 3 numbers to practice strategies for adding within 20.

Materials

- number cards (0–10) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 3, Sub-Unit 3.

Counting Collections

Up to 99

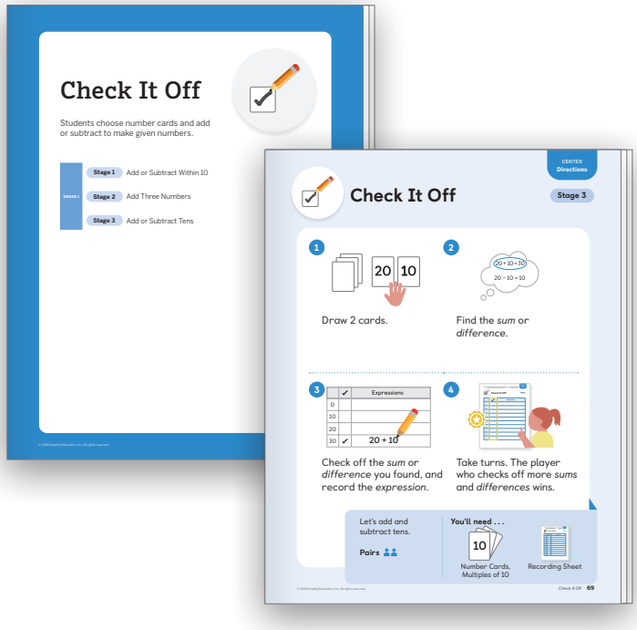
Pairs | 15 min | 1.2.C

Students count collections and represent how many and how they counted.

Materials

- 10-frames **(Manipulative Kit)**
- collections of objects (one per pair), cups **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Cover Up

Add 7, 8, or 9

Pairs | 15 min | 1.3.D, 1.5.G

Students add 7, 8, or 9 to a number between 0 and 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 1.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

D Differentiation Use after Lesson 8

Lesson Goal: Interpret different base-ten representations of two-digit numbers, including pictures, numbers, words, and expanded form, and represent the numbers with a different type of representation.

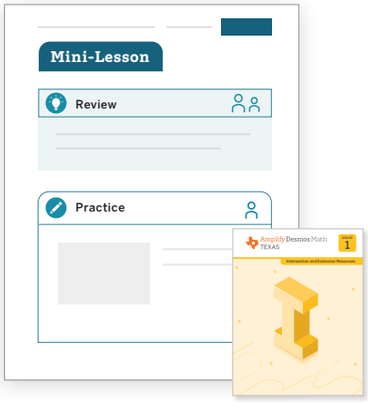
Support

Provide targeted intervention for students by using these resources.

If students interpret base-ten representations of two-digit numbers as ones representing tens and tens representing ones:

Respond:

- Assign the *Representing Two-Digit Numbers in More Than One Way* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 2 *Differentiation: Teacher Moves* table.



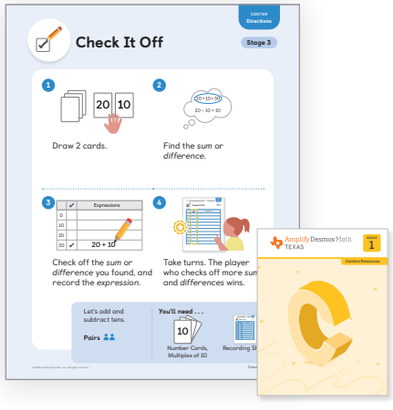
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students interpret base-ten representations of two-digit numbers:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  Counting Collections: Up to 99
  Cover Up: Add 7, 8 or 9
- Have students complete **Lesson 8 Practice**. | 15 min
- **Item Bank**



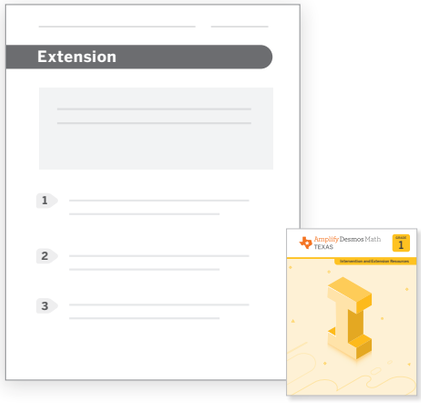
Stretch

Challenge students and extend their learning with these resources.

If students interpret base-ten representations of two-digit numbers and represent two-digit numbers with different base-ten representations:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

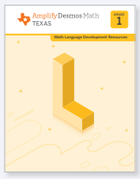


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., *digit/dígito*
- Frayer Model templates
- Vocabulary routines

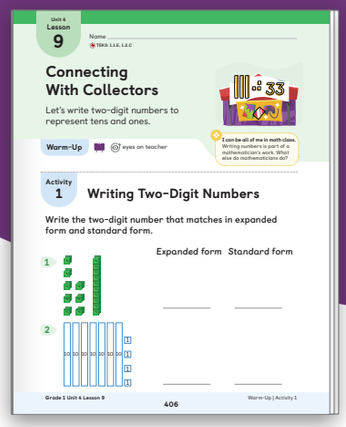


Professional Learning

What unfinished learning or misunderstandings do your students have about representing tens and ones? How did you leverage those misconceptions in a positive way to further the understanding of the class?

Unit 4
Lesson
9

Student Edition pages and Presentation Screens support learning in this lesson.



Connecting With Collectors

Writing Two-Digit Numbers to Match Different Base-Ten Representations

Let's write two-digit numbers to represent tens and ones.

Key Concepts

Today's Goals

1. **Goal:** Write two-digit numbers in expanded form and standard form to match different base-ten representations.
2. **Language Goal:** Explain how a two-digit number in expanded form or standard form matches a base-ten representation. **(Listening and Speaking)**
   ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students interpret different base-ten representations of two-digit numbers and record the written numerals that match each representation. This is the first time students write two-digit numbers with explicit attention to the value of each of the digits. Students consider the number of tens and ones in each representation to determine the digit to write in the tens place and the digit to write in the ones place. Students notice the need to write the digit 0 in the ones place when recording a number that represents a multiple of 10. **(TEKS 1.1.E)**

Prior Learning

In Lesson 8, students attended to the base-ten structure of two-digit numbers to make connections between different representations of the same number. They interpreted different base-ten representations, including drawings, numbers, words, and expanded form, to identify the two-digit number being represented.

Future Learning

In Lesson 10, students will find sums of expressions involving multiples of tens and some ones.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of how to represent two-digit numbers with written numerals.

Vocabulary

Review Vocabulary

digit

expanded form

a one/ones

standard form

a ten/tens

TEKS

Addressing

1.2.C

Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

Math Process Standard: 1.1.E

ELPS: 1.B, 1.C, 1.E, 1.F, 2.B, 2.D, 2.E, 2.F

Building On

K.5.A

Building Math Identity

I can be all of me in math class.
Writing numbers is part of a mathematician's work. What else do mathematicians do?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

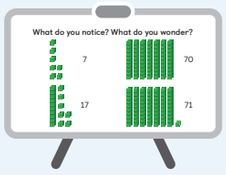
60 min

TEKS: 1.1.E, 1.2.C

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about base-ten representations and corresponding written numerals with the same digit in different places.

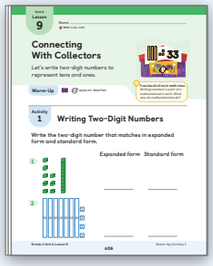


Activity 1

Pairs | 15 min

Students interpret base-ten representations and write a two-digit number to match each representation. They recognize that they write the digit that represents the number of tens in the tens place and the digit that represents the amount of ones in the ones place.

Materials: Unit Story, *The Collectors*

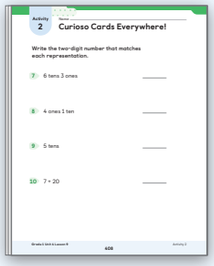


Activity 2

Pairs | 15 min

Students write two-digit numbers that match different base-ten representations, including words and expressions. They discuss the need to write a 0 in the ones place when writing a multiple of 10.

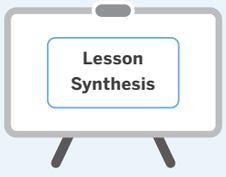
Manipulative Kit: connecting cubes (as needed)



Synthesis

Whole Class | 5 min

Students review and reflect on how to write two-digit numbers by recording the amount of tens as a digit in the tens place and recording the amount of ones as a digit in the ones place.

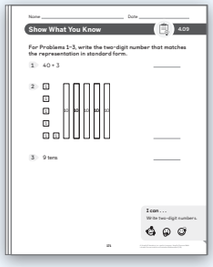


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by writing two-digit numbers in standard form to match the representations displayed.

Materials: *Show What You Know* PDF

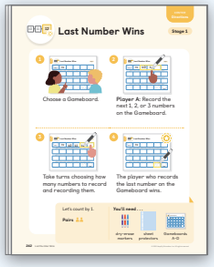


Center

Pairs | 15 min

Students are introduced to the Center, *Last Number Wins, Numbers to 99 by 1*, in which they take turns writing the next 1, 2, or 3 numbers in a sequence to practice counting on by 1 from numbers less than 120 and writing two-digit numbers.

Additional Prep Prepare: Place Gameboards in sheet protectors



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

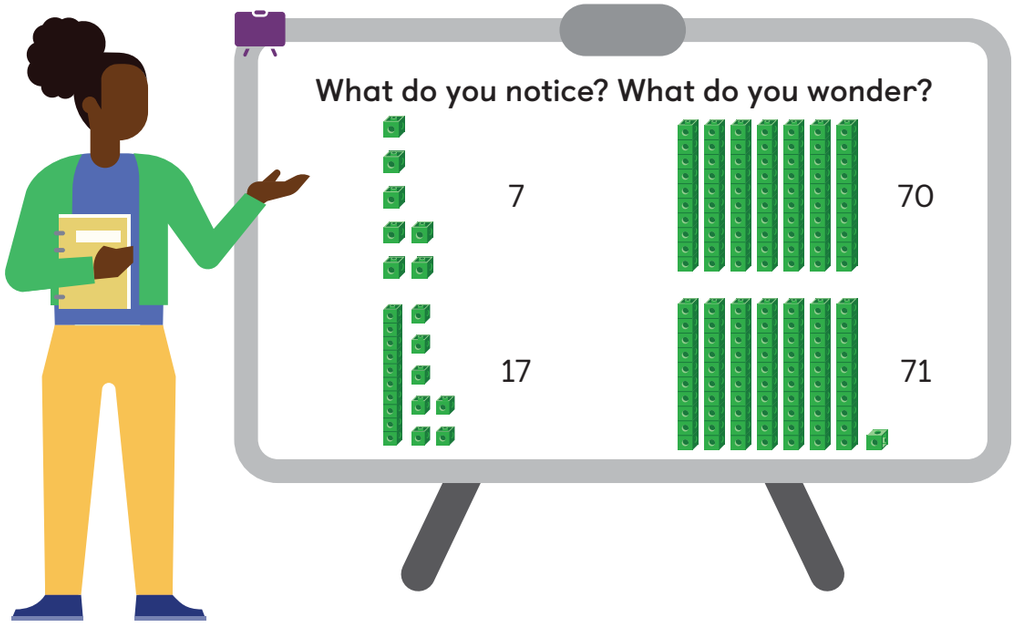
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students examine a set of base-ten representations with corresponding written numerals to consider the similarities and differences between numbers with the same digit in different places.



1 Launch

Display the image.

Use the Notice and Wonder routine.

Use the Think-Pair-Share routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Record students' responses as they share.

Ask:

- "How are 7 and 17 the same? How are they different?"
- "How are 70 and 71 the same? How are they different?"
- "How are 7 and 70 the same? How are they different?"

Say, "You will continue to think about what each of the digits in a two-digit number represents."

Students might say . . . ELPS 2.B

I notice 7 is the only one that does not have any tens.

I notice 17 has 1 ten 7 ones, and 71 has 7 tens 1 one.

I wonder why other numbers with a 7 are not included.

I wonder why all these images show the tens before the ones.

Pairs | 15 min

Activity 1 Writing Two-Digit Numbers

Purpose: Students interpret base-ten representations to determine and record the number shown to practice writing two-digit numbers in standard and expanded forms.

Presentation Screens

Materials

- Display the illustration on Page 8 of the Unit Story, *The Collectors* during the Launch.

Short on time? Consider omitting Problem 7.

1 Launch

Display the illustration on page 8 of the Unit Story, *The Collectors*.

Say, "All the Curioso collectors that Steph meets are so proud of their collections, no matter how many cards they have. Each collector is eager to share the amount of cards in their collection with Steph and her mom."

Display the representations from the Student Edition.

Say, "Each of the representations shows how many cards a Curioso collector has collected."

Read aloud the directions.

Have students complete Problems 1–6 independently.

Read aloud Problem 7.

A **Accessibility: Conceptual processing** Provide questions students can ask themselves as they complete Problems 1–6, such as, "How many tens are shown? How many ones are shown?"

2 Monitor

After students complete Problem 6, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about the representation?"
- Ask, "How can you describe the number of tens? The number of ones?"

EB **Emergent Bilinguals** As students complete Problem 6, use gestures to highlight and emphasize the connections between the written numeral and the representation. For example, use fingers to count the amount of tens in the representation and then point to the digit in the tens place to show how the digit relates to the drawing or connecting cubes. **ELPS 1.B**

3 Connect

Display Problem 3.

Invite students to share their responses and their thinking. Record 39 and highlight connections between the written digits and the representations as students share.

Key Takeaway: Say, "When writing a two-digit number in standard form, you write the number of tens as a digit in the tens place and the number of remaining ones as a digit in the ones place. Expanded form shows the value of each digit as an expression."

Unit 4 Lesson 9

Name

TEKS: 1.1.E, 1.2.C

Connecting With Collectors

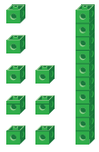
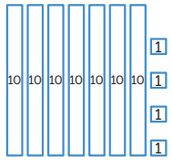
Let's write two-digit numbers to represent tens and ones.

Warm-Up eyes on teacher

I can be all of me in math class. Writing numbers is part of a mathematician's work. What else do mathematicians do?

Activity 1 Writing Two-Digit Numbers

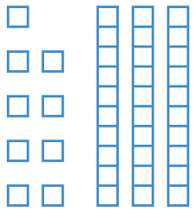
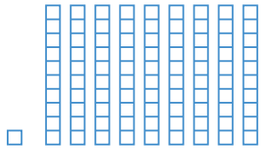
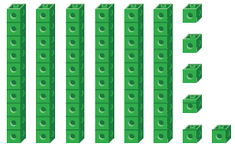
Write the two-digit number that matches in expanded form and standard form.

		Expanded form	Standard form
1		10 + 8	18
2		70 + 4	74

Activity 1

Name

Writing Two-Digit Numbers (continued)

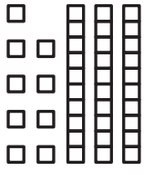
		Expanded form	Standard form
3		30 + 9	39
4		90 + 1	91
5		60 + 6	66

6 **Discuss**

What two-digit number did you write for each representation?
How do you know that number matches the representation? Oral activity: No writing expected.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . Problem 3	Provide support . . .
Almost there Explain that they counted to find the total.	 **93 because I counted and there are 9 and then 3.**	**Support** Ask, "How many tens do you see? How many ones do you see?"
Explain that they counted by 10 and 1 to find the total.	**39 because I counted 10, 20, 30, 31, 32, . . . , 39.**	**Strengthen** Ask, "How could you use what you know about tens and ones to find the number without counting?"
Explain how they used the amounts of tens and ones to write the number.	**39 because there are 3 tens and 9 ones.**	**Stretch** Ask, "Imagine another 1 was added to this representation. How would the drawing change? How would the two-digit number you recorded change?"

Pairs | 15 min

Activity 2 Curioso Cards Everywhere!

Purpose: Students write two-digit numbers in standard form to match different base-ten representations, including multiples of 10, to notice that a zero is needed in the ones place when writing multiples of 10 to show there are no remaining ones.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (as needed).

1 Launch

Say:

- "So many people at the flea market visited Prashant's stall and were excited to chat about their own Curioso collections. Steph and her mom enjoyed every minute they got to connect with other Curioso collectors."
- "The problems in this activity show the amount of cards in people's Curioso collections."

Read aloud the directions.

A **Accessibility: Visual-spatial processing** Encourage students to use connecting cubes or drawings to represent the problems more concretely.

2 Monitor

After students have completed **Problem 9**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about this representation?"
- Ask, "What digits can you use to show the amount of tens? What digit can you use to show the amount of ones?"

3 Connect

MLR This connect is structured using the *MLR7: Compare and Connect* routine. ELPS 1.E, 2.B, 2.D, 2.E

Invite students to share their responses for Problems 7 and 9. Record the numbers 63 and 50 as students share.

Use the Think-Pair-Share routine. Ask:

- "How are the two-digit numbers that match these representations alike?"
- "How are they different? Why?"

EB **Emergent Bilinguals** Provide students with wait time to formulate and rehearse a response with a partner before sharing with the class. ELPS 1.E, 2.F

Key Takeaway: Say, "When a two-digit number has a number of tens with no remaining ones, you write a digit in the tens place to represent the number of tens, and you write the digit 0 in the ones place to show there are zero remaining ones."

Student Edition

Activity 2

Name _____

Curioso Cards Everywhere!

Write the two-digit number that matches each representation.

7 6 tens 3 ones — 63

8 4 ones 1 ten — 14

9 5 tens — 50

10 7 + 20 — 27

Activity 2

Name _____

Curioso Cards Everywhere! (continued)

11 30 + 6 — 36

12 2 + 60 — 62

13 7 tens — 70

14 80 + 9 — 89

Presentation Screens

D Differentiation | Teacher Moves

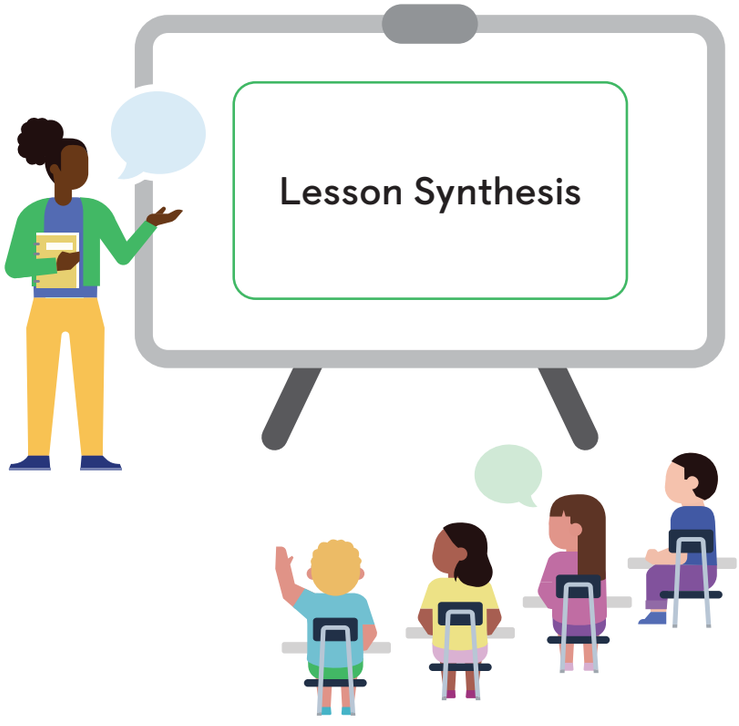
Look for students who . . .	For example . . .	Provide support . . .
Almost there Write the amount of tens.	5	**Support** Ask, "How many cubes are in 5 tens? How does the number you wrote show the same amount?"
Almost there Reverse the order of the tens and ones digits.	05	**Support** Ask, "How did you decide what digit to write in the tens place and what digit to write in the ones place?"
Write the amount of tens in the tens place and the digit 0 in the ones place.	50	**Strengthen** Say, "Talk with your partner about why you need to write the digit 0 in the ones place, even though there are no ones."

Whole Class | 5 min

Presentation Screens

Synthesis

Lesson Takeaway: When writing two-digit numbers in standard form, the amount of tens is written as the digit in the tens place, and the amount of remaining ones is written as the digit in the ones place. Multiples of 10 are written with the digit 0 in the ones place.



Say, "A Curioso customer wants to buy fish at the market. The price of the fish is represented with cubes. They are thinking about how to write the number that represents the price."

Play the animation. ELPS 1.F

Use the Think-Pair-Share routine. Ask, "What advice would you give this Curioso customer about writing numbers that have tens and ones?"

Play the animation. ELPS 1.F

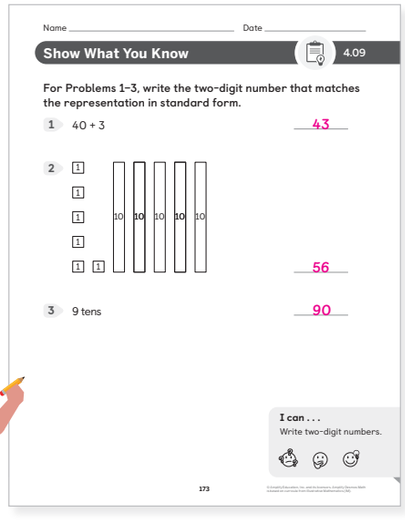
Say, "When writing numbers to represent number of tens and ones, only 2 digits are used. The digit on the left shows the number of tens, and the digit on the right shows the number of ones."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.09

For Problems 1–3, write the two-digit number that matches the representation in standard form.

1. 40 + 3 — 43
2. 1 1 1 1 1 | 10 10 10 10 10 — 56
3. 9 tens — 90

I can . . .
Write two-digit numbers.

173

Today's Goals

1. **Goal:** Write two-digit numbers in expanded form and standard form to match different base-ten representations.
   - In Problems 1–3 in the *Show What You Know*, students wrote the two-digit number that matched the representation.
2. **Language Goal:** Explain how a two-digit number in expanded form or standard form matches a base-ten representation. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

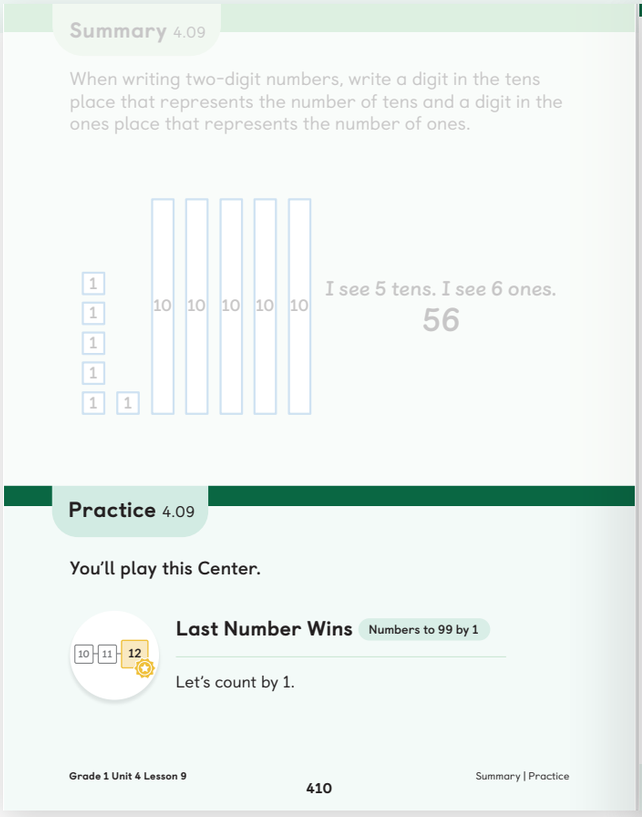
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.09

When writing two-digit numbers, write a digit in the tens place that represents the number of tens and a digit in the ones place that represents the number of ones.

1 1 1 1 1 | 1 | 10 10 10 10 10

I see 5 tens. I see 6 ones.

56

Practice 4.09

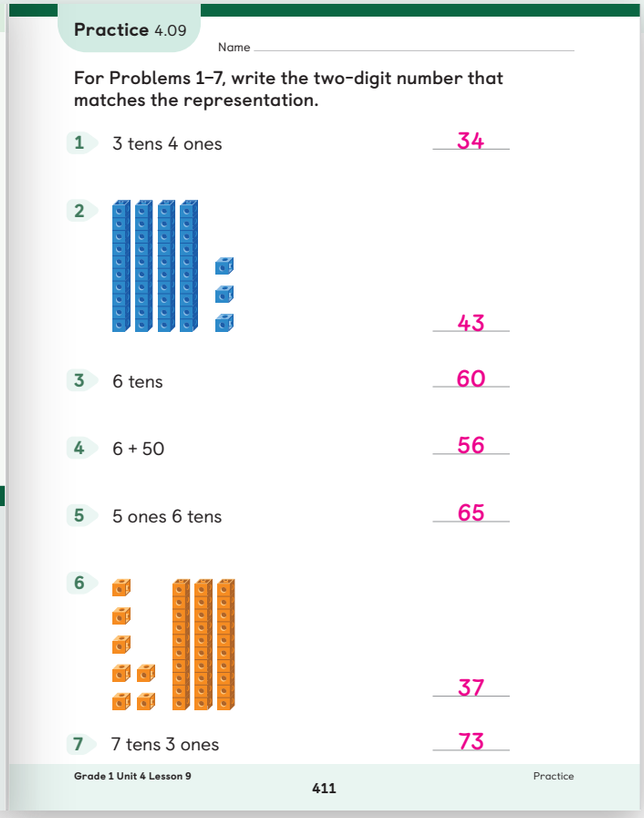
You'll play this Center.

10 11 12

Last Number Wins Numbers to 99 by 1

Let's count by 1.

Grade 1 Unit 4 Lesson 9 410 Summary | Practice



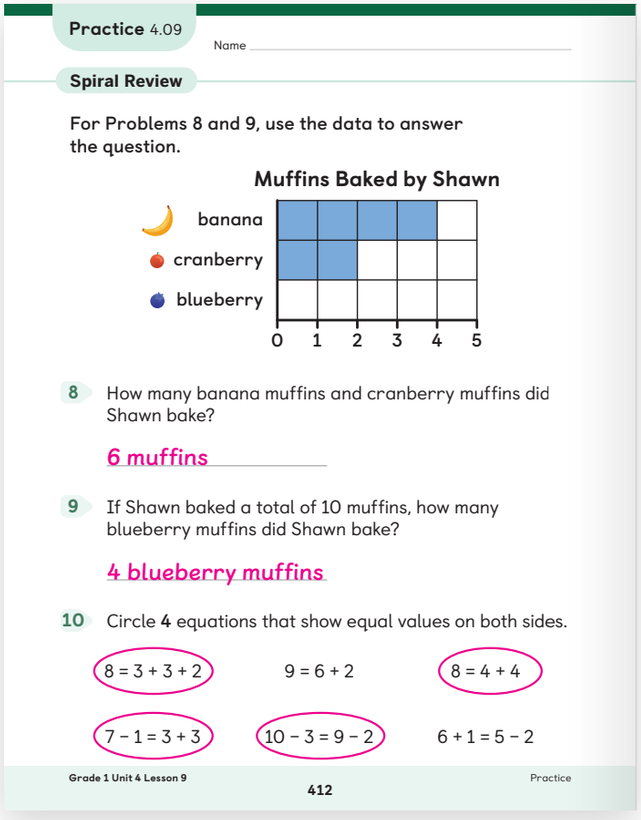
Practice 4.09

Name _____

For Problems 1–7, write the two-digit number that matches the representation.

1. 3 tens 4 ones — 34
2. — 43
3. 6 tens — 60
4. 6 + 50 — 56
5. 5 ones 6 tens — 65
6. — 37
7. 7 tens 3 ones — 73

Grade 1 Unit 4 Lesson 9 411 Practice



Practice 4.09

Name _____

Spiral Review

For Problems 8 and 9, use the data to answer the question.

Muffins Baked by Shawn

8. How many banana muffins and cranberry muffins did Shawn bake?

   6 muffins

9. If Shawn baked a total of 10 muffins, how many blueberry muffins did Shawn bake?

   4 blueberry muffins

10. Circle **4** equations that show equal values on both sides.

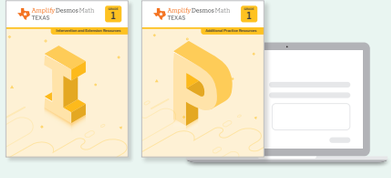
8 = 3 + 3 + 2	9 = 6 + 2	8 = 4 + 4
7 − 1 = 3 + 3	10 − 3 = 9 − 2	6 + 1 = 5 − 2

Grade 1 Unit 4 Lesson 9 412 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–7	1	1.2.C
Spiral Review			
	8, 9	2	1.8.C
Fluency	10	1	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Pairs | 15 min

Introducing the Center
Last Number Wins, Numbers to 99 by 1

Purpose: Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by ones and writing two-digit numbers.

Presentation Screen

Materials

Classroom materials:

- Distribute two different colors of dry-erase markers to each pair.

Centers Resources:

- Prepare Gameboards (A–D) by placing them in sheet protectors **(Classroom materials)** before the activity.
- Display the Directions and Gameboards (A–D) during the Launch.
- Distribute Gameboards (A–D) to each pair.

1 Launch

Display the Center materials, Directions, and Gameboards

Demonstrate how to play *Last Number Wins, Numbers to 99 by 1*. Monitor to ensure students are able to follow directions with accuracy. ELPS 1.C

- **Say**, "You will play *Last Number Wins* today."
- **Say**, "First, you and your partner will choose the Gameboard you will use." Display Gameboard A.
- **Ask**, "I will choose to record the next 1, 2, or 3 numbers when counting by 1 on the Gameboard. I choose to record the next 2 numbers. If you count by 1, what are the next 2 numbers after 39?"
- **Record** the numbers 40 and 41 in the next 2 boxes.
- **Say**, "Take turns counting and recording 1, 2, or 3 numbers from left to right. The player who writes the last number on the Gameboard wins."

2 Monitor

Observe how students determine the next numbers in the counting sequence. They may repeat the count sequence starting from the first number on the board, count on from the most recent number recorded, or use patterns to determine the number that comes next.

3 Connect

Display Gameboard A with the numbers recorded up to 49.

Ask, "How could you figure out what number comes after 49?" Select and sequence responses using Rows 2–4 in the *Differentiation* table.

Key Takeaway: Say, "There are different strategies for finding the next number in a count sequence. It can be helpful to count on from a given number or use what you know about number patterns to find the number that comes next."

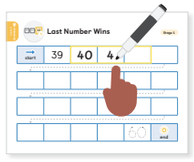
CENTER Directions

Last Number Wins

Stage 1

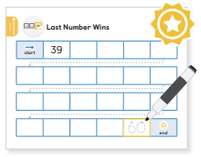
1 Choose a Gameboard.

2 **Player A:** Record the next 1, 2, or 3 numbers on the Gameboard.



3 Take turns choosing how many numbers to record and recording them.

4 The player who records the last number on the Gameboard wins.



Let's count by 1.

Pairs

You'll need . . .

dry-erase markers

sheet protectors

Gameboards A–D

242 Last Number Wins

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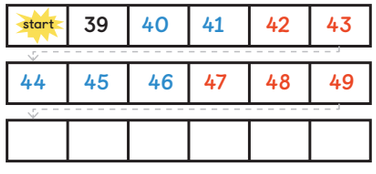
Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Count from 0 or 1 to determine the next number in the sequence.	 **1, 2, 3, . . . , 48, 49, 50**	**Support** Ask, "You started your count from 1. Could you start counting from another number to begin your count?"
Count on from the first number on the board to determine the next number in the sequence.	**39, 40, 41, . . . , 48, 49, 50**	**Strengthen** Ask, "You counted on from the starting number. Where is another place you could begin counting?"
Count on from the most recent number recorded on the board to determine the next number in the sequence.	**49, 50**	**Stretch** Have pairs predict who they think will write the last number, and then continue playing to see if their predictions were correct.
Use counting patterns or base-ten understanding to determine the next number in the sequence.	***1 more would make another group of 10. Then there would be 5 tens, so the next number is 50.***	

Differentiation Use after Lesson 9

Lesson Goal: Write two-digit numbers in expanded form and standard form to match different base-ten representations.

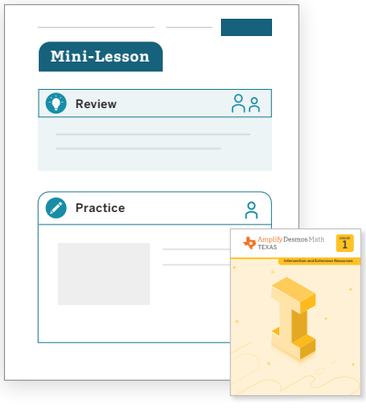
Support

Provide targeted intervention for students by using these resources.

If students write a two-digit number with the digits reversed:

Respond:

- Assign the *Writing Two-Digit Numbers for Base-Ten Representations* Mini-Lesson. | 15 min
- Review Row 2 of the Activity 2 *Differentiation: Teacher Moves* table.



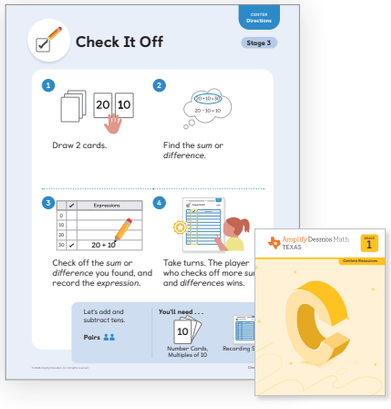
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students write a two-digit number to match by identifying the total value of the representation:

Respond:

- Invite students to play these **Centers**. | 15 min
  Check It Off: Add Three Numbers
  Cover Up: Add 7, 8, or 9
  Last Number Wins: Numbers to 99 by 1
- Have students complete **Lesson 9 Practice**. | 15 min
- **Item Bank**



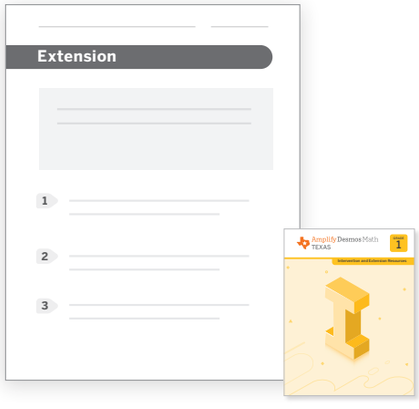
Stretch

Challenge students and extend their learning with these resources.

If students write a two-digit number to match by identifying the amounts of tens and ones in the representation:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

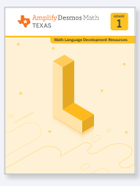


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., *digit/dígito*
- Frayer Model templates
- Vocabulary routines

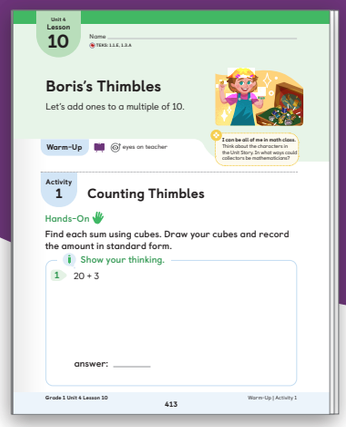


Professional Learning

Reflect on how you could reinforce number writing outside of math class. When could you ask students to write two-digit numbers that represent amounts around them? What questions could you ask to help them find the tens and ones in these amounts?

Unit 4
Lesson
10

Student Edition pages, Manipulatives, and Presentation Screens support learning in this lesson.



Boris's Thimbles

Adding Ones to a Multiple of 10

Let's add ones to a multiple of 10.

Key Concepts

Today's Goals

1. **Goal:** Add ones to a multiple of 10.
2. **Language Goal:** Explain how to find the sum of a multiple of 10 and some ones. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students add ones to multiples of 10 for the first time and use cubes and drawings to find the sums. They are presented with a variety of problems, some of which have the multiple of 10 presented first and some of which have the ones presented first. Students share strategies for finding the sum when adding ones to a multiple of 10. **(TEKS 1.1.E)**

Prior Learning

In Lesson 9, students considered the amounts of tens and ones in a pictorial representation and determined the value in expanded form and standard form.

Future Learning

In Sub-Unit 3, students will use their knowledge of two-digit numbers and their values to compare, using greater than and less than terminology.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of adding ones to multiples of 10.
- Students **apply** their understanding of the base-ten structure of multiples of 10 to solve problems involving tens and some ones.

Vocabulary

Review Vocabulary

a ten/tens

a one/ones

TEKS

Addressing

1.3.A

Use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99.

Math Process Standard: 1.1.E

ELPS: 1.B, 1.C, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Building Math Identity

I can be all of me in math class.
Think about the characters in the Unit Story. In what ways could collectors be mathematicians?

Invite students to reflect on this question as they complete this lesson.

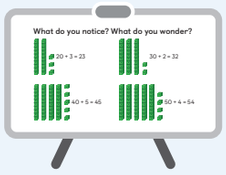
Lesson at a Glance 60 min

TEKS: 1.1.E, 1.3.A

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about base-ten representations and corresponding written equations with the same digit in different places.



Activity 1

Pairs | 15 min

Students represent addition equations with a multiple of 10 as the first addend and some ones as the second addend using connecting cubes. Then they draw their representation and solve the equation.

Manipulative Kit: connecting cubes

Activity 2

Pairs | 15 min

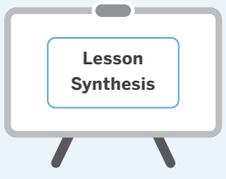
Students represent addition equations with ones as the first addend and a multiple of 10 as the second addend using connecting cubes. Then they draw their representation and solve the equation.

Manipulative Kit: connecting cubes

Synthesis

Whole Class | 5 min

Students review and reflect on how to find the sum of a multiple of 10 and some ones in any order.

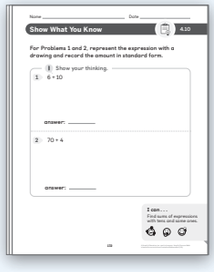


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by representing an equation involving a multiple of 10 and some ones with a drawing and solving the equation.

Materials: *Show What You Know* PDF



Center

Pairs | 15 min

Students are introduced to the Center, *Cover Up, Add or Subtract 10*, in which they add and subtract a ten from a multiple of 10 to begin to use patterns when adding or subtracting tens from another number.

Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

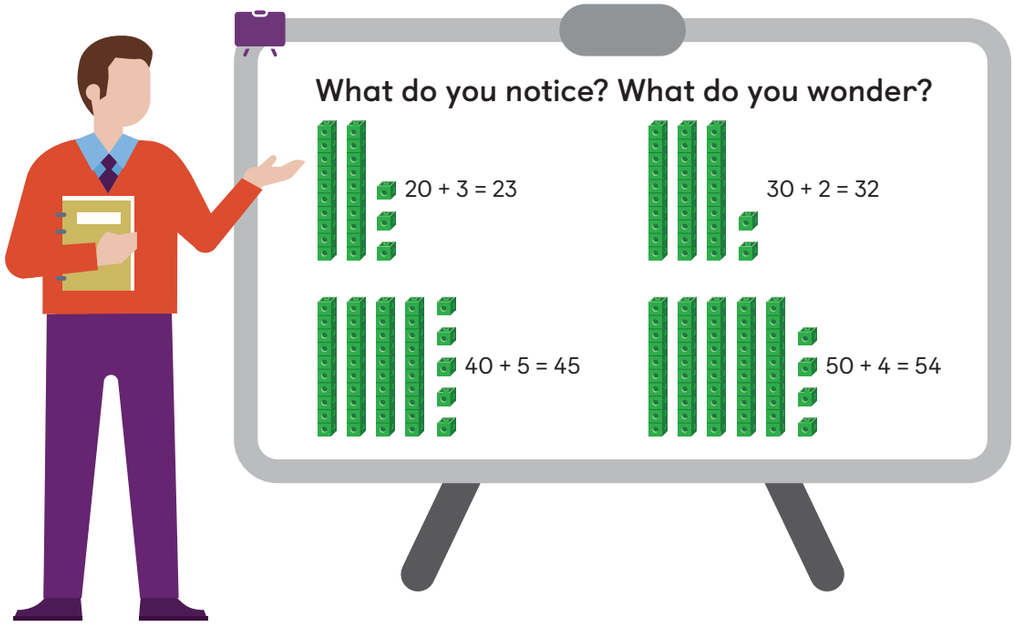
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students examine a set of base-ten representations with corresponding written equations to consider the similarities and differences between numbers with the same digit in different places.



1 Launch

Use the Notice and Wonder routine.

Use the Think-Pair-Share routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Record students' responses as they share.

Ask:

- "How are the numbers 23 and 32 the same? How are they different?"
- "How are the numbers 45 and 54 the same? How are they different?"
- "What would happen if you switched the order of the addends?"

Say, "You will continue to think about what each of the digits in a two-digit number represents."

Students you might say . . . ELPS 2.B

I notice the top 2 have the same numbers but switched around.

I notice the bottom 2 have the same numbers but switched around.

I notice there is a 0 in all the first numbers in the equations.

I wonder if you could switch the order of the numbers and get the same answer.

I wonder why all the images show the tens before the ones.

Pairs | 15 min

Activity 1 Counting Thimbles

Purpose: Students represent expressions involving multiples of 10 and some ones using cubes and drawings to find the sums in standard form.

Presentation Screens

Materials

Manipulative Kit:

- Distribute connecting cubes to each pair during the Launch.

Short on time? Consider omitting Problem 3.

1 Launch

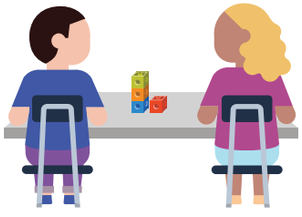
Say, "Boris keeps his thimbles in boxes. He has some of his thimbles in groups of 10 while some are left in groups of 1. You will help Boris count by using cubes and drawings."

Read aloud the directions and Problem 1–3.

Distribute 10 towers of 10 connecting cubes to each pair.

A **Accessibility: Conceptual processing** Provide questions students can ask themselves as they complete Problems 1–3, such as, "How many tens are in the first number?" and " How many ones are there?".

2 Monitor



After students have completed **Problem 2**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How will you decide how many groups of 10 you will need?"
- Ask, "How can you show the amount of thimbles in a drawing?"

3 Connect

Invite pairs to share their strategies for Problem 2. Select and sequence their strategies using Rows 2 and 3 in the *Differentiation* table.

Say, "There is more than 1 way to find the sum. When the objects are grouped in tens and ones, one strategy is to add the tens and ones together using what we know about place value."

Key Takeaway: Say, "You can use objects or pictures to find the sum of a number of ones and a number of tens. You can also use what you know about place value to represent the number of ones and the number of tens in standard form."

Unit 4 Lesson 10

Name

TEKS: 1.1.E, 1.3.A

Boris's Thimbles

Let's add ones to a multiple of 10.

Warm-Up eyes on teacher

I can be all of me in math class. Think about the characters in the Unit Story. In what ways could collectors be mathematicians?

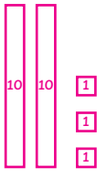
Activity 1 Counting Thimbles

Hands-On

Find each sum using cubes. Draw your cubes and record the amount in standard form. Sample work shown.

Show your thinking.

1 20 + 3



answer: 23

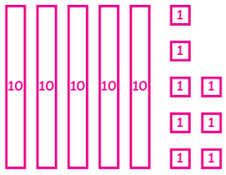
Activity 1

Name

Counting Thimbles (continued)

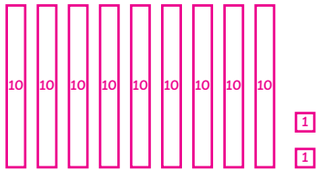
Show your thinking.

2 50 + 8



answer: 58

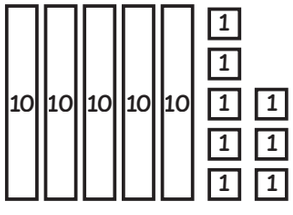
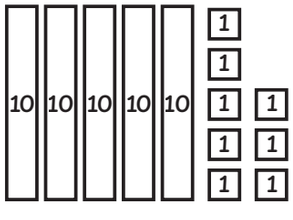
3 90 + 2



answer: 92

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Add the numbers without regarding tens.	□□□□□ □□□□□□□□ 5 + 8 = 13, the answer is 13 cubes.	**Support** Ask, "What is the difference between 5 and 50?"
Count on.	 50 is 5 towers of 10 cubes. Then we count the ones 51, 52, . . . , 58.	**Strengthen** Ask, "What other ways could you find the total number of cubes?"
Use place value and properties of addition to solve.	 50 + 8 = 58	**Stretch** Ask, "How would the total change if there was 1 more tower of 10?"

Pairs | 15 min

Activity 2 Towers and Cubes

Purpose: Students represent expressions involving tens and ones, in various orders, using cubes and drawings to find the sums in standard form.

Presentation Screens

Materials

Manipulative Kit:

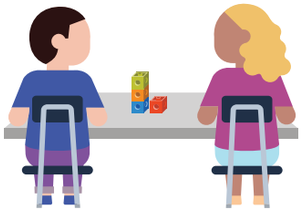
- Ensure each pair has 10 towers of 10 connecting cubes.

1 Launch

Say, "Sometimes, the thimbles in groups of 10 are at the bottom, so Boris pulls out the single thimbles first."

Read aloud the directions and Problems 4–6.

2 Monitor



After students have completed **Problem 4**, refer to the Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "Does it matter if you draw the tens or ones first?"
- Ask, "How will you decide which order to write the numerals in standard form?"

3 Connect

MLR **MLR7: Compare and Connect** ELPS 1.B, 1.E, 2.B, 2.D, 2.E

Invite pairs to share their strategies for Problem 4. encourage pairs to share their thinking using their drawings or connecting cubes models.

Use the Think-Pair-Share routine. Ask:

- "How are these strategies alike?"
- "How are these strategies different?"

EB **Emergent Bilinguals** Allow students to speak using a variety of sentence lengths, sentence types, and grammatical structures. Encourage them to use connecting words, such as "and" or "because." ELPS 2.C

"Some representations show the ones first and then the tens. Some show the tens and then the ones. Does the order you draw or represent the ones and tens matter?"

Key Takeaway: You can find the sum of a number of ones and a number of tens using drawings and objects. You can represent and count the ones and tens in any order to find the sum. When you write the number in standard form, the tens digit is always come before the ones digit.

Activity 2

Name _____

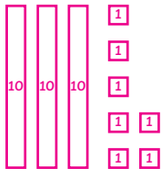
Towers and Cubes

Hands-On

Find each sum using cubes. Draw your cubes and record the amount in standard form. Sample work shown.

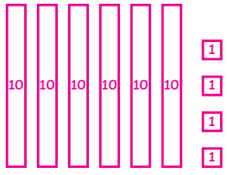
Show your thinking.

4 7 + 30



answer: 37

5 4 + 60



answer: 64

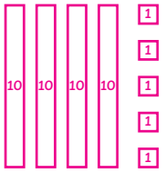
Activity 2

Name _____

Towers and Cubes (continued)

Show your thinking.

6 5 + 40



answer: 45

7 Discuss

Explain how you found your answer to Problem 6.

For Problem 6, I knew _____.

Oral activity: No writing expected. Sample response shown.

For Problem 6, I knew the 5 is the ones and the 40 is the tens. So I drew 4 towers of ten to show 40 and 5 squares to show the ones, which is 45.

Presentation Screens

D Differentiation | Teacher Moves

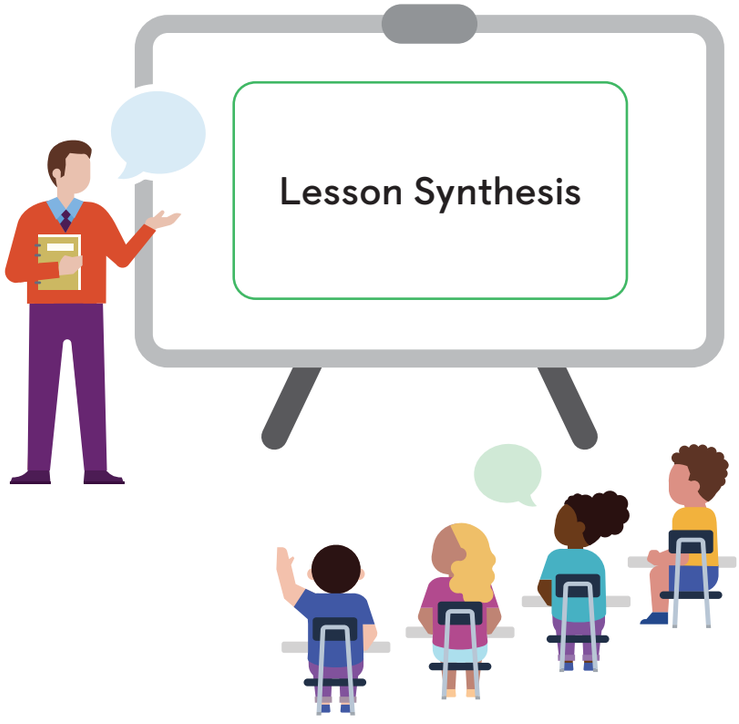
Look for students who . . .	For example . . .	Provide support . . .
Almost there Put the numerals together as they appear.	7 + 30 = 73	**Support** Ask, "Which number shows tens? When writing a two-digit number in standard form, which place value comes first?"
Count the ones first.	1, 2, 3, 4, 5, 6, 7, 17, 27, 37	**Strengthen** Ask, "Why did you choose to count the ones first?"
Use place value knowledge to find the sum.	7 + 30 = 37 *because* 30 + 7 = 37.	**Stretch** Ask, "How would the answer change if you had 7 tens instead of 7 ones?"

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: Ones and tens can be represented and counted in any order to find the sum. Ones and tens must be represented in a specific order when a number is represented in standard form.



Say, "These cubes represent another box of Boris's thumbles."

Use the Think-Pair-Share routine. Ask, "Which expression matches the cubes? How many thimbles are in this box?"

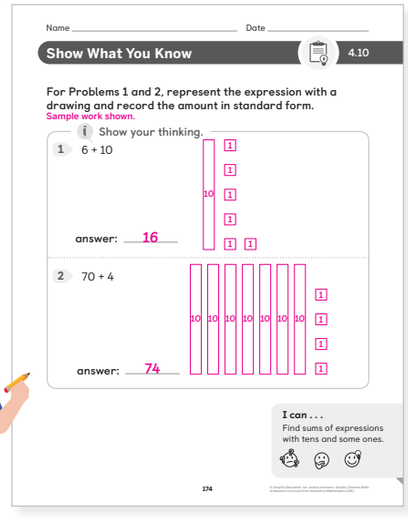
Say, "Tens and ones can be added together, in any order, to find a sum."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.10

For Problems 1 and 2, represent the expression with a drawing and record the amount in standard form.
Sample work shown.

Show your thinking.

1 6 + 10

answer: 16

2 70 + 4

answer: 74

I can . . .
Find sums of expressions with tens and some ones.

174

Today's Goals

1. **Goal:** Add ones to a multiple of ten.
   - In Problems 1 and 2 in the *Show What You Know*, students added ones to a multiple of 10.
2. **Language Goal:** Explain how to find the sum of a multiple of 10 and some ones. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

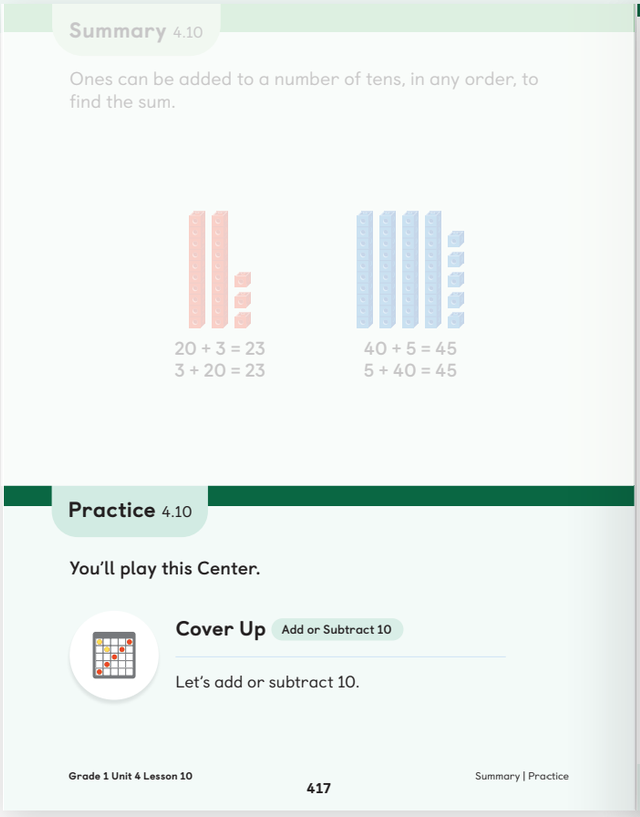
Differentiation See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.10

Ones can be added to a number of tens, in any order, to find the sum.

20 + 3 = 23
3 + 20 = 23

40 + 5 = 45
5 + 40 = 45

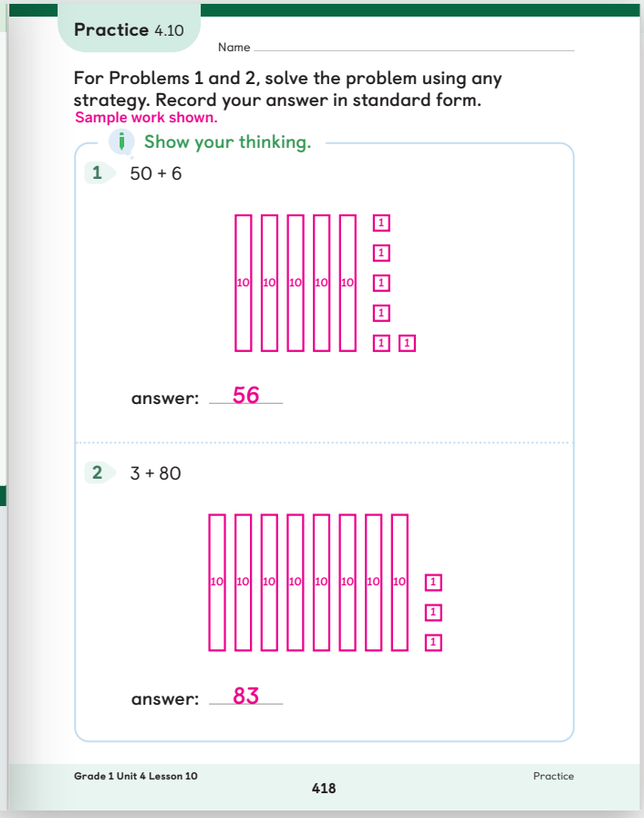
Practice 4.10

You'll play this Center.

Cover Up Add or Subtract 10

Let's add or subtract 10.

Grade 1 Unit 4 Lesson 10 417 Summary | Practice



Practice 4.10

Name

For Problems 1 and 2, solve the problem using any strategy. Record your answer in standard form.
Sample work shown.

Show your thinking.

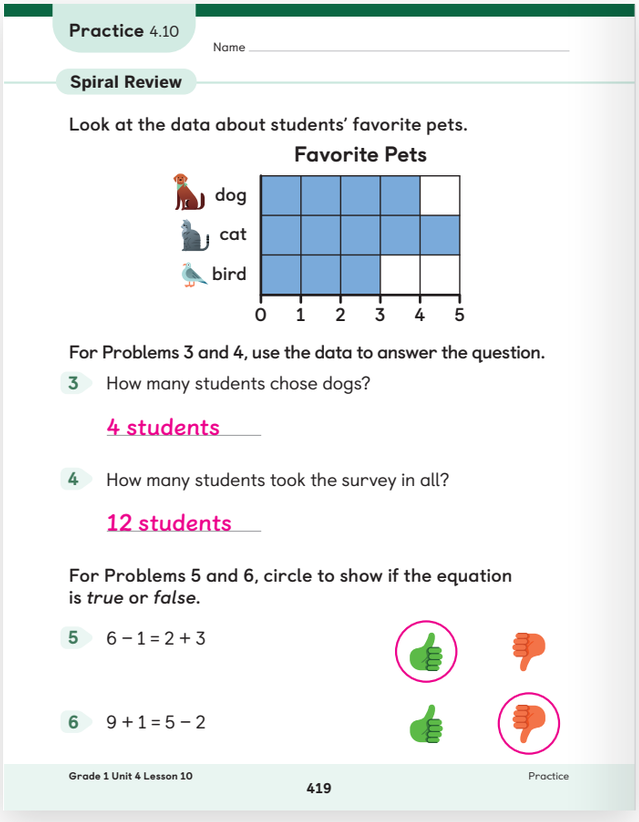
1 50 + 6

answer: 56

2 3 + 80

answer: 83

Grade 1 Unit 4 Lesson 10 418 Practice



Practice 4.10

Name

Spiral Review

Look at the data about students' favorite pets.

Favorite Pets

dog
cat
bird

0 1 2 3 4 5

For Problems 3 and 4, use the data to answer the question.

3 How many students chose dogs?

4 students

4 How many students took the survey in all?

12 students

For Problems 5 and 6, circle to show if the equation is *true* or *false*.

5 6 − 1 = 2 + 3

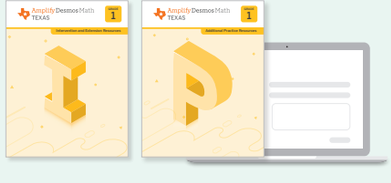
6 9 + 1 = 5 − 2

Grade 1 Unit 4 Lesson 10 419 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	2	1.3.A
Spiral Review			
	3, 4	1	1.8.C
Fluency	5, 6	2	1.5.E

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Pairs | 15 min

Let's Play
Cover Up, Add or Subtract 10

Purpose: Students choose a multiple of 10 within 100 and add or subtract 10 to practice place-value based strategies.

Presentation Screen

Materials

Manipulative Kit:

- Distribute one set of number cards (multiples of 10) and two-color counters to each pair.
- Provide students with access to connecting cubes (optional).

Centers Resources:

- Display the Directions and Gameboard A during the Launch.
- Distribute Gameboard A or B to each pair.

1 Launch

Display the Center materials, Directions, and Gameboard A.

Demonstrate how to play *Cover Up, Add or Subtract 10*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Cover Up* today."
- **Say**, "First, I will draw a card and then choose to add 10 to or subtract 10 from the number on the card." Draw a card, make a choice to add or subtract, and then have students share the sum or difference.
- **Say**, "Now I find the sum or difference on the Gameboard and cover the number with a counter."
- **Say**, "Decide who will use yellow counters and who will use red counters. The first player to cover 5 in a row on the Gameboard wins."

Provide access to connecting cube towers of 10.

2 Monitor

Observe the strategies students use to find the sums and differences.

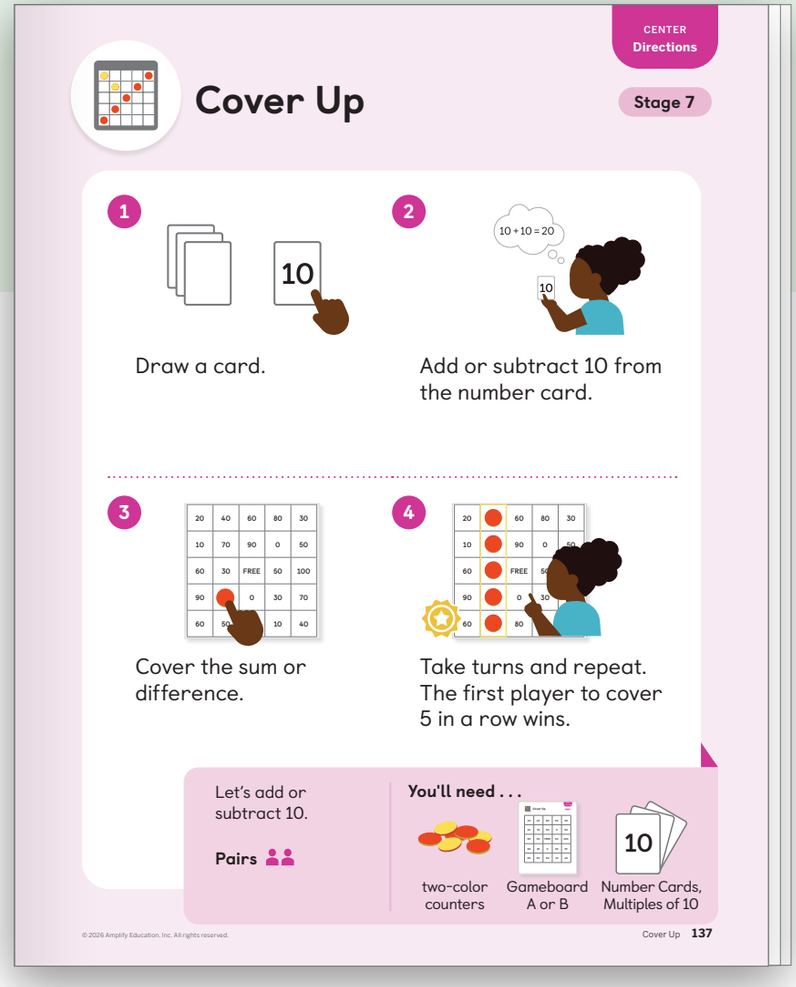
3 Connect

Display Gameboard A with red counters covering each number in the first column except 10, and cover a few additional numbers on the Gameboard. Display Number card 20.

Use the Think-Pair-Share routine. Ask, "Would you add 10 to or subtract 10 from this number? Explain your thinking."

Say (if not yet mentioned during discussion), "All the numbers in the first column on the Gameboard are covered except 10. If you subtract 10 from 20, you can cover 10 and win the game."

Key Takeaway: Say, "Looking at the numbers on your Gameboard before deciding to add or subtract 10 can help you cover 5 in a row more quickly."



CENTER Directions

Cover Up

Stage 7

1 Draw a card.

2 Add or subtract 10 from the number card.

3 Cover the sum or difference.

4 Take turns and repeat. The first player to cover 5 in a row wins.

Let's add or subtract 10.

Pairs

You'll need . . .

two-color counters

Gameboard A or B

Number Cards, Multiples of 10

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Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Count on or back by 1.	**20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30** or **20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10**	**Support** Ask, "What counting strategies could you use if you did not want to count by 1?"
Count on or back by 10.	**20, 30** or **20, 10**	**Strengthen** Ask, "How could you figure out 10 more or 10 less without counting by 10?"
Use place value reasoning.	**20 is 2 tens. 1 more ten is 3 tens, which is 30.** or **20 is 2 tens. 1 fewer ten is 1 ten, which is 10.**	**Strengthen** Ask, "Why did you choose to think about the number as a number of tens?"

Differentiation Use after Lesson 10

Lesson Goal: Add ones to a multiple of 10.

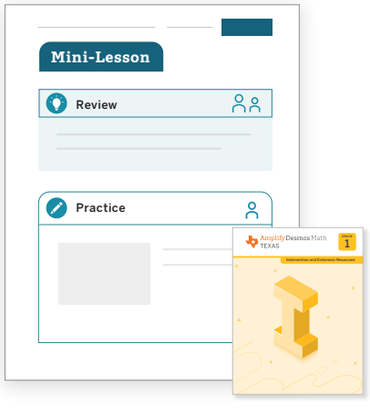
Support

Provide targeted intervention for students by using these resources.

If students put the numerals together as they appear:

Respond:

- Assign the *Adding Ones to a Multiple of Ten* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 2 *Differentiation: Teacher Moves* table.



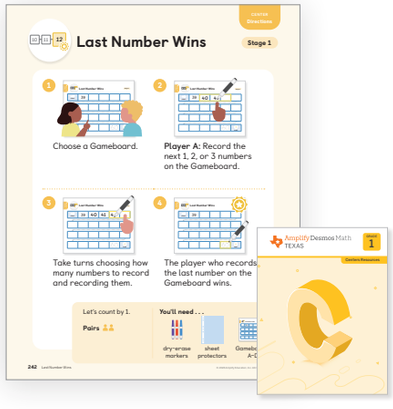
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students count on from the multiple of 10 to determine the sum:

Respond:

- Invite students to play these **Centers**. | 15 min
  Last Number Wins: Numbers to 99 by 1
  Cover Up:
  - *Add 7, 8, or 9*
  - ***Add or Subtract 10***
- Have students complete **Lesson 10 Practice**. | 15 min
- **Item Bank**



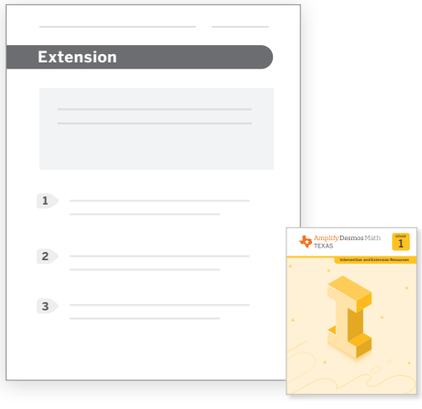
Stretch

Challenge students and extend their learning with these resources.

If students use place value understanding to determine the sum:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines

Professional Learning

In Sub-Unit 3, students will use what they know about place value to compare two-digit numbers. Based on what you observed in today's lesson, what support might students need to be successful?

Notes:

Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Quiz: Sub-Unit 2

Independent | 20 min

Facilitation: Assign this Sub-Unit Quiz at the end of Sub-Unit 2 to evaluate students' proficiency with the key concepts and skills addressed in this sub-unit. Read aloud the problems to students as needed.

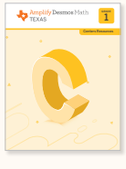
Item Analysis

Problem(s)	Concept or skill	DOK	TEKS
1, 2	Writing two-digit numbers	1	1.2.C, 1.5.B 1.1.D
3	Recognizing different representations of a two-digit number	2	1.2.C, 1.3.A 1.1.D
4, 5	Finding 10 more or 10 less than a number	1	1.5.C 1.1.F

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources



Intervention and Extension Resources includes:

- Mini-Lessons • Extensions

Centers Resources includes:

- Centers

Practice

During Sub-Unit 3, if students need further review or practice with concepts or skills, consider the following resources:

- Lesson Practice (Print and Digital)
- Item Bank (Digital)

Assessment Resource PDF

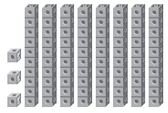
Name _____ Date _____

Quiz: Sub-Unit 2

Unit 1.4

For Problems 1 and 2, find the number of cubes.

1

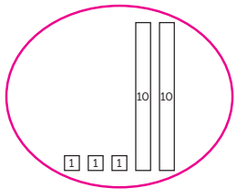


83

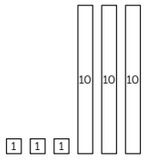
2

60

3 Circle **THREE** representations that show 23.



20 + 3



3 ones 2 tens

147

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Name _____ Date _____

Quiz: Sub-Unit 2 (continued)

Unit 1.4

4 What is 10 more than 41? 51

5 What is 10 less than 41? 31

148

D Differentiation (Quiz: Sub-Unit 2)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Sub-Unit.

Sub-Unit Goals	Problems	Respond to Student Thinking
Sub-Unit 2: Understand that the 2 digits of a two-digit number represent number of tens and ones.	**1–3**	**Support** • **Mini-Lesson:** *Matching Representations of Two-Digit Numbers* (ML 4.07) • **Center:** *Counting Collections: Up to 99* • **Teacher Move:** Consider revisiting Lesson 9, Activity 2. Have students discuss their matches with a partner.
Sub-Unit 2: Mentally find 10 more and 10 less than a two-digit number.	**4, 5**	**Support** • **Mini-Lesson:** *Adding and Subtracting 10* (ML 4.04) • **Teacher Move:** Have students review the problems. Provide another opportunity for students to represent the two-digit numbers using cubes and counters.

Notes:

Sub-Unit 3

Comparing Numbers to 99

Sub-Unit 3 Goals

- **Goal:** Use place value understanding to compare 2 two-digit numbers, and record comparison using the <, >, and = symbols.

Progression of TEKS in Sub-Unit 3

- **Lessons 11–12:** Students use place value to compare 2 two-digit numbers using *greater than* and *less than*.
- **Lessons 13–15:** Students represent the comparison of 2 two-digit numbers using the <, >, and = symbols.
- **Lessons 16:** Students use place value to compare and order one- and two-digit numbers.

Sub-Unit 3 Progression	Lesson 11	Lesson 12	Lesson 13	Lesson 14	Lesson 15	Lesson 16
Numbers and Operations						
TEKS 1.2.D	○	○	○	●	●	○
TEKS 1.2.E	●	●	●	●	●	●
TEKS 1.2.F	○	○	○	○	○	●
TEKS 1.2.G	○	○	●	●	●	●
Algebraic Reasoning						
TEKS 1.5.E	○	○	●	○	○	○
TEKS 1.5.G	○	○	○	○	●	○

Coming Up Next

- **Sub-Unit 4, Lessons 17–19:**
  - » Numbers and Operations: **TEKS 1.3.D**
  - » Algebraic Reasoning: **TEKS 1.5.A**
  - » Personal Financial Literacy: **TEKS 1.9.A, 1.9.B, 1.9.C, 1.9.D**

Math That Matters Most

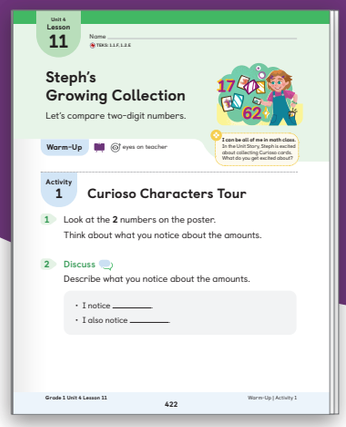
Sub-Unit 3: Use place value understanding to compare numbers.

Progression of Strategies, Skills, or Language

Progression	For example . . .		
Comparing two-digit numbers that have different number of tens.	I know 50 is greater than 38 because 50 has 5 tens and 38 only has 3 tens.		
Comparing two-digit numbers that have the same amount of tens.	42 and 49 each have 4 tens so I have to compare the ones. 2 ones is less than 9 ones, so 42 is less than 49.		
Recording comparisons using the >, <, and = symbols.	58 > 33	12 < 18	67 = 67
Ordering numbers by their values.	Greatest to least. 95, 62, 26, 5	Least to greatest. 14, 34, 78, 87	

Unit 4
Lesson
11

Student Edition pages and Presentation Screens support learning in this lesson.



Steph's Growing Collection

Comparing Two-Digit Numbers Using *Greater Than* and *Less Than*

Let's compare two-digit numbers.

Key Concepts

Today's Goals

1. **Goal:** Compare 2 two-digit numbers.
2. **Language Goal:** Justify comparisons of two-digit numbers using *greater than* and *less than*. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students have an opportunity to apply their developing understanding of place value and the composition of two-digit numbers as they compare 2 two-digit numbers. Students first describe what they notice about pairs of two-digit numbers to recognize and describe numbers as amounts of tens and ones and surface familiar comparison language. They then compare 2 two-digit numbers using any strategy and describe the comparisons using formal mathematical language. Students are encouraged to use the terms **greater than** and **less than** as they share their thinking with peers so that they become familiar with this language before attaching it to comparison symbols in subsequent lessons. **(TEKS 1.1.F)**

Prior Learning

In Kindergarten, students counted and compared objects, images, and written numbers from 1 to 10 using the terms *more, less, fewer,* and *same*. In Sub-Unit 2, students created base-ten representations and interpreted the values of two-digit numbers. They recognized that the value of a digit is determined by its place in the number.

Future Learning

In Lesson 12, students will continue to compare two-digit numbers and will begin to attend to the values of individual digits to make comparisons.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of comparing two-digit numbers.

Vocabulary

New Vocabulary

greater than

less than

Review Vocabulary

fewer

less

more

TEKS

Addressing

1.2.E

Use place value to compare whole numbers up to 120 using comparative language.

Math Process Standard: 1.1.F

ELPS: 1.B, 1.E, 1.F, 2.B, 2.E, 3.E, 3.F

Building Math Identity

I can be all of me in math class.

In the Unit Story, Steph is excited about collecting Curioso cards. What do you get excited about?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

60 min

TEKS: 1.1.F, 1.2.E

Warm-Up

Whole Class | 10 min

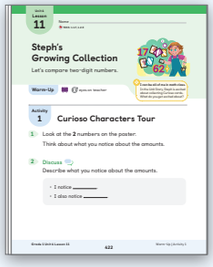
Students use the **Notice and Wonder** routine to share what they notice and wonder about narrative-related images and two-digit numbers. The same images are used in Activity 1.

Activity 1

Pairs | 15 min

Students look at 2 two-digit numbers and describe what they notice to review the meaning of the digits before comparing two-digit numbers in Activity 2.

Note: The Student Edition is not required for this activity.
Manipulative Kit: connecting cubes (optional)
Materials: Activity 1 PDF, chart paper, markers, *Words to Compare* chart (teacher made), *Words to Describe Numbers* chart (from prior lessons)
Additional Prep Prepare: *Words to Compare* chart; Display: Posters from the Activity 1 PDF in order by letter in various places around the classroom

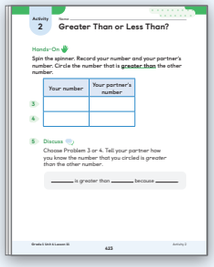


Activity 2

Pairs | 15 min

Students record 2 two-digit numbers and compare them. They describe the comparisons using **greater than** and **less than**, which are introduced in the Launch. During the Connect, students share their strategies for comparing two-digit numbers.

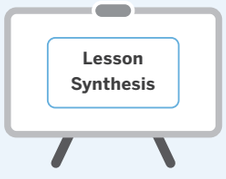
Manipulative Kit: connecting cubes (optional)
Materials: Activity 2 PDF, paper clips



Synthesis

Whole Class | 5 min

Students review and reflect on strategies that can be used to compare 2 numbers and the language that mathematicians use to describe these comparisons.

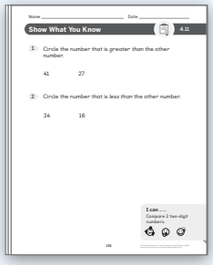


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by identifying a two-digit number that is greater than or less than another two-digit number.

Materials: *Show What You Know* PDF



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice counting and writing two-digit numbers.

- Cover Up
- Last Number Wins

Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

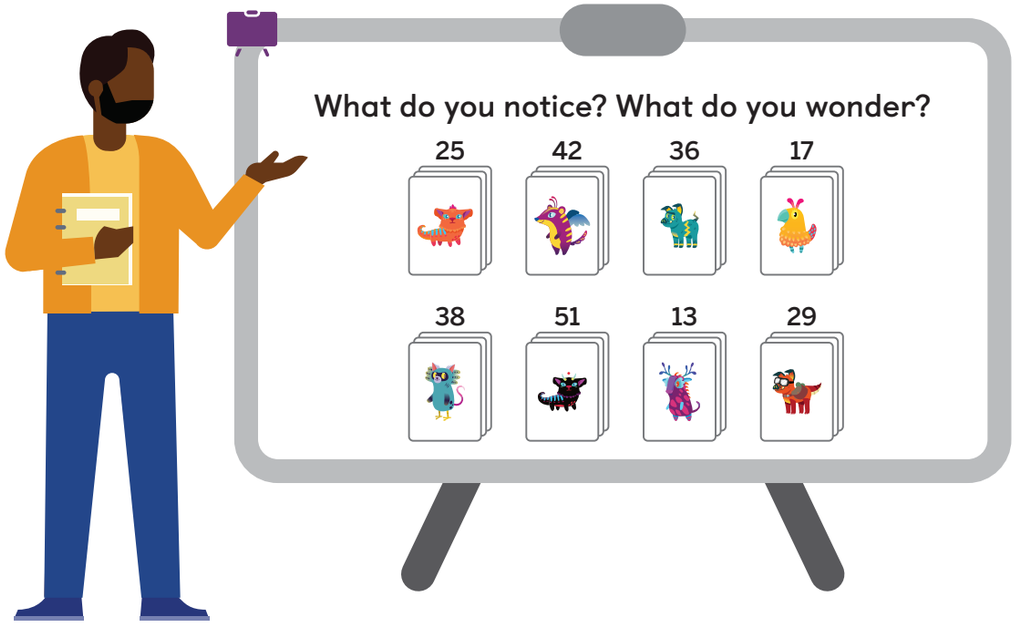
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students examine images of Curioso cards to prepare them for describing what they notice about the numbers in Activity 1.



1 Launch

Display the image.

Use the Notice and Wonder routine.

Say, "Here are some of the Curioso cards Steph has collected."

Use the Think-Pair-Share routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Record students' responses as they share.

Use the Think-Pair-Share routine. Ask, "The numbers show how many cards are in each stack. Which of these stacks of Curioso cards would you want to have? Why?"

Say, "You will continue to work with amounts of Curioso cards in the next activity."

Students might say . . . ELPS 2.B

I notice that the cards have animals.

I notice that each of the animals is a different color.

I wonder what the numbers mean.

I wonder why there are different numbers.

Pairs | 15 min

Activity 1 Curioso Characters Tour

Purpose: Students analyze and describe pairs of two-digit numbers to demonstrate their understanding of the base-ten structure of numbers and activate prior knowledge about comparing numbers.

Presentation Screens

Materials

Lesson Resources:

- Display the posters from the Activity 1 PDF in order by letter in various places around the classroom with enough space for students to gather.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Use chart paper and markers to create the *Words to Compare* chart before the activity.
- Display the *Words to Describe Numbers* chart (from prior lessons).

Short on time? Consider having pairs visit and discuss 2–3 posters instead of all 6.

1 Launch

Display the *Words to Describe Numbers* chart and the Activity 1 PDF.

Say, "When Steph and her mom got home from the flea market, Steph decided to sort her cards into groups by the characters on the cards. Each displayed poster shows the amount of cards in 2 of Steph's sorted groups."

Assign each pair of students to 1 poster. Explain that more than 1 pair of students may discuss a poster at the same time.

Read aloud Problems 1 and 2.

Say, "First, take time to think about the numbers on your own. Then discuss your ideas with your partner. You can use the *Words to Describe Numbers* chart if it is helpful. When you finish discussing, rotate to the next poster."

Provide access to connecting cube towers of 10 and single cubes.

2 Monitor

While students complete **Problem 2**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What numbers are on the poster? What is 1 thing you notice about these numbers?"
- Ask, "Pick 1 of the numbers. What is 1 thing you can describe about that number?"

A **Accessibility: Conceptual processing** Guide processing by providing questions students can ask themselves to analyze the structure of the representations. For example, "How many tens and ones are in each number? How are the numbers similar? How are they different?"

3 Connect

Invite students to share their responses to Problem 2. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

MLR **MLR2: Collect and Display** ELPS 2.B

Collect students' language used to compare numbers, such as *more*, *bigger*, and *greater than* in Column 1, and *less*, *fewer*, *smaller*, and *less than* in Column 2, on the *Words to Compare* chart. Update and refer to the chart throughout the remainder of the unit to support the acquisition of new words and high-frequency words.

EB **Emergent Bilinguals** Add and connect visual examples to the collected language and make explicit connections to ideas that are discussed. ELPS 3.F

Key Takeaway: Say, "You have learned a lot about two-digit numbers. In the next activity, you will use what you know to compare two-digit numbers."

Student Edition

Unit 4
Lesson
11

Name

TEKS: 1.1.F, 1.2.E

Steph's Growing Collection

Let's compare two-digit numbers.

I can be all of me in math class.
In the Unit Story, Steph is excited about collecting Curioso cards. What do you get excited about?

Warm-Up eyes on teacher

Activity 1 Curioso Characters Tour

1 Look at the **2** numbers on the poster.
Think about what you notice about the amounts.

2 Discuss
Describe what you notice about the amounts.
Oral activity: No writing expected.

- I notice _____.
- I also notice _____.

Grade 1 Unit 4 Lesson 11 422 Warm-Up | Activity 1

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . Poster F	Provide support . . .
Almost there Describe each number individually.	25 42 *I notice that 25 has 2 tens and 5 ones. I also notice that 42 has 4 tens and 2 ones.*	**Support** Ask, "Do you notice anything about these numbers that is the same? Do you notice anything that is different?"
Describe similarities or differences between the numbers.	*I notice that 25 has 2 tens, and 42 has 4 tens. 25 has 5 ones, and 42 has 2 ones.* or *I notice the numbers have tens and ones.*	**Strengthen** Ask, "You noticed that 1 card has 2 tens and the other has 4 tens. What does the number of tens in each number tell you about which group has more cards?"
Describe a relationship between the 2 amounts.	*I notice Steph has more cards with this character because 42 is more than 25.*	**Stretch** Say, "Talk with your partner about how you know 42 is more than 25."

Pairs | 15 min

Activity 2 Greater Than or Less Than?

Purpose: Students compare two-digit numbers and practice using the comparison language **greater than** and **less than** to describe the comparisons.

Presentation Screens

Materials

Lesson Resources:

- Distribute the Activity 2 PDF to each pair during the Launch.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Distribute one paper clip to each pair during the Launch.
- Display the *Words to Compare* chart (from Activity 1) and the *Words to Describe Numbers* chart (from prior lessons).

1 Launch

Display the *Words to Compare* chart from Activity 1.

Say, "When comparing 2 numbers, you can say that one number is more, or **greater than**, the other number. You can also say one number is **less than** the other number." Record *greater than* and *less than* as the column headings on the chart.

Read aloud all the directions for Activity 2.

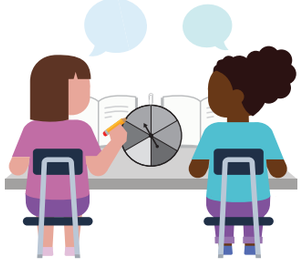
Say, "Each partner will spin the spinner. If you land on the same number, spin again so you have different numbers. Then use any strategy to compare the numbers."

Read aloud Problems 5 and 8.

Say, "For these problems, practice using the phrases *greater than* and *less than*."

A **Accessibility: Conceptual processing** Invite students to make observations about the values of the digits and think about how their observations could be used to make comparisons.

2 Monitor



After students have completed **Problem 8**, refer to the **D** Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What does it mean to compare numbers?"
- Ask, "How could you find which number is greater than the other?"

MLR **MLR1: Stronger and Clearer Each Time** ELPS 1.E, 2.E

After students have completed Problems 6 and 7, have pairs meet with 1–2 other pairs to share their responses for Problem 8. Encourage listeners to ask clarifying questions, such as:

- "What do you mean by . . .?"
- "Can you tell me more about . . .?"

3 Connect

Display the numbers 50 and 23.

Use the Think-Pair-Share routine. Ask, "Which number is less? Which number is greater? How do you know?" Have students use the *Words to Describe Numbers* and *Words to Compare* charts for language support.

Ask, "Did you hear any other words or phrases that should be included on the *Words to Compare* chart?" As students share, add language or annotations to the chart.

Play the animation. ELPS 1.F

Key Takeaway: Say, "There is more than 1 way to compare two-digit numbers. You can use what you know about counting, or you can think about the number of tens and ones."

Activity 2

Name _____

Greater Than or Less Than?

Hands-On

Spin the spinner. Record your number and your partner's number. Circle the number that is **greater than** the other number. Sample responses shown.

	Your number	Your partner's number
3	50	(72)
4	(41)	17

5 **Discuss**

Choose Problem 3 or 4. Tell your partner how you know the number that you circled is *greater than* the other number. Oral activity: No writing expected.

_____ is greater than _____ because _____.

Activity 2

Name _____

Greater Than or Less Than? (continued)

Spin the spinner. Record your number and your partner's number. Circle the number that is **less than** the other number. Sample responses shown.

	Your number	Your partner's number
6	65	(38)
7	(23)	38

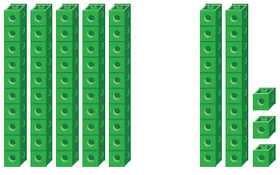
8 **Discuss**

Choose Problem 6 or 7. Tell another pair how you know the number that you circled is *less than* the other number. Oral activity: No writing expected.

_____ is less than _____ because _____.

Presentation Screens

D Differentiation | Teacher Moves

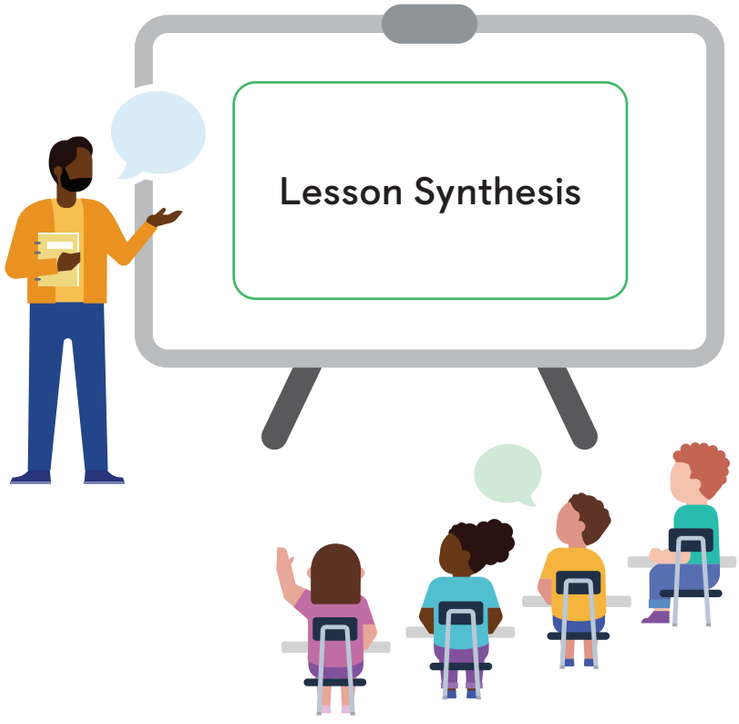
Look for students who . . .	For example . . .	Provide support . . .
Compare the numbers by representing each number and comparing the totals.	 **23 is less than 50 because it has fewer cubes.**	**Strengthen** Ask, "How could you compare the numbers without representing them with cubes?"
Compare the numbers by counting or using knowledge of the count sequence.	**23 is less than 50 because 23 comes before 50 when you count.**	**Strengthen** Ask, "What do you notice about the digits? How could you use what you notice about the digits to compare the numbers?"
Compare the numbers using place value understanding.	**23 is less than 50 because it only has 2 tens and 50 has 5 tens.**	**Stretch** Ask, "Why did you focus only on the tens in each number?"

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: When comparing 2 two-digit numbers, comparison language, such as **greater than** and **less than**, can be used.



Use the Think-Pair-Share routine. Ask, "What is a true statement you can make about 2 of these numbers using the phrases *greater than* or *less than*?"

Say, "You will continue to explore how to compare two-digit numbers in the next lesson."

Formalize vocabulary: greater than, less than

(optional) **Consider using the Frayer Model routine** with one or more of the new vocabulary words. **ELPS 3.E, 3.F**

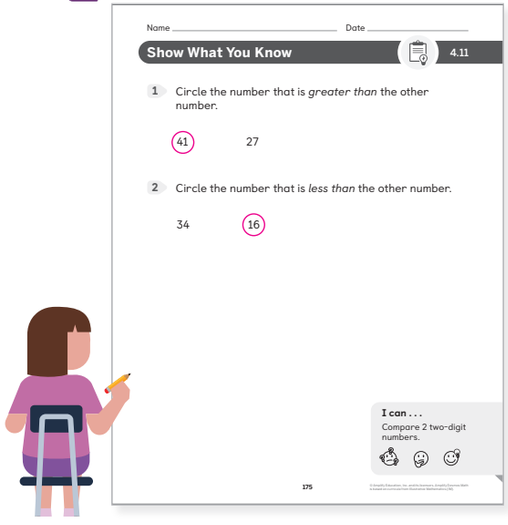
Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.11

1 Circle the number that is *greater than* the other number.

41 27

2 Circle the number that is *less than* the other number.

34 16

I can . . .
Compare 2 two-digit numbers.

175

Today's Goals

1. **Goal:** Compare 2 two-digit numbers.
   - In Problems 1 and 2 in the *Show What You Know*, students compared 2 two-digit numbers.
2. **Language Goal:** Justify comparisons of two-digit numbers using *greater than* and *less than*. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**

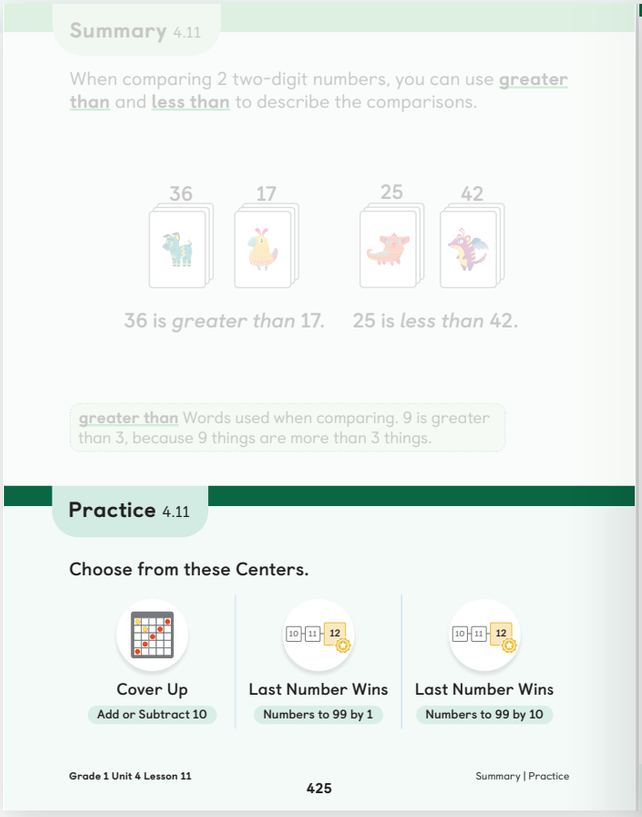
Differentiation See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.11

When comparing 2 two-digit numbers, you can use **greater than** and **less than** to describe the comparisons.

36 is *greater than* 17. 25 is *less than* 42.

greater than Words used when comparing. 9 is greater than 3, because 9 things are more than 3 things.

Practice 4.11

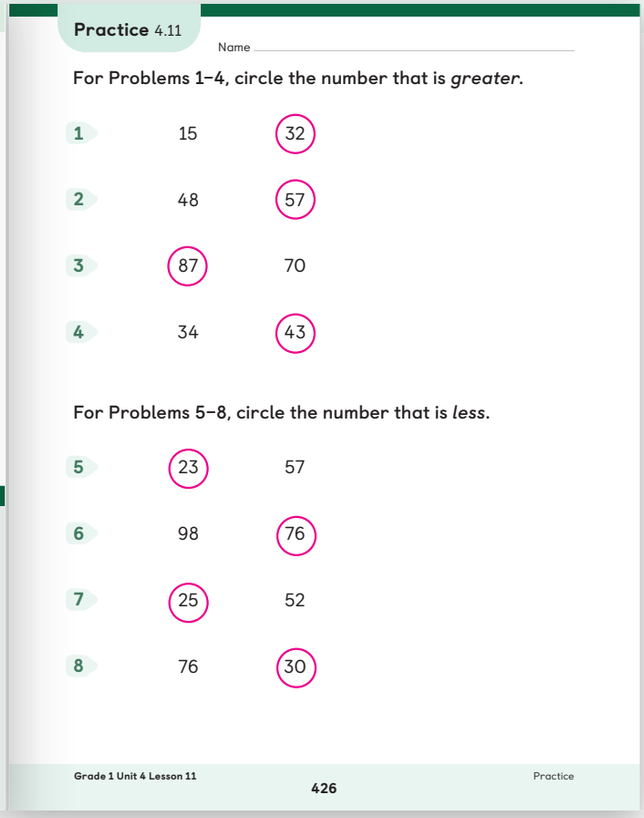
Choose from these Centers.

Cover Up — Add or Subtract 10

Last Number Wins — Numbers to 99 by 1

Last Number Wins — Numbers to 99 by 10

Grade 1 Unit 4 Lesson 11 425 Summary | Practice



Practice 4.11

Name _____

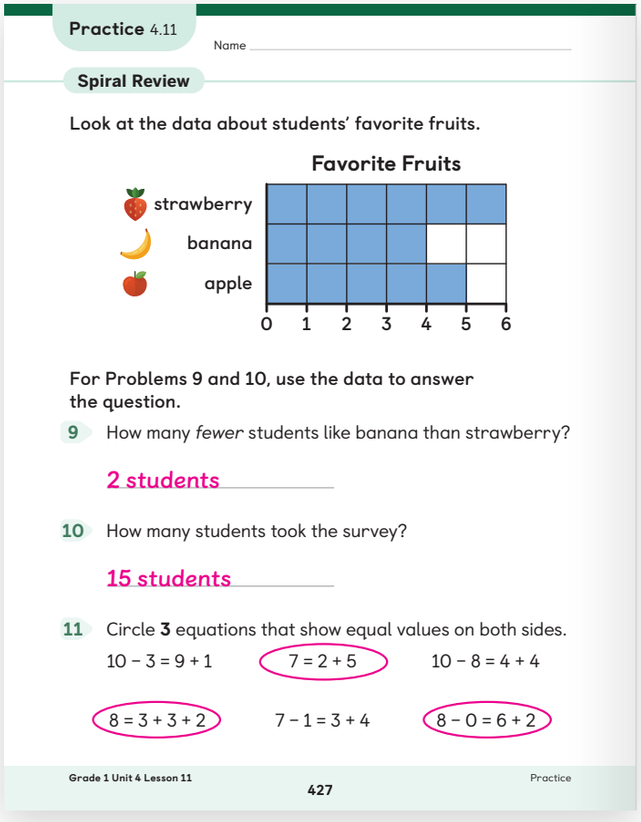
For Problems 1–4, circle the number that is *greater*.

1	15	(32)
2	48	(57)
3	(87)	70
4	34	(43)

For Problems 5–8, circle the number that is *less*.

5	(23)	57
6	98	(76)
7	(25)	52
8	76	(30)

Grade 1 Unit 4 Lesson 11 426 Practice



Practice 4.11

Name _____

Spiral Review

Look at the data about students' favorite fruits.

For Problems 9 and 10, use the data to answer the question.

9 How many *fewer* students like banana than strawberry?

2 students

10 How many students took the survey?

15 students

11 Circle **3** equations that show equal values on both sides.

10 − 3 = 9 + 1 (7 = 2 + 5) 10 − 8 = 4 + 4

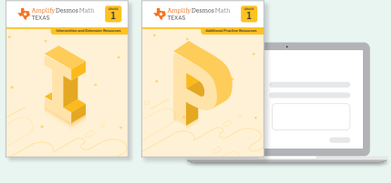
(8 = 3 + 3 + 2) 7 − 1 = 3 + 4 (8 − 0 = 6 + 2)

Grade 1 Unit 4 Lesson 11 427 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–8	1	1.2.E
Spiral Review			
	9, 10	2	1.8.C
Fluency	**11**	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Cover Up

Add or Subtract 10

Pairs | 15 min | 1.5.C

Students choose a multiple of 10 within 100 and add or subtract 10 to practice place-value based strategies.

Materials

- number cards (multiples of 10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 1.

Last Number Wins

Numbers to 99 by 1

Pairs | 15 min | 1.5.A

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 1 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Last Number Wins

10 11 12

Numbers to 99 by 10

Pairs | **15 min** | **1.5.C**

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 10 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

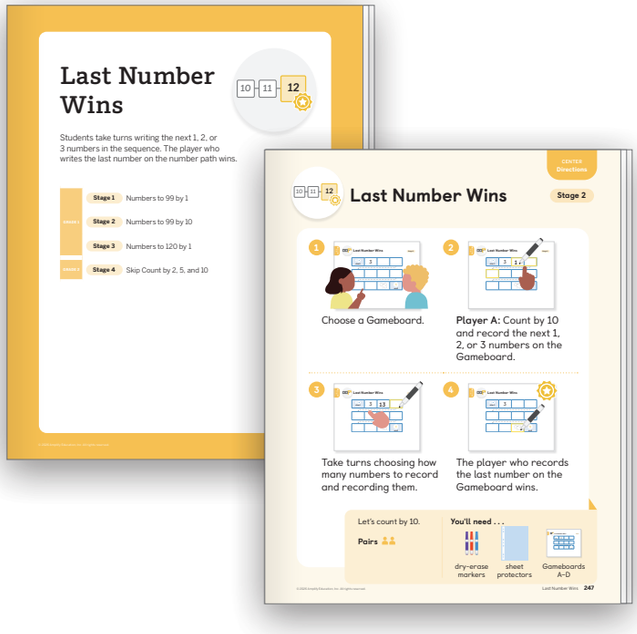
D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.



Differentiation Use after Lesson 11

Lesson Goal: Compare 2 two-digit numbers.

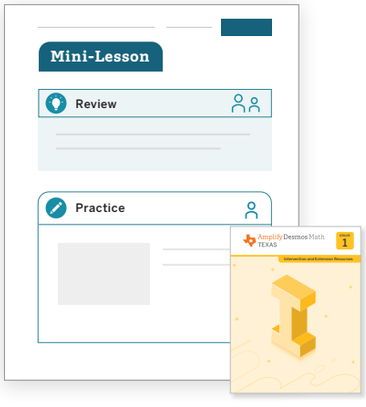
Support

Provide targeted intervention for students by using these resources.

If students compare the numbers by reasoning about the values of individual digits:

Respond:

- Assign the *Comparing Two-Digit Numbers* Mini-Lesson. | 15 min
- Students will also have more opportunities to develop this concept in future lessons, so intervention is not necessary at this time.



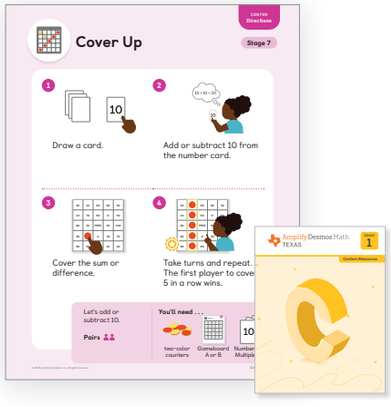
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students compare two-digit numbers using the count sequence:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up: Add or Subtract 10
  Last Number Wins:
  - *Numbers to 99 by 1*
  - *Numbers to 99 by 10*
- Have students complete **Lesson 11 Practice**. | 15 min
- **Item Bank**



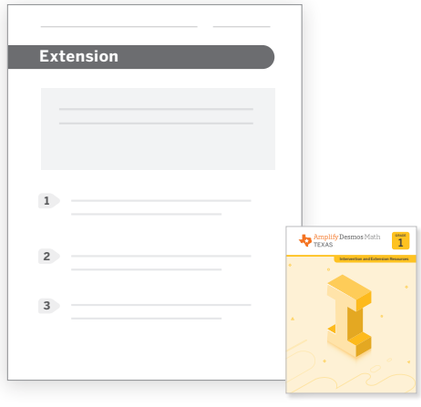
Stretch

Challenge students and extend their learning with these resources.

If students compare two-digit numbers using place value reasoning:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• Boost Personalized Learning • Fluency Practice • Math Adventures

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

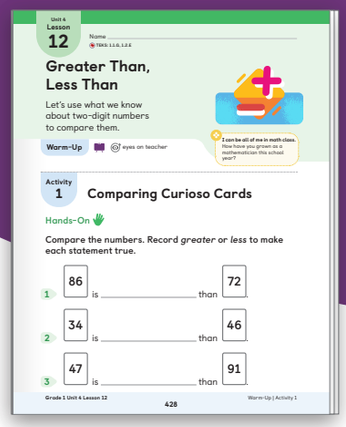
- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines

Professional Learning

Today, students used formal mathematical language to describe comparisons. What additional supports might be needed in upcoming lessons for students who may still be developing an understanding of this language?

Unit 4
Lesson
12

Student Edition pages and Presentation Screens support learning in this lesson.



Greater Than, Less Than

Making Conjectures About Comparing Two-Digit Numbers

Let's use what we know about two-digit numbers to compare them.

Key Concepts

Today's Goals

1. **Goal:** Compare 2 two-digit numbers.
2. **Language Goal:** Make conjectures about comparing 2 two-digit numbers. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**
3. **Language Goal:** Justify comparisons of two-digit numbers by reasoning about the values of the digits. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students compare two-digit numbers and discuss what they notice is true about the numbers that are greater and the numbers that are less. They use these noticings to make conjectures about comparing 2 two-digit numbers. Then students test a given conjecture to recognize that when the digit in the tens place is the same in each number, the digits in the ones places must be compared to know which is greater or less. **(TEKS 1.1.G)**

Prior Learning

In Lesson 11, students compared 2 two-digit numbers using the terms *greater than* and *less than*.

Future Learning

In Lesson 13, students will be introduced to the comparison symbols > and < and will interpret comparison statements written with the symbols.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of strategies for comparing two-digit numbers.
- Students **apply** their understanding of the meanings of the digits to compare two-digit numbers.

Vocabulary

Review Vocabulary

conjecture

digit

greater than

less than

TEKS

Addressing

1.2.E

Use place value to compare whole numbers up to 120 using comparative language.

Math Process Standards: 1.1.C, 1.1.D, 1.1.G

ELPS: 1.A, 1.E, 2.C, 2.D, 2.E, 2.F

Building Toward

2.7.B

Building Math Identity

I can be all of me in math class.
How have you grown as a mathematician this school year?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance 60 min

TEKS: 1.1.C, 1.1.D, 1.1.G, 1.2.E

Warm-Up Fluency

Whole Class | 10 min

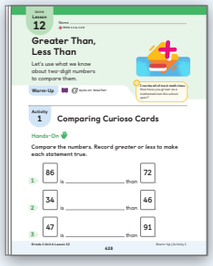
Students use the **Number Talk** routine, in which they look for patterns and make use of the base-ten structure of two-digit numbers to add 10 to and subtract 10 from a multiple of 10. **(TEKS 1.1.C, 1.1.D)**

Activity 1

Pairs | 15 min

Students compare 2 two-digit numbers. They describe what they notice is true about the numbers that are greater and the numbers that are less and make conjectures about comparing two-digit numbers.

Manipulative Kit: connecting cubes (optional)
Materials: chart paper, markers

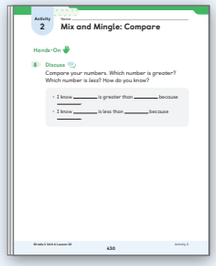


Activity 2

Pairs | 15 min

Students use the **Mix and Mingle** routine to compare numbers, many of which have the same amount of tens. They test a conjecture about comparing the amount of tens to recognize that when 2 numbers have the same amount of tens, the ones need to be compared.

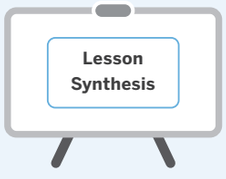
Note: The Student Edition is not required for this activity.
Manipulative Kit: connecting cubes (optional)
Materials: Activity 2 PDF, chart (from Activity 1)
Additional Prep Cut out: Activity 2 PDF



Synthesis

Whole Class | 5 min

Students review and reflect on how to compare 2 two-digit numbers that have the same digit in the tens place.

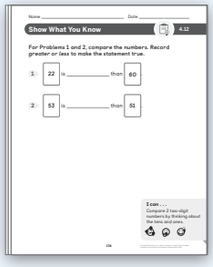


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by comparing 2 two-digits numbers using the words *less than* and *greater than*.

Materials: *Show What You Know* PDF



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice counting and writing two-digit numbers.

- Cover Up
- Last Number Wins

Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

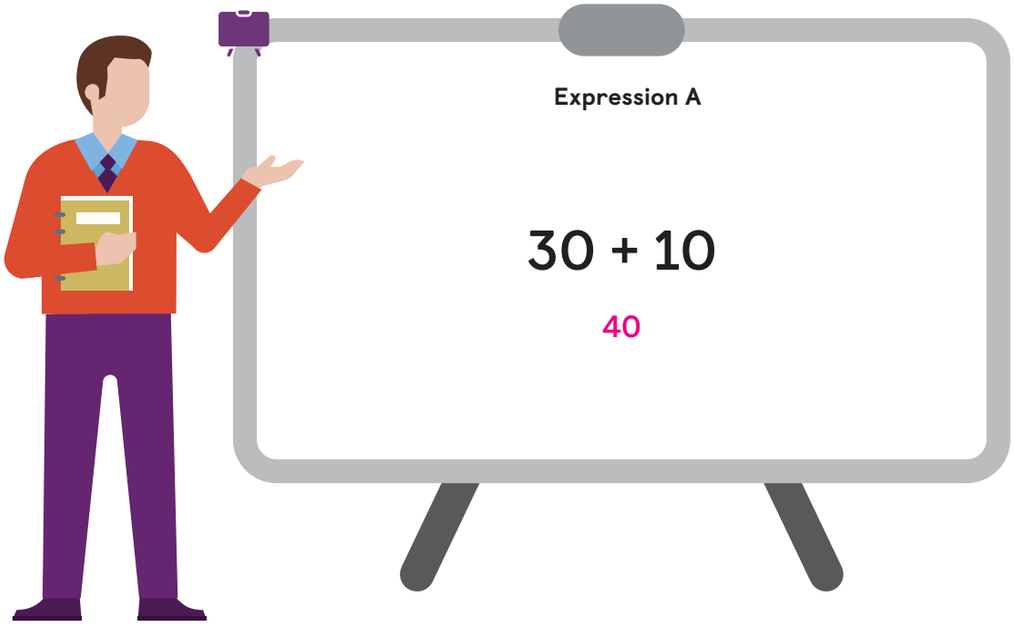
Whole Class | 10 min

Presentation Screen

Warm-Up Number Talk

Fluency

Purpose: Students add and subtract 10 from multiples of 10 within 100 to provide opportunities to reason about the change in the amount of tens.



Expression B

40 + 10

50

Expression C

50 – 10

40

Expression D

40 – 10

30

Why these problems? These expressions lend themselves to making use of the base-ten structure of numbers to reason about each sum or difference.

1 Launch

Use the Number Talk routine.

Display 1 expression at a time.

Say, "Take your time to find the value mentally. Give me a signal when you have an answer and can explain how you found it."

2 Connect

Record sums and differences and 2 or 3 strategies as students share, honoring all strategies and keeping expressions and work displayed.

Repeat with each expression, spending the most time discussing Expressions B and D.

Ask, "Which expression has a value that is less, 40 + 10 or 40 – 10? How do you know?"

Students might say . . . ELPS 2.C, 2.D, 2.E

A: *I know 30 + 10 is 40 because if I count 1 more ten after 30, it is 40.*

B: *If I keep counting by tens, 1 more ten is 50.*

C: *If I count back 1 ten from 50, I get 40.*

D: *40 – 10 means 1 less ten. There are 4 tens in 40, so 1 less would be 3 tens, which is 30.*

Pairs | 15 min

Activity 1 Comparing Curioso Cards

Purpose: Students compare pairs of two-digit numbers and discuss what they notice about the numbers that are greater and the numbers that are less to make conjectures about comparing two-digit numbers.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Record students' conjectures with chart paper and markers during the Connect.

Short on time? Consider omitting Problems 3 and 6.

1 Launch

Say, "While meeting Prashant's friends, Steph noticed they were playing a game with their Curioso cards. Players would name a character and then each friend would compare the number of cards they had with that character. Just like Prashant's friends, you will compare numbers to figure out which number is greater or which number is less."

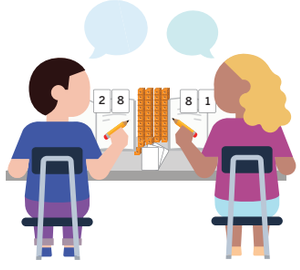
Read aloud the directions and Problems 1–6. Have students work for 4–5 minutes.

Provide access to connecting cube towers of 10 and single cubes.

Read aloud Problem 7. Have students discuss for 2 minutes.

A **Accessibility: Memory and attention** Chunk this task into smaller, more manageable parts by checking in with students and providing feedback on Problems 1–3 before moving them on to Problems 5 and 6.

2 Monitor



After students have completed **Problem 4**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you know about each of these numbers?"
- Ask, "What strategies have you used to help you find which number is greater?"

3 Connect

Invite students to share their responses to Problem 7. Record students' noticings.

MLR **MLR8: Discussion Supports — Make a Conjecture** ELPS 2.C

Use the Think-Pair-Share routine. Ask, "What conjectures can you make about comparing 2 two-digit numbers? Think about what is always true when a number is greater than or less than another number."

EB **Emergent Bilinguals** Allow students to speak using a variety of sentence lengths and types, as well as grammatical structures. Encourage them to use connecting words, such as *and* or *because*. ELPS 2.C

Record students' responses on chart paper. For each conjecture, ask:

- "Why do you believe this conjecture is always true?"
- "Are there any counterexamples that show this conjecture is false?"

Key Takeaway: Say, "In the next activity, you will test a conjecture to see if it is always true."

Unit 4
Lesson
12

Name _____

TEKS: 1.1.G, 1.2.E

Greater Than, Less Than

Let's use what we know about two-digit numbers to compare them.

Warm-Up eyes on teacher

I can be all of me in math class. How have you grown as a mathematician this school year?

Activity 1 Comparing Curioso Cards

Hands-On

Compare the numbers. Record *greater* or *less* to make each statement true.

1. 86 is greater than 72.
2. 34 is less than 46.
3. 47 is less than 91.

Activity 1

Name _____

Comparing Curioso Cards (continued)

Compare the numbers. Record *greater* or *less* to make each statement true.

4. 39 is less than 53.
5. 28 is greater than 18.
6. 28 is less than 60.

7. Discuss

What do you notice about the numbers that are greater? What do you notice about the numbers that are less?

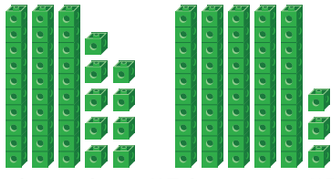
- All the numbers that are greater _____.
- All the numbers that are less _____.

Oral activity: No writing expected. Sample response shown.

All the numbers that are greater have more tens than the numbers that are less. All the numbers that are less have a smaller digit in the tens place.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Compare the numbers by reasoning about the values of individual digits.	39 is greater than 53 because it has 9, and 9 is the biggest number.	**Support** Ask, "What do you notice about the tens in each number? How could you use that to figure out which number is less than the other number?"
Compare the numbers using drawings or cubes.	 39 is less than 53 because 53 has 5 towers of 10, and 39 has 3 towers of 10.	**Strengthen** Ask, "You noticed 39 is less than 53 because it has less tens. How could you figure this out without using cubes or drawings?"
Compare the numbers using place value reasoning.	39 is less than 53 because 39 has a 3 in the tens place, and 53 has a 5 in the tens place. 3 tens is less than 5 tens.	**Stretch** Ask, "You compared the digits in the tens place of each number. Would this strategy work for comparing any 2 two-digit numbers? How do you know?"

Pairs | 15 min

Activity 2 Mix and Mingle: Compare

Purpose: Students compare 2 two-digit numbers, including two-digit numbers with the same amount of tens, to test a conjecture about how to compare two-digit numbers.

Presentation Screens

Materials

Lesson Resources:

- Distribute one pre-cut card from the Activity 2 PDF to each student.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Record the conjecture on the chart from Activity 1 during the Launch.

1 Launch

Record the conjecture, "When comparing two-digit numbers, you only need to compare the digits in the tens place." on the chart from Activity 1.

Say, "In Activity 1, you made conjectures about comparing 2 two-digit numbers. Let's look at this conjecture." Read aloud the conjecture.

Say, "For Problem 8, you will meet with a partner and compare the numbers on your cards. Discuss how you know which number is greater and which number is less. As you compare, test the conjecture."

Use the Mix and Mingle routine. Place students in pairs to compare their numbers. After each round, have students trade cards and find a new partner. Repeat 2–3 times.

Provide access to connecting cube towers of 10 and single cubes.

A **Accessibility: Conceptual processing** Guide processing by providing questions students can ask themselves, such as, "How many tens does each number have? How many ones does each number have?".

Read aloud the conjecture a second time and then read aloud Problem 9.

2 Monitor

After students have completed **Problem 9**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What strategies did you see or hear your classmates use to compare numbers in Activity 1? Could you try one of those strategies?"

EB **Emergent Bilinguals** Encourage all students to use gestures, such as using their fingers to represent amounts of tens and ones and pointing when explaining if they think the conjecture is true or false, to help their partners understand. **ELPS 1.A, 1.E**

3 Connect

Invite students to share their responses to Problem 9. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Say, "You found examples that show the conjecture is true, but because you also found examples that show it is false, that means the conjecture is false."

Key Takeaway: Say, "When comparing two-digit numbers, sometimes only the digits in the tens places need to be compared. Sometimes, the digits in the ones places also need to be compared."

Activity 2

Name _____

Mix and Mingle: Compare

Hands-On

8 Discuss

Compare your numbers. Which number is *greater*? Which number is *less*? How do you know?

- I know _____ is greater than _____ because _____.
- I know _____ is less than _____ because _____.

Oral activity: No writing expected. Sample response shown.

I know 36 is greater than 32 because the numbers have 3 tens, but 36 has more ones. I know 9 is less than 50 because 9 has no tens, and 50 has 5 tens.

Activity 2

Name _____

Mix and Mingle: Compare (continued)

9 Discuss

Do you think this conjecture is *true* or *false*? Explain your thinking.

You can include examples or non-examples if it is helpful.

- I think this conjecture is true because _____.
- I think this conjecture is false because _____.

Oral activity: No writing expected. Sample response shown.

I think this conjecture is false because sometimes you need to compare the digits in the ones places too. For example, 43 and 47 both have 4 tens, so you need to compare the ones.

Presentation Screens

D Differentiation | Teacher Moves

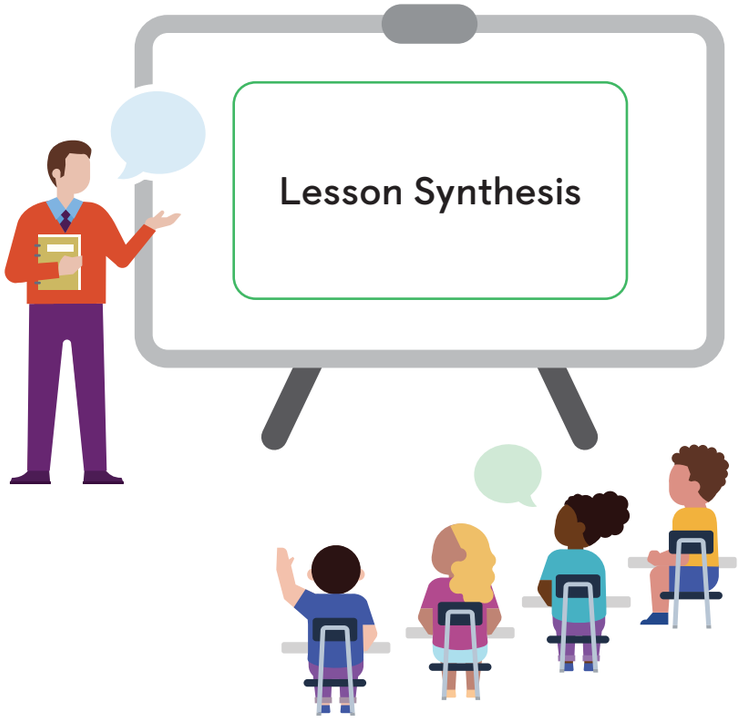
Look for students who . . .	For example . . .	Provide support . . .
Almost there Explain why the conjecture is true.	The conjecture is true because you only need to compare the tens.	**Support** Ask, "How would you compare 2 numbers that have the same digit in the tens place?"
Almost there Explain why the conjecture is true and provide an example.	The conjecture is true because you only need to compare the digits in the tens places. For example, 47 is greater than 38 because 4 tens is greater than 3 tens.	
Explain why the conjecture is false and provide an example.	The conjecture is false because sometimes you need to compare the digits in the ones places too. For example, 43 and 47 have 4 tens, so you can't just compare the tens. You need to compare the ones.	**Stretch** Ask, "What other examples can you think of that prove the conjecture is false?"

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: When comparing 2 two-digit numbers, the digits in the tens place of each number are compared. If 2 numbers have the same number of tens, then the digits in the ones place must be compared.



Use the Think-Pair-Share routine. Ask, "How is comparing 27 and 23 different from comparing 61 and 85?"

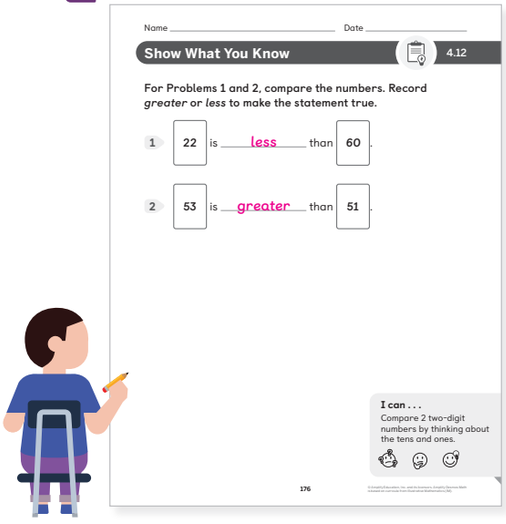
Say, "When comparing 2 two-digit numbers, you can use what you know about the digits to compare. Begin by comparing the digits in the tens place because tens have a greater value than ones. If the digits in the tens place are the same in each number, then you have to compare the digits in the ones place."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min

PDF Show What You Know PDF


Name _____ Date _____

Show What You Know 4.12

For Problems 1 and 2, compare the numbers. Record *greater* or *less* to make the statement true.

1. 22 is less than 60.

2. 53 is greater than 51.

I can . . .
Compare 2 two-digit numbers by thinking about the tens and ones.

176

Today's Goals

1. **Goal:** Compare 2 two-digit numbers.
   - In the *Show What You Know*, students compared 2 two-digit numbers using the words *greater* and *less*.
2. **Language Goal:** Make conjectures about comparing 2 two-digit numbers. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F
3. **Language Goal:** Justify comparisons of two-digit numbers by reasoning about the values of the digits. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

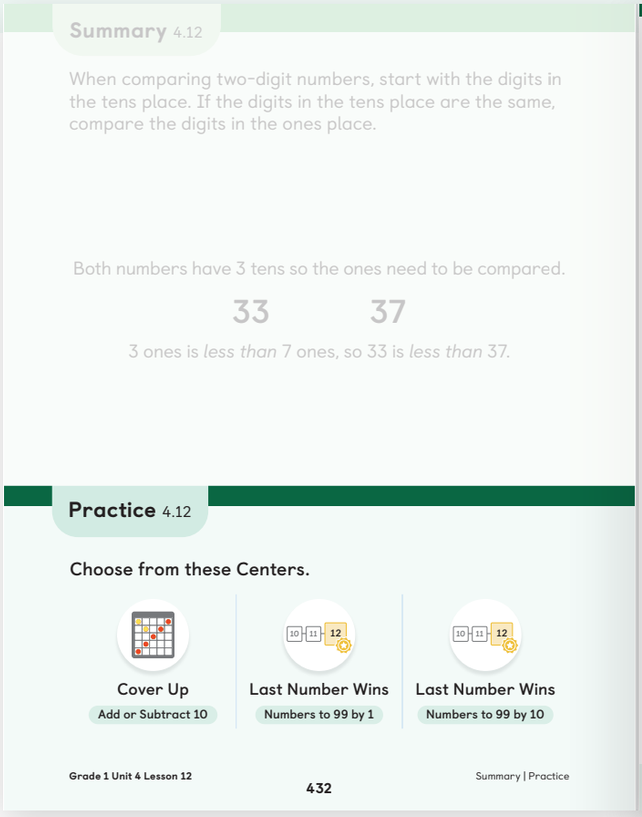
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.12

When comparing two-digit numbers, start with the digits in the tens place. If the digits in the tens place are the same, compare the digits in the ones place.

Both numbers have 3 tens so the ones need to be compared.

33 37

3 ones is *less than* 7 ones, so 33 is *less than* 37.

Practice 4.12

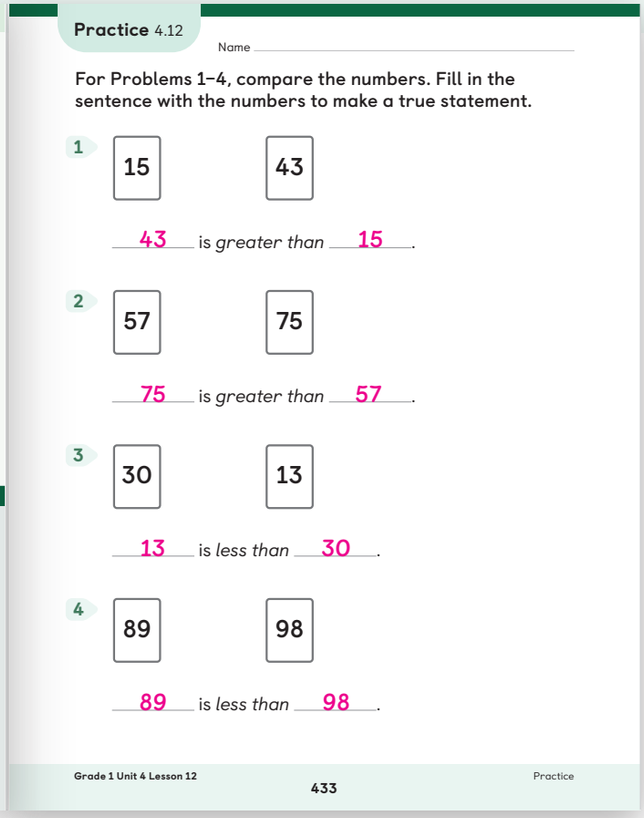
Choose from these Centers.

Cover Up
Add or Subtract 10

Last Number Wins
Numbers to 99 by 1

Last Number Wins
Numbers to 99 by 10

Grade 1 Unit 4 Lesson 12 432 Summary | Practice



Practice 4.12

Name

For Problems 1–4, compare the numbers. Fill in the sentence with the numbers to make a true statement.

1. 15 43

43 is *greater than* 15.

2. 57 75

75 is *greater than* 57.

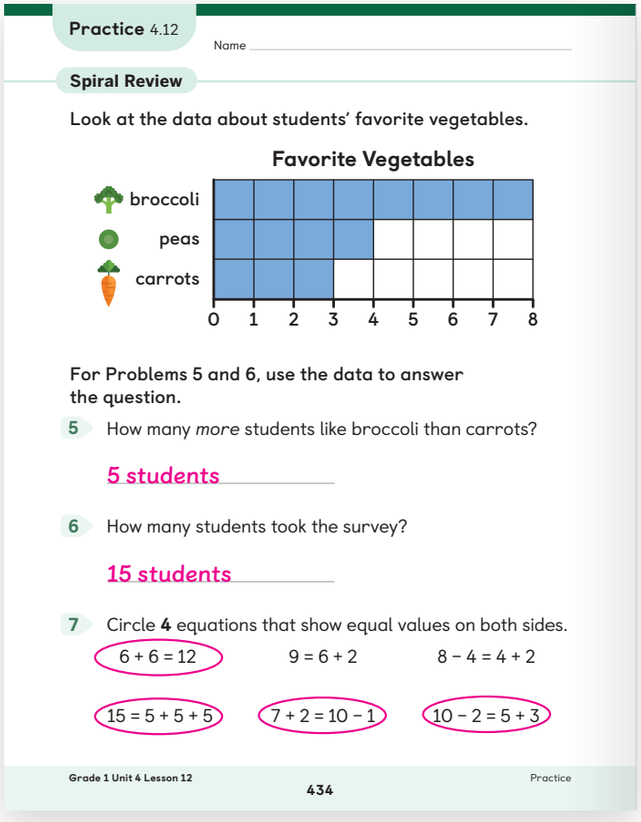
3. 30 13

13 is *less than* 30.

4. 89 98

89 is *less than* 98.

Grade 1 Unit 4 Lesson 12 433 Practice



Practice 4.12

Name

Spiral Review

Look at the data about students' favorite vegetables.

For Problems 5 and 6, use the data to answer the question.

5. How many *more* students like broccoli than carrots?

5 students

6. How many students took the survey?

15 students

7. Circle **4** equations that show equal values on both sides.

6 + 6 = 12 9 = 6 + 2 8 − 4 = 4 + 2

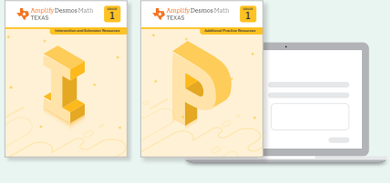
15 = 5 + 5 + 5 7 + 2 = 10 − 1 10 − 2 = 5 + 3

Grade 1 Unit 4 Lesson 12 434 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	1.2.E
Spiral Review			
	5, 6	2	1.8.C
Fluency	**7**	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Cover Up

Add or Subtract 10

Pairs | 15 min | 1.5.C

Students choose a multiple of 10 within 100 and add or subtract 10 to practice place-value based strategies.

Materials

- number cards (multiples of 10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 1.

Last Number Wins

Numbers to 99 by 1

Pairs | 15 min | 1.5.A

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 1 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Last Number Wins

10 11 12

Numbers to 99 by 10

Pairs **15 min** | **1.5.C**

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 10 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 12

Lesson Goal: Compare 2 two-digit numbers.

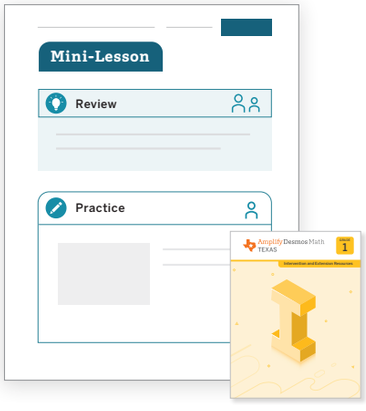
Support

Provide targeted intervention for students by using these resources.

If students compare the numbers by reasoning about the value of individual digits:

Respond:

- Assign the *Making Comparison Statements About Two-Digit Numbers* Mini-Lesson. | 15 min



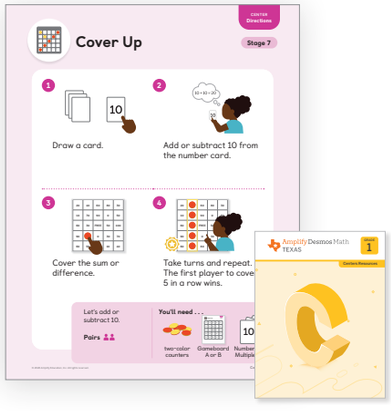
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students compare the numbers using drawings or cubes:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up: Add or Subtract 10
  Last Number Wins:
  - *Numbers to 99 by 1*
  - *Numbers to 99 by 10*
- Have students complete **Lesson 12 Practice**. | 15 min
- **Item Bank**



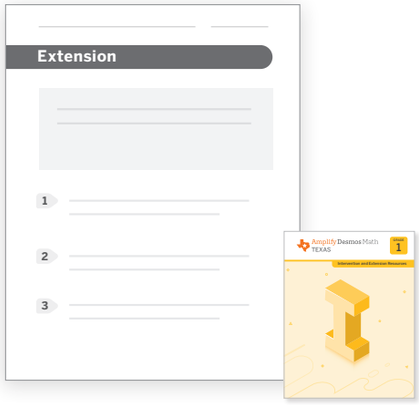
Stretch

Challenge students and extend their learning with these resources.

If students compare the numbers using place value reasoning:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

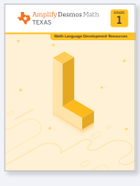


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• Boost Personalized Learning • Fluency Practice • Math Adventures

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., *conjecture/conjectura*
- Frayer Model templates
- Vocabulary routines

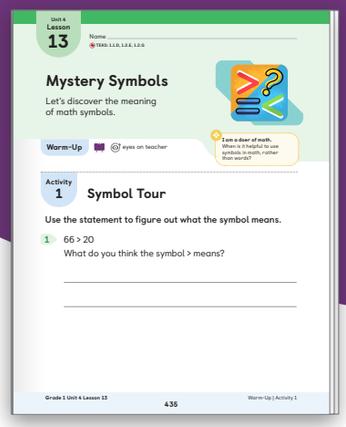


Professional Learning

Today, students used the values of the digits in the tens and ones places to make conjectures about comparing numbers. What did students' conjectures reveal about their understanding? What conjectures do you want to revisit and discuss further?

Unit 4
Lesson
13

Student Edition pages and Presentation Screens support learning in this lesson.



Mystery Symbols

Exploring Comparison Symbols

Let's discover the meaning of math symbols.

Key Concepts

Today's Goals

1. **Goal:** Read and interpret comparison statements about two-digit numbers that include the > and < symbols.
2. **Language Goal:** Justify if comparison statements that include the > and < symbols are true or false. **(Listening, Speaking, and Writing)** **ELPS 1.E, 2.E, 2.F, 4.D, 4.F**

Connections and Coherence

Students explore comparison statements in which pairs of two-digit numbers are compared using the symbols > and <. They first examine pairs of statements that include the same 2 numbers but use different comparison symbols to consider possible meanings for each symbol. Students discuss the numbers, the symbols, and their placements to connect their understanding of describing numbers with *greater than* or *less than* to the abstract symbols. Students reason about the orientation of each symbol and their meanings to justify if comparison statements are true or false. **(TEKS 1.1.D)**

Prior Learning

In Lesson 11, students compared two-digit numbers using the terms *greater than* and *less than*. In Lesson 12, students explored and discussed how to compare two-digit numbers by attending to the meaning of the digits.

Future Learning

In Lesson 14, students will complete comparison statements to make them true, using either greater than and less than symbols or digits.

Integrating Rigor in Student Thinking

- Students develop their **conceptual understanding** of strategies for comparing two-digit numbers.
- Students **apply** their understanding of the meanings of the digits to compare two-digit numbers.

Vocabulary

Review Vocabulary

equal

greater than

less than

TEKS

Addressing

1.2.G

Represent the comparison of two numbers to 100 using the symbols >, <, or =.

Also Addressing: **1.2.E, 1.5.E**

Math Process Standards: 1.1.D, 1.1.F, 1.1.G

ELPS: 1.C, 1.E. 2.B, 2.C, 2.D, 2.E, 2.F, 4.D, 4.F

Building Math Identity

I am a doer of math.

When is it helpful to use symbols in math, rather than words?

Invite students to reflect on this question as they complete this lesson.

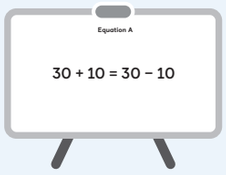
Lesson at a Glance 60 min

TEKS: 1.1.D, 1.1.F, 1.1.G, 1.2.E, 1.2.G, 1.5.E

Warm-Up Fluency

Whole Class | 10 min

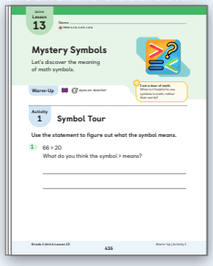
Students use the **True or False?** routine, in which they determine whether a series of equations are true or false by using their understanding of adding and subtracting 10.
(TEKS 1.1.F, 1.1.G)



Activity 1

Small Groups | 20 min

Students analyze true comparison statements with the same two-digit numbers that use the > and < symbols to reason about the meaning of each symbol. They are then formally introduced to the meaning of each symbol and make connections between comparison language and each symbol.
Manipulative Kit: connecting cubes (optional)
Materials: Unit Story, *The Collectors*, Activity 1 PDF, *Words to Compare* chart (from Lesson 11)
Additional Prep Display: Posters A–F from the Activity 1 PDF in order by letter in various places around the classroom

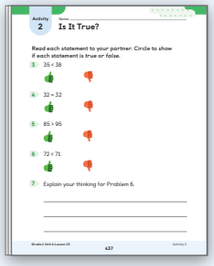


Activity 2

Pairs | 10 min

Students evaluate a series of comparison statements that use the >, <, and = symbols. They use their understanding of comparing 2 two-digit numbers and the >, <, and = symbols to justify if the statements are true or false.

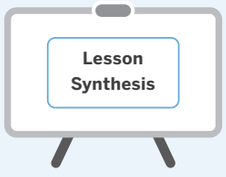
Manipulative Kit: connecting cubes (optional)
Materials: *Words to Compare* chart (from Lesson 11)



Synthesis

Whole Class | 5 min

Students review and reflect on how the > and < symbols can be used to make comparison statements about 2 two-digit numbers.

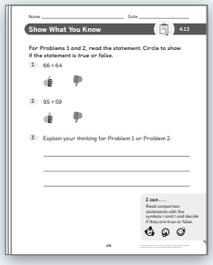


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by evaluating inequality expressions as true or false and explaining their reasoning.

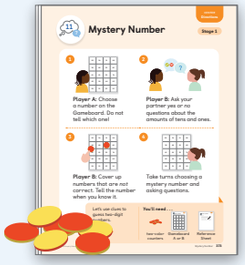
Materials: *Show What You Know* PDF



Center

Pairs | 15 min

Students are introduced to the Center, *Mystery Number, Two-Digit Numbers*, in which they take turns asking each other questions to guess a two-digit number.



Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 4.C, 4.D, 4.F

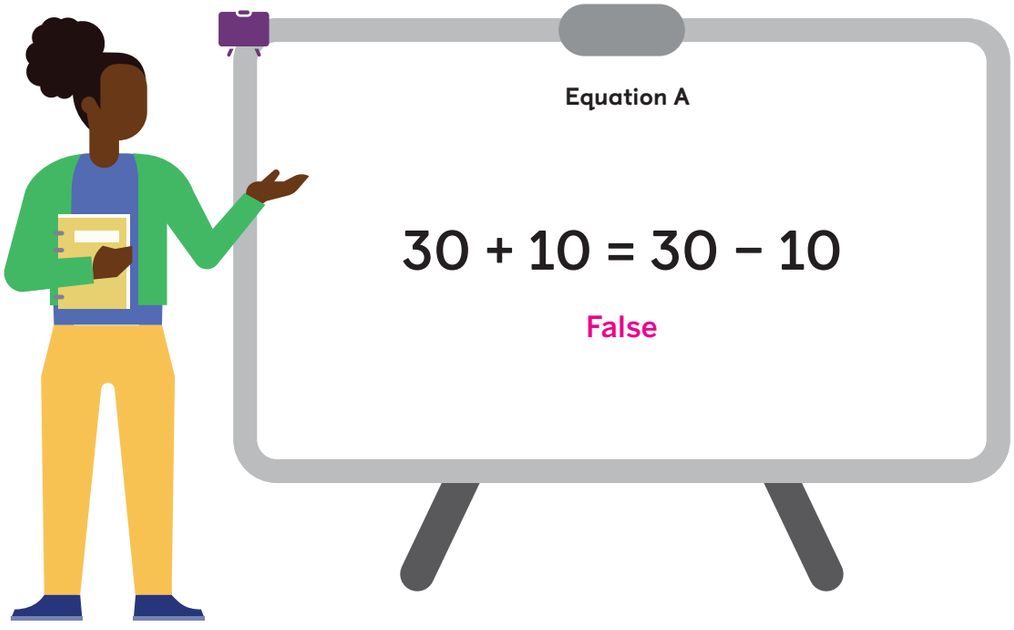
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** and **write** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** and **write** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** and **write** using a variety of sentence types.	Students **listen** to spoken English and **speak** and **write** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screen

Warm-Up True or False? Fluency

Purpose: Students analyze equations involving adding 10 to or subtracting 10 from a multiple of 10, without evaluating all expressions, to determine the relationship between values on either side of the equal sign.



Equation B

30 + 10 = 10 + 30

True

Equation C

30 − 10 = 20 − 10

False

Equation D

30 + 10 = 10 + 40

False

Why these problems? These equations lend themselves to reasoning about mentally adding and subtracting 10 and using comparison language.

1 Launch

Use the True or False? routine.

Display 1 equation at a time.

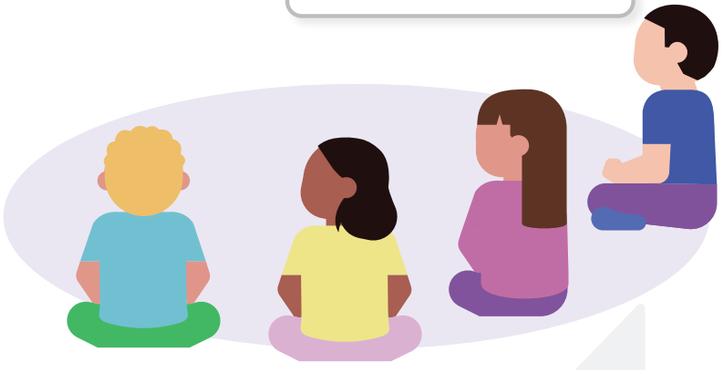
Say, "Give me a signal when you know whether the statement is true and can explain how you know."

2 Connect

Record 2 or 3 students' responses, asking for their reasoning and allowing others to agree or disagree. Keep each equation displayed as you progress to the next.

Repeat with each equation.

Ask, "Look at Equation D. How can thinking about comparing help you know if Equation D is true?"



Students might say . . . ELPS 2.B, 2.C, 2.D, 2.E

A: *False. If you add 10 to 30, the value will be greater than 30, and if you subtract 10 from 30, the value will be less than 30.*

B: *True. Both sides of the equation have the same value because they show adding the same 2 numbers.*

C: *False. 30 − 10 has a greater value because even though both sides of the equation show subtracting 10, 1 side starts with a greater number.*

D: *False. 1 side of the equation shows adding 10 to 30. 30 is less than 40. So, the value of 30 + 10 is less than the value of 10 + 40.*

Small Groups | 20 min

Activity 1 Symbol Tour

Purpose: Students explore and discuss comparison statements that include the greater than and less than symbols to consider what these symbols mean.

Presentation Screens

Materials

- Display and read aloud page 9 of the Unit Story, *The Collectors*.

Lesson Resources:

- Display the posters from the Activity 1 PDF in order by letter in various places around the classroom.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Display and add to the *Words to Compare* chart (from prior lessons) during the Connect.

Short on time? Consider modifying the activity so that groups visit 3 posters rather than 6.

1 Launch

Display and read aloud page 9 of the Unit Story, *The Collectors* and the Activity 1 PDF.

Say:

- "A piece of paper was taped to the pack of cards from Prashant, on which he had written numbers and symbols. Steph wondered what they meant."
- "Each poster shows a pair of statements that Prashant wrote. As you visit each poster, discuss what you think the symbols mean and why."

MLR **MLR8: Discussion Supports — Sentence Frames** ELPS 1.E, 2.C, 2.E

Display the sentence frames for students to use during the Symbol Tour.

Read aloud the directions and Problems 1 and 2 after students have finished the tour.

2 Monitor

While students complete the activity, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about the numbers and the symbol?"
- Ask, "What do you know about these numbers that might help you figure out what the symbol means?"

A **Accessibility: Conceptual processing** Clarify vocabulary and symbols by providing examples and non-examples of the *greater than* and *less than* symbols.

3 Connect

Display the comparison statements from Problems 1 and 2.

Invite students to share their responses to Problems 1 and 2. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Say (pointing to each symbol):

- "This is the *greater than* symbol. This statement says *66 is greater than 20*."
- "This is the *less than* symbol. This statement says *20 is less than 60*."

Display the *Words to Compare* chart. Record the > symbol next to *greater than* and the < symbol next to *less than*.

Key Takeaway: Say, "Statements with greater than and less than symbols are read from left to right, just like words. The *greater than* symbol is the symbol with the wide part on the left. The *less than* symbol is the symbol with the point on the left."

Student Edition

Unit 4
Lesson
13

Name

TEKS: 1.1.D, 1.2.E, 1.2.G

Mystery Symbols

Let's discover the meaning of math symbols.

Warm-Up eyes on teacher

I am a doer of math.
When is it helpful to use symbols in math, rather than words?

Activity 1 Symbol Tour

Use the statement to figure out what the symbol means.
Sample response shown.

1 66 > 20

What do you think the symbol > means?

I think the symbol means "greater than"

because 66 is greater than 20.

Activity 1

Name

Symbol Tour (continued)

Use the statement to figure out what the symbol means.
Sample response shown.

2 20 < 60

What do you think the symbol < means?

I think the symbol means "less than"

because 20 is less than 60.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . (Poster A: 54 > 25, 25 < 54)	Provide support . . .
Almost there Explain that the symbols have the same meaning.	*The symbols look the same, so they must mean the same thing.*	**Support** Ask, "What do you notice is the same about the symbols? What do you notice is different about the symbols?"
Explain 1 meaning for the symbols.	*These symbols are showing which number is greater than the other number.*	**Strengthen** Ask, "What do you notice is different about the symbols? Why do you think the symbol is different in each statement?"
Explain the meaning of each symbol.	*The symbol in the top statement means greater than. The symbol in the bottom statement means less than.*	**Stretch** Ask, "How might you be able to tell the symbols apart if you saw them without numbers on either side?"

Pairs | 10 min

Activity 2 Is It True?

Purpose: Students read comparison statements and reason about if they are true or false to practice interpreting the greater than and less than symbols.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Refer to the *Words to Compare* chart (from prior lessons) during the Monitor.

1 Launch

Read aloud the directions. Have students work for 2–3 minutes before working on Problem 7.

Provide access to connecting cube towers of 10 and single cubes.

EB **Emergent Bilinguals:** Encourage students to rehearse their explanation for Problem 7 orally with a partner in their primary language before writing in English. ELPS 1.E, 2.F, 4.F

2 Monitor

After students have completed **Problem 7**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What do you know about the numbers in this statement?"
- Ask, "How can you use the *Words to Compare* chart to help you decide if this statement is true?"

3 Connect

Display the correct responses to Problems 3–6.

Display the comparison statement and explanation.

Read aloud the explanation only.

Use the Think-Pair-Share routine. Ask, "Do you agree or disagree? Why?"

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share if they agree or disagree, press for details in their reasoning. For example:

- If a student says, "I disagree because the wrong symbol was used." . . .
- Press for details by asking, "What do you mean when you say the wrong symbol was used?"

Ask, "How could you change the comparison statement so that it is true?"

Record $59 < 62$ and $62 > 59$.

Say, "These statements are true because 59 is less than 62 and 62 is greater than 59."

Key Takeaway: Say, "Comparison statements that use the greater than, less than, or equal symbols are true when they represent a true relationship between the numbers."

Student Edition

Activity 2

Name _____

Is It True?

Read each statement to your partner. Circle to show if each statement is *true* or *false*.

3 35 < 38

4 32 = 32

5 85 > 95

6 72 < 71

7 Explain your thinking for Problem 6.

Sample response shown.

It is false because 72 is greater than 71. This statement needs the greater than symbol to make it true.

Grade 1 Unit 4 Lesson 13 437 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

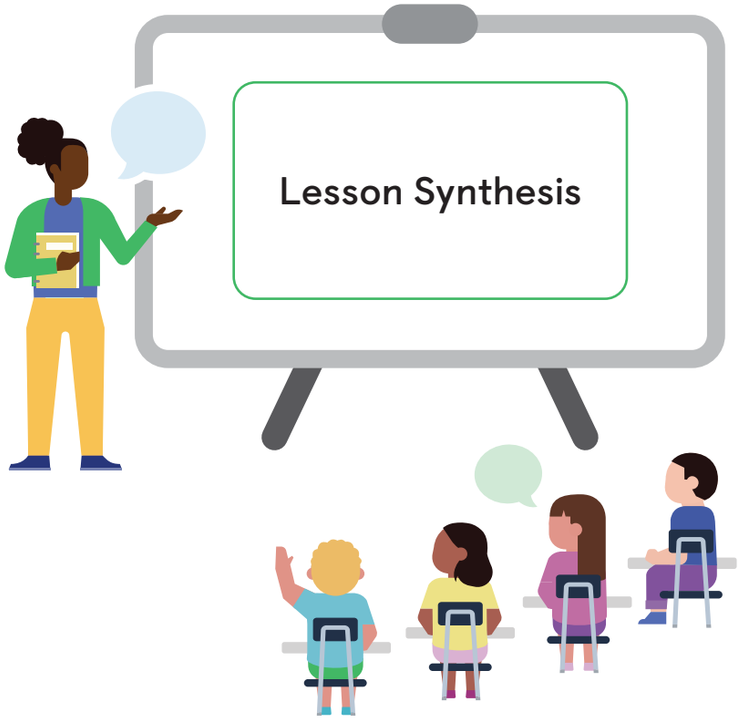
Look for students who . . .	For example . . .	Provide support . . .
Almost there Interpret the symbol and describe a different relationship between the numbers.	**This statement is true because it says 72 is less than 71.**	**Support** Ask, "How could the *Words to Compare* chart help you prove which value is greater or less than the other value?"
Almost there Interpret the symbol differently but describe the relationship between the numbers correctly.	**This statement is true because it says 72 is greater than 71.**	**Support** Ask, "How could you use the *Words to Compare* chart to prove that the statement you read aloud is the same statement written with the numbers and symbols?"
Interpret the symbol and describe the relationship between the numbers correctly.	**The statement is false because it says 72 is less than 71.**	**Stretch** Ask, "What could you change to make this a true statement?"

Whole Class | 5 min

Synthesis

Presentation Screen

Lesson Takeaway: Greater than and less than symbols are distinct symbols with different meanings. These symbols can be used to make comparison statements about 2 numbers.



Ask, "What numbers could make each statement true? How do you know?"

Record 2–3 numbers students share to make each statement true.

Say, "Let's read 2 of these statements together." Read aloud a statement that uses the greater than symbol and a statement that uses the less than symbol.

Say, "You found different numbers that could make each comparison statement true. You will continue to explore and record comparison statements in the next lesson."

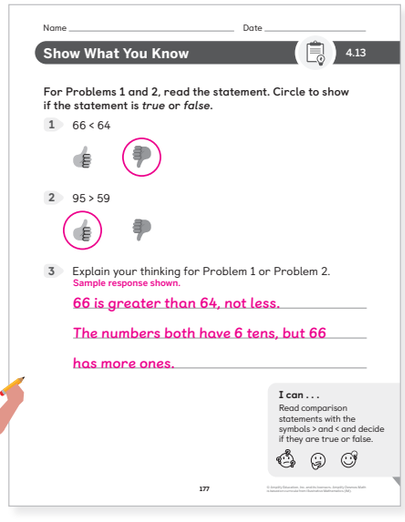
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.13

For Problems 1 and 2, read the statement. Circle to show if the statement is *true* or *false*.

1 $66 < 64$

2 $95 > 59$

3 Explain your thinking for Problem 1 or Problem 2.
Sample response shown.

66 is greater than 64, not less. The numbers both have 6 tens, but 66 has more ones.

I can . . .
Read comparison statements with the symbols > and < and decide if they are true or false.

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Today's Goals

1. **Goal:** Read and interpret comparison statements about two-digit numbers that include the > and < symbols.
   - In Problems 1 and 2 in the *Show What You Know*, students analyzed inequality expressions to determine if they are true or false.
2. **Language Goal:** Justify if comparison statements that include the > and < symbols are true or false. **(Listening, Speaking, and Writing)** ELPS 1.E, 2.E, 2.F, 4.D, 4.F
   - In Problem 3 in the *Show What You Know*, students explained their reasoning for comparing 2 two-digit numbers.

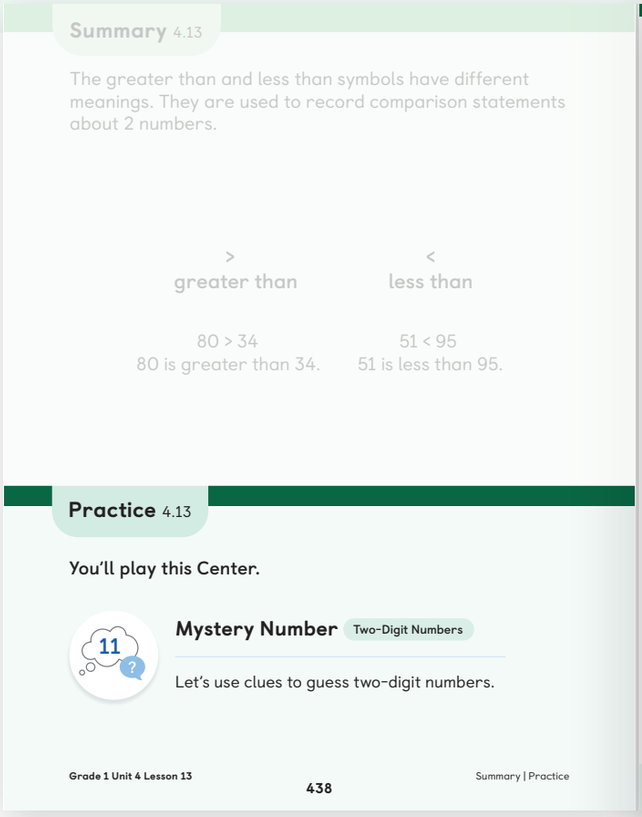
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.13

The greater than and less than symbols have different meanings. They are used to record comparison statements about 2 numbers.

>	<
greater than	less than
80 > 34 80 is greater than 34.	51 < 95 51 is less than 95.

Practice 4.13

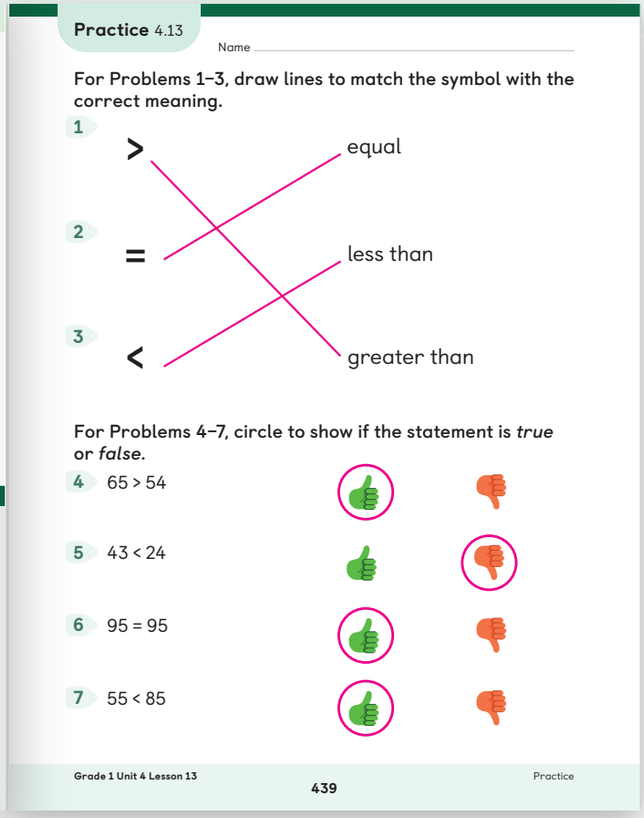
You'll play this Center.

11

Mystery Number Two-Digit Numbers

Let's use clues to guess two-digit numbers.

Grade 1 Unit 4 Lesson 13 438 Summary | Practice



Practice 4.13

Name _____

For Problems 1–3, draw lines to match the symbol with the correct meaning.

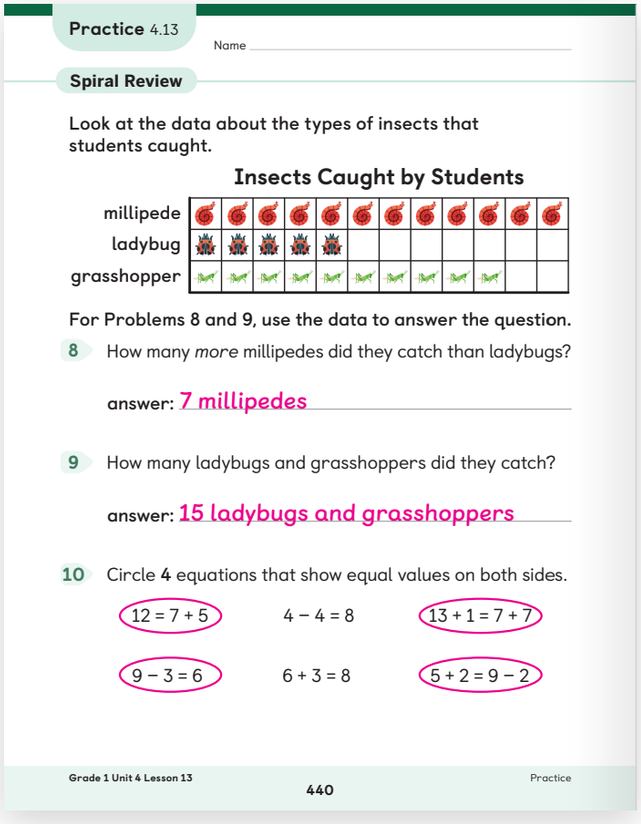
1 >
2 =
3 <

equal
less than
greater than

For Problems 4–7, circle to show if the statement is *true* or *false*.

4 65 > 54
5 43 < 24
6 95 = 95
7 55 < 85

Grade 1 Unit 4 Lesson 13 439 Practice



Practice 4.13

Name _____

Spiral Review

Look at the data about the types of insects that students caught.

Insects Caught by Students

millipede	12
ladybug	5
grasshopper	10

For Problems 8 and 9, use the data to answer the question.

8 How many *more* millipedes did they catch than ladybugs?

answer: 7 millipedes

9 How many ladybugs and grasshoppers did they catch?

answer: 15 ladybugs and grasshoppers

10 Circle **4** equations that show equal values on both sides.

12 = 7 + 5 | 4 − 4 = 8 | 13 + 1 = 7 + 7

9 − 3 = 6 | 6 + 3 = 8 | 5 + 2 = 9 − 2

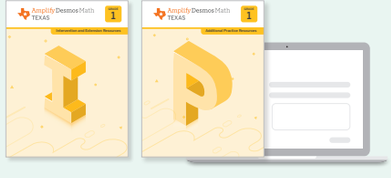
Grade 1 Unit 4 Lesson 13 440 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	1.2.G*
	4–7	1	1.2.G
Spiral Review			
	8, 9	2	1.8.C
Fluency	10	1	1.3.D

*These problems build toward the standard shown.

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Pairs | 15 min

Introducing the Center
Mystery Number, Two-Digit Numbers

Purpose: Students continue to develop their understanding of place value as they ask questions to guess a two-digit mystery number.

Presentation Screen

Materials

Manipulative Kit:

- Distribute two-color counters to each pair.

Centers Resources:

- Display the Directions, Gameboard A, and Reference Sheet during the Launch.
- Distribute Gameboards (A and B) and one Reference Sheet to each pair.

1 Launch

Display the Center materials, Directions, Gameboard A, and Reference Sheet.

Demonstrate how to play *Mystery Number, Two-Digit Numbers*. Monitor to ensure students are able to follow directions with accuracy. ELPS 1.C

- **Say**, "You will play *Mystery Number* today."
- **Say**, "First, you and your partner will choose a Gameboard to use." Display Gameboard A.
- **Say**, "To start, I will choose a mystery number, but I will keep it a secret from my partner. Then my partner will ask me questions that I can answer with *yes* or *no* to try to guess my mystery number."
- **Use the Think-Pair-Share routine**. Ask, "I have picked a mystery number. What questions could you ask to help figure out the mystery number? You can use the Reference Sheet with example questions if it is helpful." Read aloud some of the questions.
- **Say**, "You could ask if the mystery number is greater than 25. The answer is *no*, so my partner would cover up all the numbers that are greater than 25." Cover the numbers greater than 25 with two-color counters.
- **Ask**, "Look at the numbers that are uncovered. What question would be helpful to ask next?"
- **Say**, "Now you will play *Mystery Number* with a partner. After you guess your partner's mystery number, you will switch roles."

2 Monitor

Observe the questions students are asking and if their questions vary given the values that remain on the Gameboard.

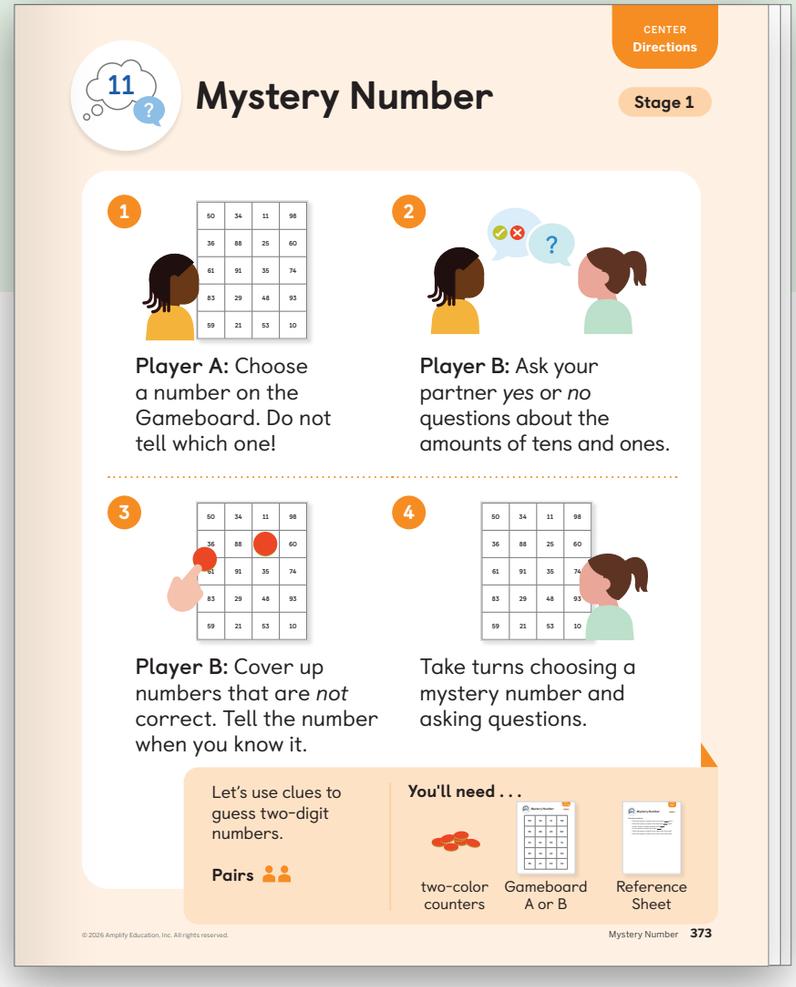
3 Connect

Display Gameboard A with all the numbers covered except 50, 83, 88, and 98.

Ask, "If the only numbers left on the Gameboard were 50, 83, 88, and 98, what question would you ask?"

Key Takeaway: Say, "One way to figure out a mystery two-digit number is to ask questions about how many tens and ones. You could ask if the number is greater than or less than another number."

Centers Resource



CENTER Directions

Stage 1

Mystery Number

1

Player A: Choose a number on the Gameboard. Do not tell which one!

2

Player B: Ask your partner *yes* or *no* questions about the amounts of tens and ones.

3

Player B: Cover up numbers that are *not* correct. Tell the number when you know it.

4

Take turns choosing a mystery number and asking questions.

Let's use clues to guess two-digit numbers.

Pairs

You'll need . . .

two-color counters

Gameboard A or B

Reference Sheet

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Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Ask questions specific to only 1 number.	**Is the number 53?** **Is the number 93?**	**Support** Ask, "What questions could you ask that might help you cover more than 1 number at a time?"
Repeat the same type of question.	**Does the number have 0 ones?** **Does the number have 3 ones?**	**Strengthen** Ask, "What do you notice about the numbers that are left that might help you think of your next question?"
Vary questions given which numbers remain on the board.	**Does the number have 0 ones?** **Is the number less than 30?**	**Stretch** Ask, "How do you decide which questions to ask?"

Differentiation Use after Lesson 13

Lesson Goal: Justify if comparison statements that include the > and < symbols are true or false.

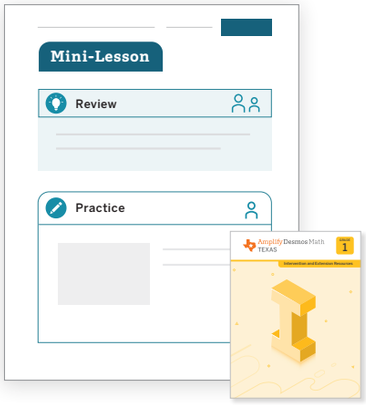
Support

Provide targeted intervention for students by using these resources.

If students interpret the symbol differently and describe the relationship between the numbers differently:

Respond:

- Assign the *Exploring Comparison Symbols* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 2 *Differentiation: Teacher Moves* table.



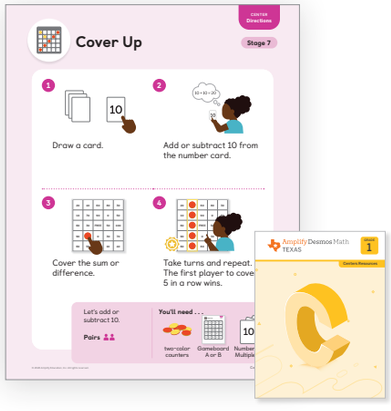
Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

If students interpret the symbol differently or describe the relationship between the numbers differently:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up: Add or Subtract 10
  Last Number Wins: Numbers to 99 by 10
  Mystery Number: Two-Digit Numbers
- Have students complete **Lesson 13 Practice**. | 15 min
- **Item Bank**



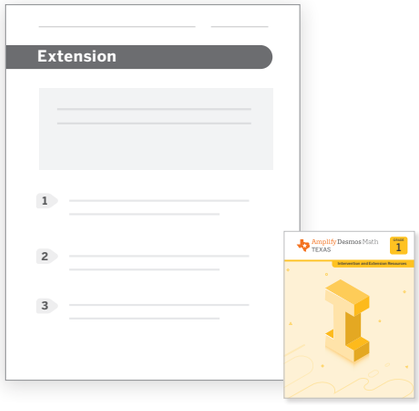
Stretch

Challenge students and extend their learning with these resources.

If students interpret the symbol and describe the relationship between the numbers correctly:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities**. | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

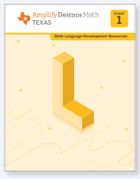


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., *equal/igual*
- Frayer Model templates
- Vocabulary routines



Professional Learning

What did you notice today as you listened to students read comparison statements? What other opportunities might you have throughout the school year to display comparison statements for students to read and evaluate?

Unit 4
Lesson
14

Student devices recommended

Student Edition pages and Presentation Screens support learning in this lesson.

Purr-fect Comparisons

Using Comparison Symbols and Digits to Make True Statements

Let's use symbols to make comparison statements true.

Key Concepts

Today's Goals

1. **Goal:** Use the >, <, and = symbols to make true comparison statements.
2. **Language Goal:** Justify the reasoning for choosing a digit that makes a comparison statement true. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students interpret comparison statements that are missing a digit or symbol. They use place value reasoning to compare 2 two-digit numbers and choose the symbol that makes a statement true. Students then attend to the structures of statements and the > and < symbols to fill in a missing tens or ones digit in two-digit numbers to make statements true. They recognize that sometimes more than 1 number can make a comparison statement true. **(TEKS 1.1.D)**

Prior Learning

In Lesson 13, students analyzed true comparison statements to discover and understand the meaning of the > and < symbols.

Future Learning

In Lesson 15, students will write 2 comparison statements to compare the same 2 numbers.

Integrating Rigor in Student Thinking

- Students deepen their **conceptual understanding** of comparing two-digit numbers using comparison symbols.
- Students **apply** their understanding of the meanings of the tens and ones digits to compare two-digit numbers.

Vocabulary

Review Vocabulary

equal

greater than

less than

TEKS

Addressing

1.2.G

Represent the comparison of two numbers to 100 using the symbols >, <, or =.

Also Addressing: **1.2.D, 1.2.E**

Math Process Standard: 1.1.D

ELPS: 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Building Math Identity

I can be all of me in math class.
How have you used symbols as a mathematician?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance

60 min

TEKS: 1.1.D, 1.2.D, 1.2.E, 1.2.G

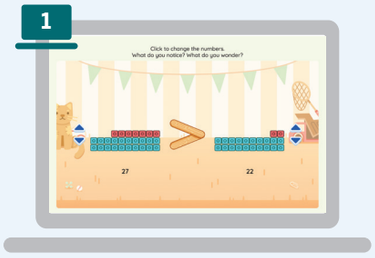
Why digital?

Students receive real-time responsive feedback that connects language, quantities, and symbols to support understanding.

Warm-Up

Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about a mathematical symbol that changes as 2 two-digit numbers and the amounts they represent increase and decrease.

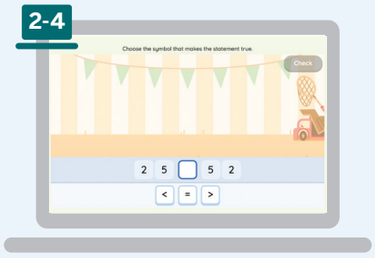


Activity 1

Pairs | 15 min

Students apply place value reasoning and the meanings of >, <, and = symbols to choose the symbol that makes a true statement about 2 two-digit numbers. For numbers that are not equal, students notice that the order of the numbers determines which symbol to use.

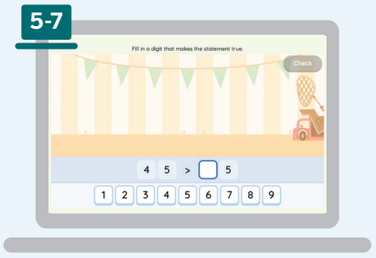
Manipulative Kit: connecting cubes (as needed)
Students using print: *Words to Compare* chart (from prior lessons)



Activity 2

Pairs | 15 min

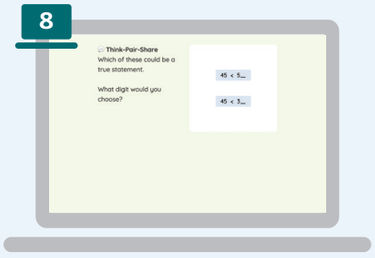
Students reason about two-digit numbers and the meanings of the symbols > and < to find the tens digit or ones digit that makes comparison statements true. They notice that for some comparison statements, different digits can be used to make the statement true.



Synthesis

Whole Class | 5 min

Students review and reflect on using comparison symbols and attending to the values of the digits to make true comparison statements about 2 two-digit numbers.

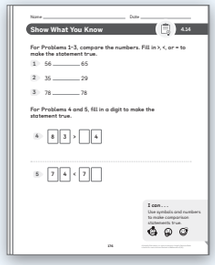


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by comparing 2 two-digit numbers and making true comparison statements.

Students using print: *Show What You Know* PDF



Center Choice Time

Pairs | 15 min

Students have an opportunity to revisit these Centers to build their understanding of quantity.

- Last Number Wins
- Mystery Number

Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

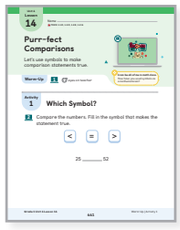
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

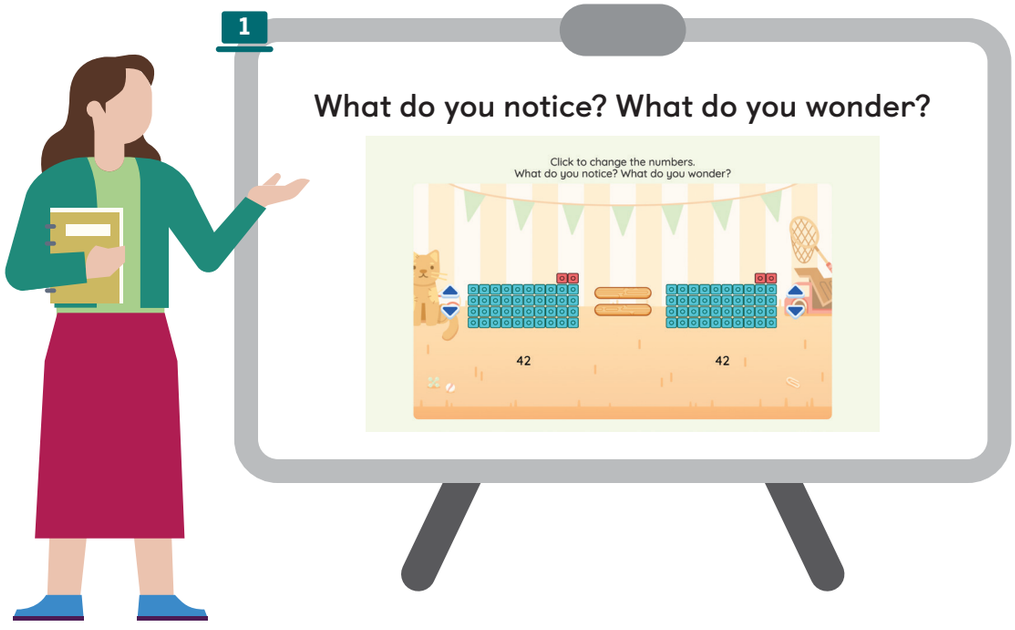
Whole Class | 10 min | Suggested Pacing: Screen 1

Warm-Up Notice and Wonder

Purpose: Students prepare for Activity 1 by exploring an interactive to notice how the symbol that represents the relationship between the numbers changes as the amounts of cubes representing the numbers increase or decrease.

Students using print





1 Launch

1 **Display** the 2 groups of cubes and the equal symbol.

Ask, "In the playroom, someone has been building with towers of 10 cubes and single cubes. The screen shows an equal symbol between the groups of cubes. What does the equal symbol mean?"

Say (if not yet mentioned during discussion), "Both numbers have the same numbers of tens and ones. The equal symbol shows that the cubes on both sides represent the same value."

Read aloud the directions. ELPS 1.E

Students using print: Have students suggest which group of cubes to change and how to change the amounts. Demonstrate increasing and decreasing the quantities so that both comparison symbols are displayed.

Use the Notice and Wonder routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Invite students to share their responses. Demonstrate increasing and decreasing the quantities to highlight students' thinking.

Display 37 < 57.

Ask, "This statement says 37 is less than 57. How do you know this statement is true?"

Students might say . . . ELPS 2.B

I notice that the number changes to match the amount of cubes.

I notice that when the groups of cubes are not equal, the symbol changes to show which number of cubes is greater and which number of cubes is less.

I wonder why the numbers go up or down by 5 each time.

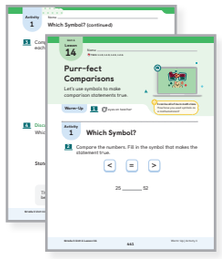
I wonder why the equal symbol only shows for 1 click, but the greater than and less than symbols show for more than 1 click.

Pairs | 15 min | Suggested Pacing: Screen 2, Screen 3, Screen 4

Activity 1 Which Symbol?

Purpose: Students compare 2 two-digit numbers and choose a comparison symbol to make comparison statements true.

Students using print



Additional Print Materials

Manipulative Kit:

- Provide students with access to connecting cubes, double 10-frames, and counters (as needed).

Classroom materials:

- Refer to the *Words to Compare* chart (from prior lessons) during the Monitor.

1 Launch

2 **Display** 25 ___ 52.

Read aloud the directions and have students complete Screen 2.

Demonstrate a correct response. Say, "The screen shows the comparison statement you filled in using words. Then it shows each number represented as tens and ones to help you see which number is greater and which number is less."

3 **Read aloud** the directions. Say, "For each problem, choose the symbol that makes the comparison statement true, and then click Check. Before you click again, explain to your partner what you notice about your answer."

Students using print: Have students complete Screen 3 independently for 4–5 minutes. Then have students compare responses with a partner. If students disagree about an answer, encourage them to work together to come to an agreement.

EB **Emergent Bilinguals:** Provide sentence frames to support students' discussions. For example, display the frame, "I noticed . . . , so I chose . . . " ELPS 1.E, 2.C, 2.E

2 Monitor

While students complete **Screen 3**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What do you know about the numbers?"
- Ask, "Which number has more tens? Which symbol could you use to show the number with more tens?" Refer to the *Words to Compare* chart for support.

A **Accessibility: Conceptual processing** Provide access to connecting cube towers of 10, single cubes, double 10-frames, and counters. Invite students to use objects or drawings to represent and solve the problems.

3 Connect

4 MLR **MLR8: Discussion Supports — Make a Conjecture** ELPS 2.C, 2.D, 2.E

Display 25 __ 36.

Invite a student to share their response to Screen 4 using Row 2 in the *Differentiation* table.

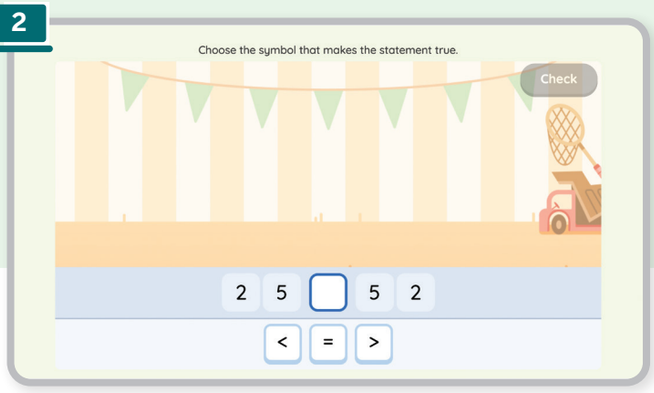
Repeat for 48 __ 42.

Use the Think-Pair-Share routine. Ask, "What conjectures can you make about greater than and less than symbols? Remember that a conjecture is a statement that you believe is always true based on the information you have."

Key Takeaway: Say, "You can use a greater than, equal to, or less than symbol to compare 2 numbers and make a statement true."

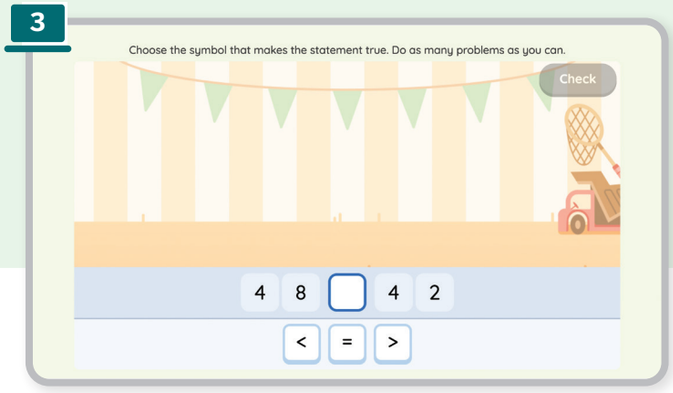
Students using digital

2



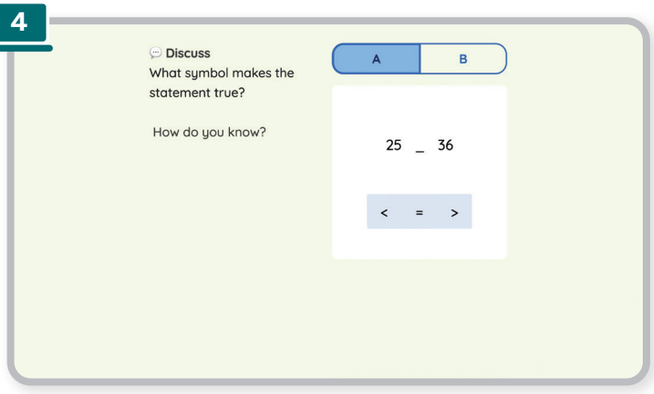
Students select the < symbol to show 25 < 52.

3



Students select the >, <, or = symbol to make the statements true in a repeated challenge.

4



Students may make a conjecture that they first look at the tens places to compare the 2 numbers, and if the tens places are equivalent, they will look at the ones.

Students using print **will arrive at similar answers.**

D Differentiation | Teacher Moves

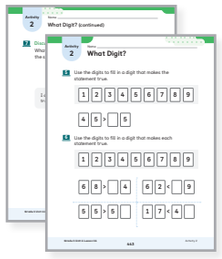
Look for students who . . .	For example . . . 18 __ 61	Provide support . . .
Almost there Choose a symbol that does not make a true statement and describe a true relationship about the numbers.	**18 > 61** **I know 61 is greater than 18 because 61 has more tens. So, I chose the greater than symbol.**	**Support** Ask, "You know 61 is greater than 18, so what do you know about 18? Which symbol shows that 18 is less than 61?"
Choose a symbol that makes a true statement and describe a true relationship about the numbers.	**18 < 61** **61 has more tens than 18, so 61 is greater and 18 is less. I chose the symbol that starts with the point because 18 is less than 61.**	**Strengthen** Ask, "How would this statement change if the 61 came first?"

Pairs | 15 min | Suggested Pacing: Screens 5-7

Activity 2 What Digit?

Purpose: Students apply their place-value understanding to determine the missing digit that will make a comparison statement true.

Students using print



1 Launch

5 **Display** 45 < _5. Ask, "What do you notice about this comparison statement?"

Read aloud the directions.

Say (if not yet mentioned during discussion), "This statement already has a comparison symbol. It says 45 is less than another number, but the second number is missing a digit in the tens place."

Ask, "What digit could be in the tens place that would make this statement true? Click a digit to enter a number of tens and notice what happens." Have students complete Screen 5.

Demonstrate a correct response, and ask, "How do you know that you chose a digit that makes the statement true?" Highlight the connection between the words, the symbol, and the cube representations.

6 **Read aloud** the directions. Say, "For each problem, explain to your partner which digit you chose and why before moving to the next screen."

Students using print: Have students complete Screen 6 independently for 4–5 minutes. Then have students compare responses with a partner. If students disagree about an answer, encourage them to work together to come to an agreement.

2 Monitor

While students complete **Screen 6**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How does the comparison symbol help you to know what must be true about these numbers?"
- Ask, "Do you need to fill in a number of tens or a number of ones? How do you know?"

A **Accessibility: Memory and attention** Clarify feedback by orienting students to each representation. For example, ask students what they notice about the amounts of tens and ones in the representations of each number, or ask them how the words and the symbols describe the relationships between the numbers.

3 Connect

7 **Display** 68 > _4.

Use the Think-Pair-Share routine. Ask, "What digit did you choose? Explain how you know the digit that you chose makes the statement true." Have students share responses as shown in Rows 2 and 3 in the *Differentiation* table.

Say (if not yet mentioned during discussion), "It can be helpful to use what you know about comparing tens and ones to think about what makes a comparison statement true."

Record 3–4 students' responses to the problem.

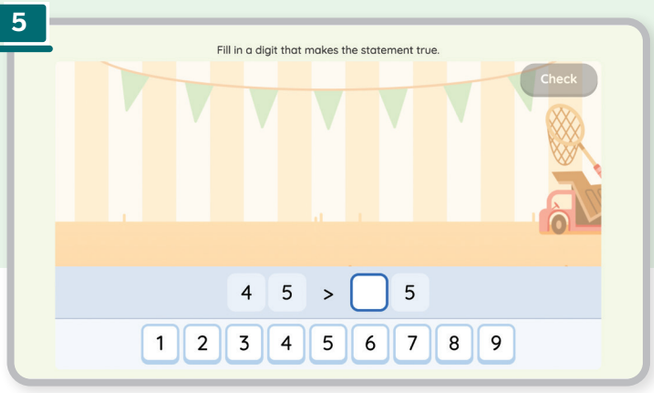
Ask, "How could there be more than 1 digit that makes the statement true?"

Say (if not yet mentioned during discussion), "68 has 6 tens, so any number of tens less than 6 will be true. The digit can also be 6 because 6 tens 8 ones is greater than 6 tens 4 ones."

Key Takeaway: Say, "Sometimes, there is more than 1 number that makes a comparison statement true."

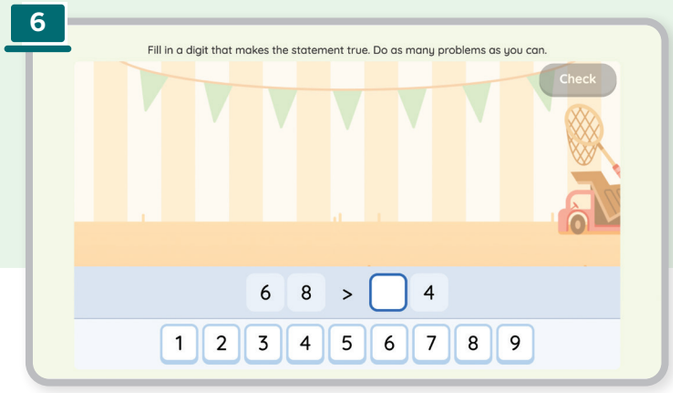
Students using digital

5



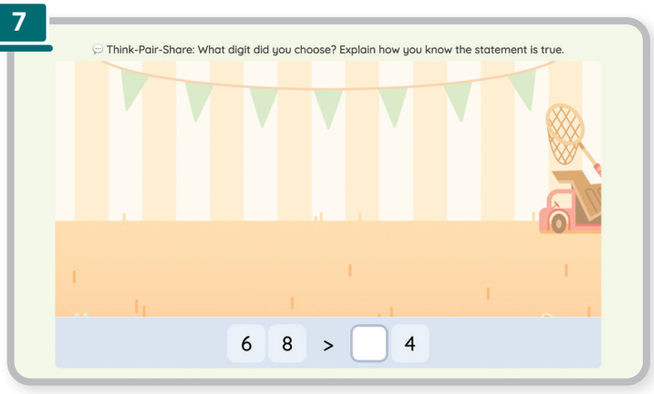
Students choose a number less than 4 to make the comparison statement true.

6



Students choose a number of tens or a number of ones to make comparison statements about 2 two-digit numbers true in a set of repeated challenges.

7



Students may explain that they chose a digit less than 6 because that would give the second number fewer tens. They may also explain that they chose 6 because the second number has fewer ones.

Students using print **will arrive at similar answers.**

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . 68 > _4	Provide support . . .
Almost there Explain that they chose a digit using a guess-and-check strategy.	68 > 94 68 > 14 At first I tried 9, then I realized that it didn't make sense. Then I tried 1, and that made sense.	**Support** Ask, "What do you know about the numbers in this problem?"
Explain that they chose a digit based on the symbol used and the magnitude of the numbers.	68 > 14 I know that 68 has to be the greater number. 14 is a teen number, and that is less than 68.	**Strengthen** Ask, "You thought about the size of the numbers. How could you use what you know about the numbers of tens and ones in these numbers to help you choose a digit?"
Explain that they chose a digit based on the symbol used by reasoning about the place value of the digits.	68 > 24 The greater than symbol is used, so I know that 68 has to be the greater number. 68 has 6 tens, so the missing digit has to be less than 6. I filled in 2 tens for the missing digit.	**Stretch** Ask, "Are there any other digits that would make this statement true? What is the greatest number that the missing digit could be? How do you know?"

Whole Class | 5 min | Suggested Pacing: Screen 8

Synthesis

Lesson Takeaway: Symbols and numbers can be used to make comparison statements true.

Students using print

8 **Display** 45 < 5_ and 45 < 3_.

Use the Think-Pair-Share routine. Ask:

- "Which of these could be a true statement?"
- "What digit would you choose? Why?"

Say (if not yet mentioned during discussion), "The top comparison statement will always be true because 4 tens is less than 5 tens. Any digit could be used in the ones place, and the statement will still be true."

Ask (if not yet mentioned during discussion), "What do you notice about the bottom comparison statement?"

Say (if not yet mentioned during discussion), "This statement cannot be true because 4 tens is greater than 3 tens. Any digit in the ones place will not change that."

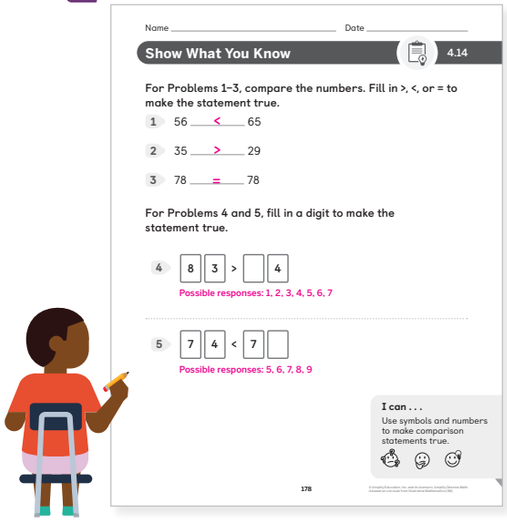
Say, "You can use what you know about symbols and the tens and ones in numbers to make comparison statements true. In Lesson 15, you will write your own comparison statements about 2 two-digit numbers."

Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know (Optional)

Independent | 5 min |

PDF Show What You Know PDF


Name _____ Date _____

Show What You Know 4.14

For Problems 1–3, compare the numbers. Fill in >, <, or = to make the statement true.

1 56 < 65

2 35 > 29

3 78 = 78

For Problems 4 and 5, fill in a digit to make the statement true.

4 8 3 > _ 4

Possible responses: 1, 2, 3, 4, 5, 6, 7

5 7 4 < 7 _

Possible responses: 5, 6, 7, 8, 9

I can . . .
Use symbols and numbers to make comparison statements true.

178

Today's Goals

1. **Goal:** Use the >, <, and = symbols to make true comparison statements.
   - In Problems 1–3 in the *Show What You Know*, students compared 2 two-digits numbers using the >, <, and = symbols.
   - In Problems 4 and 5 in the *Show What You Know*, students made inequality statements true by generating digits for two-digit numbers.
2. **Language Goal:** Justify the reasoning for choosing a digit that makes a comparison statement true. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

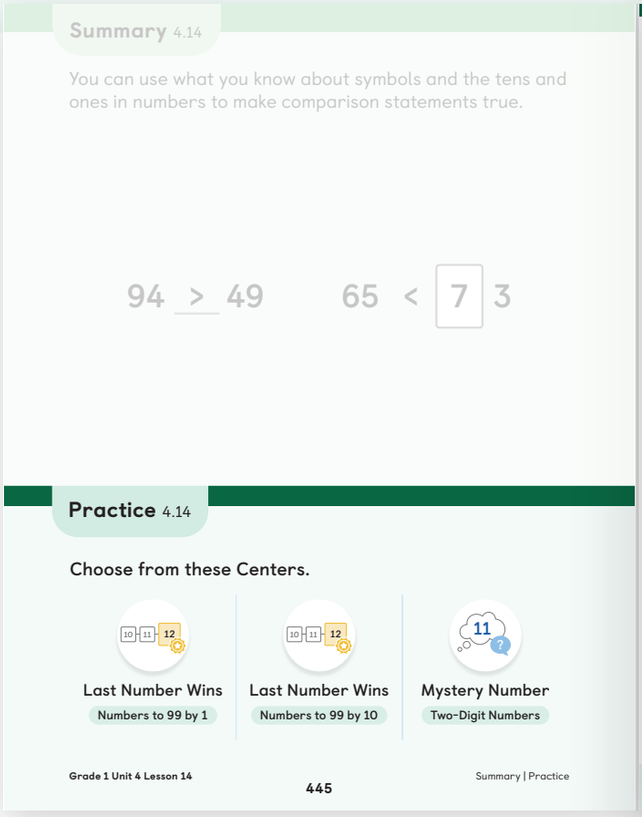
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.14

You can use what you know about symbols and the tens and ones in numbers to make comparison statements true.

94 > 49 65 < 7 3

Practice 4.14

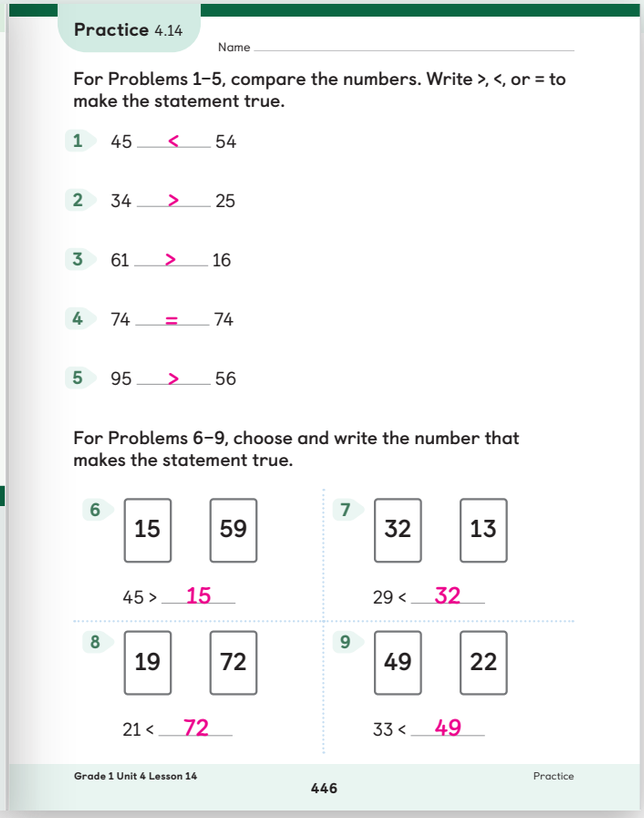
Choose from these Centers.

Last Number Wins — Numbers to 99 by 1

Last Number Wins — Numbers to 99 by 10

Mystery Number — Two-Digit Numbers

Grade 1 Unit 4 Lesson 14 445 Summary | Practice



Practice 4.14

Name _____

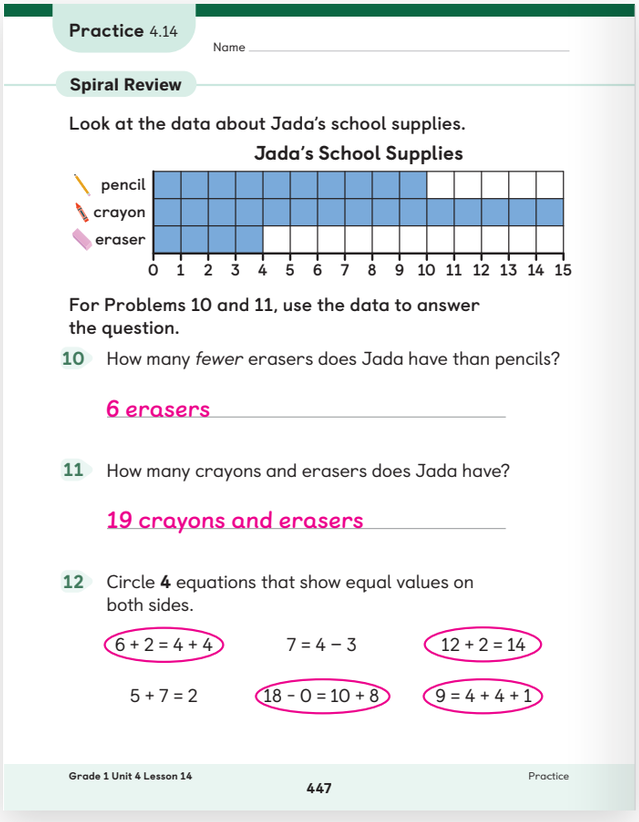
For Problems 1–5, compare the numbers. Write >, <, or = to make the statement true.

1. 45 < 54
2. 34 > 25
3. 61 > 16
4. 74 = 74
5. 95 > 56

For Problems 6–9, choose and write the number that makes the statement true.

6. 15 59 — 45 > 15
7. 32 13 — 29 < 32
8. 19 72 — 21 < 72
9. 49 22 — 33 < 49

Grade 1 Unit 4 Lesson 14 446 Practice



Practice 4.14

Name _____

Spiral Review

Look at the data about Jada's school supplies.

Jada's School Supplies

For Problems 10 and 11, use the data to answer the question.

10. How many *fewer* erasers does Jada have than pencils?

6 erasers

11. How many crayons and erasers does Jada have?

19 crayons and erasers

12. Circle **4** equations that show equal values on both sides.

6 + 2 = 4 + 4 (circled) 7 = 4 − 3 12 + 2 = 14 (circled)

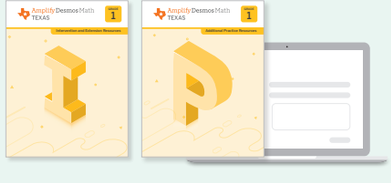
5 + 7 = 2 18 − 0 = 10 + 8 (circled) 9 = 4 + 4 + 1 (circled)

Grade 1 Unit 4 Lesson 14 447 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–5	1	1.2.G
	6–9	2	1.2.G
Spiral Review			
	10, 11	2	1.8.C
Fluency	12	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Last Number Wins

Numbers to 99 by 1

Pairs | 15 min | 1.5.A

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 1 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

Last Number Wins

Numbers to 99 by 10

Pairs | 15 min | 1.5.C

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 10 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Mystery Number

Two-Digit Numbers

Pairs | 15 min | Building On 1.2.B

Students use place value reasoning to guess two-digit numbers.

Materials

- two-color counters **(Manipulative Kit)**
- Directions, Reference Sheet, Gameboard (A or B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 3.

D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 14

Lesson Goal: Use the >, <, and = symbols to make true comparison statements.

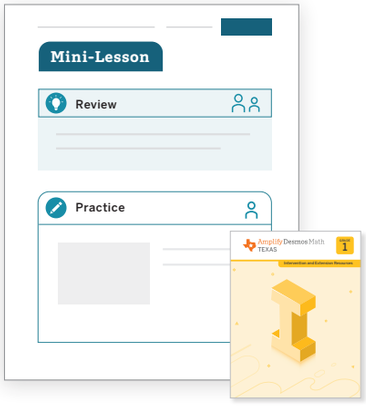
Support

Provide targeted intervention for students by using these resources.

If students use a symbol that does not make a true comparison statement:

Respond:

- Assign the *Using Comparison Symbols* Mini-Lesson. | 15 min
- Review Row 1 of the Activity 1 *Differentiation: Teacher Moves* table.



Strengthen

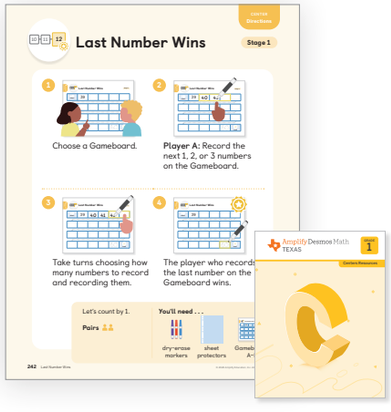
Reinforce students' understanding of the concepts assessed by using these resources.

If students use a symbol that makes a true comparison statement:

Respond:

- Invite students to play these **Centers**. | 15 min
  Last Number Wins:
  - *Numbers to 99 by 1*
  - *Numbers to 99 by 10*

  Mystery Number: Two-Digit Numbers
- Have students complete **Lesson 14 Practice**. | 15 min
- **Item Bank**



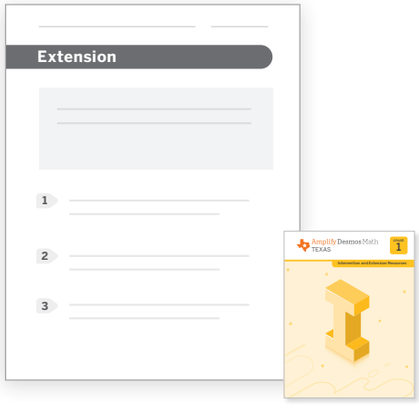
Stretch

Challenge students and extend their learning with these resources.

If students use a symbol that makes a true comparison statement and justify why the symbol makes the statement true:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

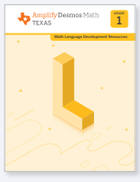


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., *equal/igual*
- Frayer Model templates
- Vocabulary routines



Professional Learning

What evidence have students given that they understand that place determines the values of the digits in two-digit numbers?

Unit 4
Lesson
15

Student Edition pages and Presentation Screens support learning in this lesson.

Steph's Friends

Writing Comparison Statements Using Symbols

Let's write comparison statements.

Key Concepts

Today's Goals

1. **Goal:** Compare 2 two-digit numbers and record 2 true comparison statements about the same numbers using the > and < symbols.
2. **Language Goal:** Justify if comparison statements about two-digit numbers are true or false. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students continue to explore strategies for comparing two-digit numbers. They write 2 comparison statements about the same numbers — 1 statement using the greater than symbol and 1 statement using the less than symbol. Students recognize that comparison statements can describe which number is greater or which number is less. Students then generate a number that is greater than a given number. **(TEKS 1.1.D)**

Prior Learning

In Lesson 14, students used two-digit numbers and symbols to make true comparison statements and noticed that more than 1 comparison statement can be made about the same 2 numbers.

Future Learning

In Lesson 16, students will use place value understanding to compare and order one- and two-digit numbers.

Integrating Rigor in Student Thinking

- Students deepen their **conceptual understanding** of strategies for comparing two-digit numbers and recording the comparisons with symbols.
- Students **apply** place value reasoning to compare two-digit numbers.

Vocabulary

Review Vocabulary

greater than

less than

TEKS

Addressing

1.2.G

Represent the comparison of two numbers to 100 using the symbols >, <, or =.

Also Addressing: **1.2.D, 1.2.E, 1.5.G**

Math Process Standards: 1.1.C, 1.1.D

ELPS: 1.E, 2.C, 2.D, 2.E, 2.F

Building On

K.2.F

Building Math Identity

I am a doer of math.
Why is it important for mathematicians to be clear when sharing their ideas?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance 60 min

TEKS: 1.1.C, 1.1.D, 1.2.D, 1.2.E, 1.2.G, 1.5.G

Warm-Up Fluency

Whole Class | 10 min

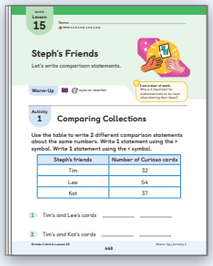
Students use the **Number Talk** routine, in which they look for structure and use repeated reasoning based on their own previous strategies or the strategies of others as they study a sequence of addition expressions. **(TEKS 1.1.C, 1.1.D)**

Activity 1

Pairs | 15 min

Students write 2 true comparison statements for pairs of two-digit numbers using the > and < symbols. They compare the 2 statements they wrote to recognize that the relationship between 2 numbers can be represented differently depending on the symbol used.

Manipulative Kit: connecting cubes (optional)

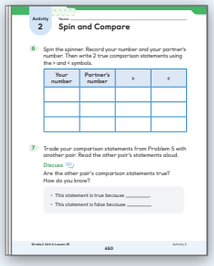


Activity 2

Pairs | 15 min

Students use a spinner to generate 2 numbers and then write 2 comparison statements about the numbers using the > and < symbols. They then read and evaluate other students' comparison statements to determine whether they are true or false and justify their thinking.

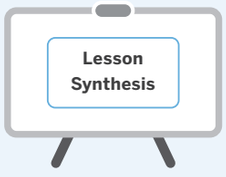
Manipulative Kit: connecting cubes (optional)
Materials: *Two-Digit Numbers Spinner PDF* (from Lesson 11), paper clips



Synthesis

Whole Class | 5 min

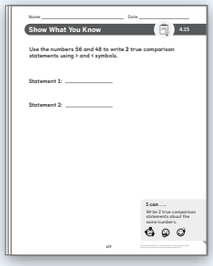
Students review and reflect on how to ensure that a comparison statement describes a true relationship between 2 numbers.



Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by writing 2 true comparison statements for pairs of two-digit numbers using the > and < symbols.



Center Choice Time

Pairs | 15 min

Students have an opportunity to revisit these Centers to practice counting by 1 and by 10 from any number and writing two-digit numbers.

- Last Number Wins
- Mystery Number

Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

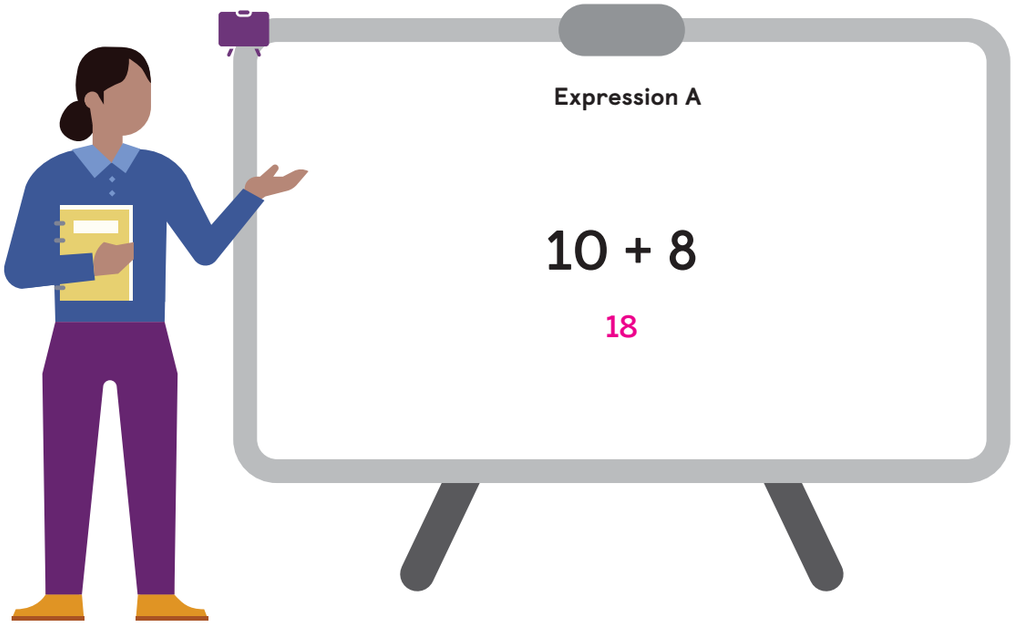
Whole Class | 10 min

Presentation Screen

Warm-Up Number Talk

Fluency

Purpose: Students add ones to multiples of 10 to make connections between addition and place value with tens and ones.



Expression B

20 + 8

28

Expression C

30 + 8

38

Expression D

40 + 8

48

Why these problems? These expressions lend themselves to making use of the base-ten structure of numbers to add ones to multiples of ten.

1 Launch

Use the Number Talk routine.

Display 1 expression at a time.

Say, "Take your time to find the value mentally. Give me a signal when you have an answer and can explain how you found it."

2 Connect

Record sums and 2 or 3 strategies as students share, honoring all strategies and keeping expressions and work displayed.

Repeat with each expression.

Ask, "What patterns do you notice when adding ones to a number of 10?"

Students might say . . . ELPS 2.C, 2.D, 2.E

A: *When I count on 8 from 10, I get 11, 12, 13, 14, 15, 16, 17, 18.*

B: *I know 10 + 8 is 18, so 20 + 8 must be 28.*

C: *I know 30 + 8 is 38 because 0 ones plus 8 ones is 8.*

D: *I know 40 + 8 is 48 because there aren't any ones in 40, so you can put the 8 ones in the ones place.*

Pairs | 15 min

Activity 1 Comparing Collections

Purpose: Students compare pairs of two-digit numbers and use the > and < symbols to write 2 true comparison statements about each pair of numbers, then generate a number that is greater than a given two-digit number.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

1 Launch

Say, "As Steph's friends learned more about Curioso cards, their interest grew, and soon they began collecting Curioso cards too! Eager to share their growing collections with each other, they planned a get-together and decided to compare the number of cards in their collections."

Read aloud the directions and Problems 1–4.

Provide access to connecting cube towers of 10 and single cubes.

A **Accessibility: Executive functioning** Vary the task demands by having students choose 2 of the 3 problems to compare before completing Problem 4. Have them complete the additional problem when they have more processing time.

2 Monitor

After students have completed **Problem 1**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How many Curioso cards does Tim have? How many does Lee have?"
- Ask, "How could you figure out who has a greater number of cards?"

3 Connect

Invite a pair to share 1 of the comparisons statements they wrote for Problem 1 using Row 3 of the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "How would you write a second comparison statement to compare these numbers?"

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share how they would determine how to write a second comparison statement, press for details in their reasoning. For example:

- If a student says, "Switch the order of the numbers." . . .
- Press for details by asking, "How would switching the order of the numbers help you write another comparison statement? What else is important to consider when writing a second comparison statement?"

EB **Emergent Bilinguals:** Support students' understanding of English language structures by modeling a sample comparison statement. ELPS 2.C

Record students' comparison statements and allow students to reach an agreement about which is correct.

Ask, "What is different about 32 < 54 and 54 > 32?"

Key Takeaway: Say, "You can write 2 comparison statements about the same numbers by writing 1 statement to describe which number is greater and 1 statement to describe which number is less."

Student Edition

Unit 4
Lesson
15

Name

TEKS: 1.1.D, 1.2.D, 1.2.E, 1.2.G

Steph's Friends

Let's write comparison statements.

Warm-Up eyes on teacher

I am a doer of math.
Why is it important for mathematicians to be clear when sharing their ideas?

Activity
1

Comparing Collections

Use the table to write 2 different comparison statements about the same numbers. Write 1 statement using the > symbol. Write 1 statement using the < symbol.

Steph's friends	Number of Curioso cards
Tim	32
Lee	54
Kat	37

1 Tim's and Lee's cards 54 > 32 32 < 54

2 Tim's and Kat's cards 32 < 37 37 > 32

Activity
1

Name

Comparing Collections (continued)

3 Lee's and Kat's cards 54 > 37 37 < 54

4 **Discuss**

Look at the 2 comparison statements you wrote for Problem 1. How are they the same? How are they different?

- They are the same because _____.
- They are different because _____.

Oral activity: No writing expected. Sample response shown.

They are the same because they compare the numbers 54 and 32. They are different because one is a "greater than" statement and one is a "less than" statement.

5 Tim went to the shop and bought some more Curioso cards. Now he has more cards than Kat. How many cards could Tim have? Sample response shown.

answer: 41

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Write 2 statements using the same symbol and reverse the order of the numbers.	54 > 32 and 32 > 54	**Support** Ask, "Which number is greater? Which one of your statements shows that?"
Almost there Write 2 statements using the numbers in the same order and reverse the symbol.	54 > 32 and 54 < 32	
Write 2 comparison statements that represent the relationship between the numbers using different symbols.	54 > 32 and 32 < 54	**Strengthen** Ask, "How do you know that your statements are true?"

Pairs | 15 min

Activity 2 Spin and Compare

Purpose: Students write 2 true comparison statements for pairs of numbers and then evaluate the statements written by another pair to determine if they are true or false.

Presentation Screens

Materials

Lesson Resources:

- Distribute the *Two-Digit Numbers Spinner* PDF (from Lesson 14) to each pair.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Distribute one paper clip to each pair.

Short on time? Consider having students write 2 sets of comparison statements instead of 3.

1 Launch

Say, "Each partner will spin a number. If you spin the same number, spin again so you have different numbers."

Read aloud Problems 5 and 6.

Provide access to connecting cube towers of 10 and single cubes.

A **Accessibility: Memory and attention** Check for understanding by inviting students to turn and talk to a partner about the directions. Have students restate the directions in their own words before beginning. Check that students understand they will spin a spinner, record their numbers, make comparison statements about their numbers, and then trade their statements with a different pair to review.

2 Monitor

After students have completed **Problem 6**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What is the meaning of the > symbol? What is the meaning of the < symbol?"
- Ask, "When writing a greater than statement, which number will you record first — the number that is greater or the number that is less?"

MLR **MLR8: Discussion Supports — Active Listening** ELPS 1.E, 2.F
Invite students to begin partner interactions by restating their partner's description, in their own words, before adding their own ideas to the discussion.

EB **Emergent Bilinguals:** If possible, pair students with different levels of English language proficiency together as they begin partner interactions. This will provide a structured opportunity for multilingual learners to interact with and receive feedback from their peers with varied language backgrounds. ELPS 1.E, 2.C, 2.D

3 Connect

Display 65 > 41 and 65 < 41.

Use the Think-Pair-Share routine. Ask, "Are these statements true? How do you know?"

Say (if not yet mentioned during discussion):

- "65 > 41 is a true statement because it says '65 is greater than 41.' This is true because 6 tens is greater than 4 tens."
- "65 < 41 is not a true statement because it says '65 is less than 41.' This is not true because 65 is the greater number."

Key Takeaway: Say, "To decide whether a comparison statement is true, you can notice which symbol is used and read the statement from left to right to see if it describes the relationship between the numbers."

Student Edition

Activity 2

Name

Spin and Compare

6 Spin the spinner. Record your number and your partner's number. Then write 2 true comparison statements using the > and < symbols. Sample response shown.

Your number	Partner's number	>	<
41	65	65 > 41	41 < 65
23	17	23 > 17	17 < 23
88	36	88 > 36	36 < 88

7 Trade your comparison statements from Problem 5 with another pair. Read the other pair's statements aloud.

Discuss

Are the other pair's comparison statements true? How do you know?

- This statement is true because _____.
- This statement is false because _____.

Oral activity: No writing expected.

Grade 1 Unit 4 Lesson 15 450 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

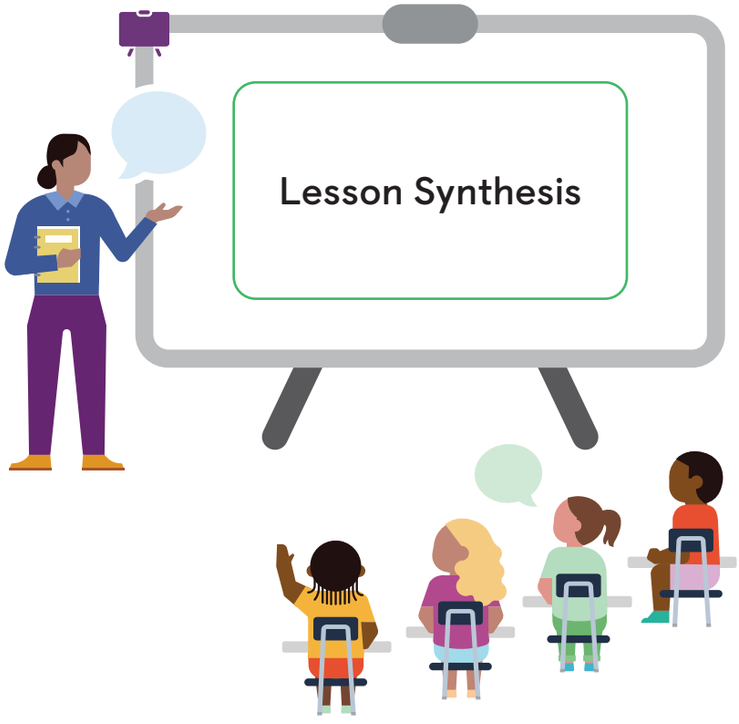
Look for students who . . .	For example . . .	Provide support . . .
Almost there Determine if the statements are true by noticing if both comparison symbols are used.	65 > 41 and 41 < 65 or 41 < 65 and 41 > 65 Both statements are true because one uses the greater than symbol and the other uses the less than symbol.	**Support** Point to each of the statements and ask, "Read this statement. Is it true or false? How do you know?"
Almost there Determine if the statements are true by noticing if the same numbers are used in both statements but in different orders.	41 < 65 and 41 > 65 Both cannot be true because the numbers are in the same order both times.	**Support** Ask, "How could you keep the numbers in the same order and write 2 true statements?"
Determine if the statements are true by noticing if both statements describe the relationship between the numbers.	65 > 41 and 41 < 65 The first statement is true because 65 is greater than 41. The second statement is true because 41 is less than 65.	**Stretch** Ask, "Is there another true statement you could write to compare the numbers? How do you know?"

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: 2 different comparison statements can represent the relationship between 2 numbers. It is important to attend to the symbols used and to read the statements to be sure both statements describe a true relationship between the numbers.



Say, "To write true comparison statements about 2 numbers, Steph likes to write the comparison symbol first and then figure out where the numbers go. Steph's friend Kat likes to write the numbers first and then figure out which symbol makes the statement true."

Use the Think-Pair-Share routine. Ask, "Which way do you prefer? Why?"

Say, "There are different ways to write statements to compare 2 numbers. It is important to make sure the symbol shows a true relationship between the numbers."

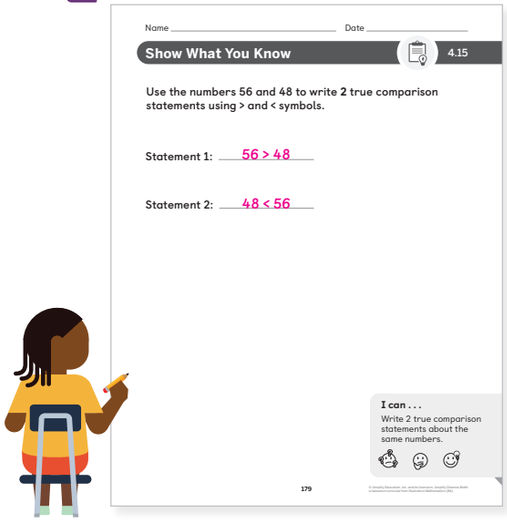
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.15

Use the numbers 56 and 48 to write 2 true comparison statements using > and < symbols.

Statement 1: 56 > 48

Statement 2: 48 < 56

I can . . .
Write 2 true comparison statements about the same numbers.

179

Today's Goals

1. **Goal:** Compare 2 two-digit numbers and record 2 true comparison statements about the same numbers using the > and < symbols.
   - In the *Show What You Know*, students recorded 2 true comparison statements about the same numbers using the > and < symbols.
2. **Language Goal:** Justify if comparison statements about two-digit numbers are true or false. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print

Summary 4.15

You can write 2 different true comparison statements to show the relationship between 2 numbers.

35 > 26 — 35 is greater than 26.

26 < 35 — 26 is less than 35.

Practice 4.15

Choose from these Centers.

- Last Number Wins — Numbers to 99 by 1
- Last Number Wins — Numbers to 99 by 10
- Mystery Number — Two-Digit Numbers

Practice 4.15

Name _____

For Problems 1–8, write **2** comparison statements using the given numbers and the > and < symbols.

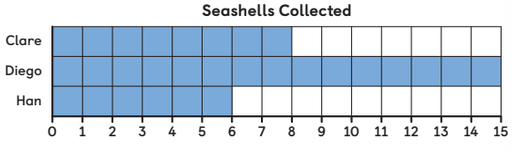
	Numbers		>	<
1	65	67	67 > 65	65 < 67
2	36	63	63 > 36	36 < 63
3	73	28	73 > 28	28 < 73
4	80	78	80 > 78	78 < 80
5	26	62	62 > 26	26 < 62
6	70	76	76 > 70	70 < 76
7	48	38	48 > 38	38 < 48
8	18	57	57 > 18	18 < 57

Practice 4.15

Name _____

Spiral Review

Look at the data that shows how many seashells each student collected.



For Problems 9 and 10, use the data to answer the question.

9 How many *more* seashells did Clare collect than Han?

answer: 2 seashells

10 How many *fewer* seashells did Clare collect than Diego?

answer: 7 seashells

11 Circle **4** equations that show equal values on both sides.

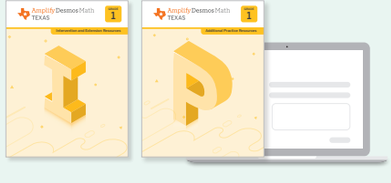
8 + 2 = 6 - 2 — 8 + 8 = 16 — 13 = 9 + 4

6 + 4 = 3 + 7 — 9 - 5 = 8 - 4 — 9 = 19 - 9

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–8	1	1.2.G
Spiral Review			
	9, 10	2	1.8.C
Fluency	11	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Presentation Screen

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Last Number Wins

Numbers to 99 by 1

Pairs | 15 min | 1.5.A

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 1 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.

Last Number Wins

Numbers to 99 by 10

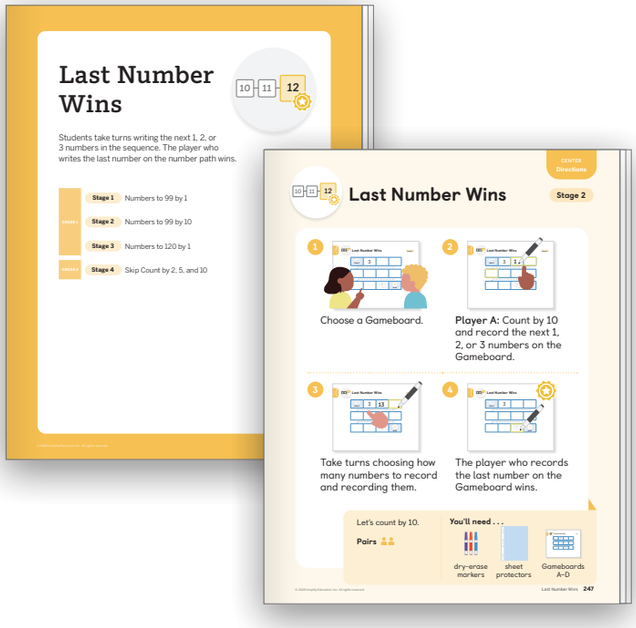
Pairs | 15 min | 1.5.C

Students take turns recording the next 1, 2, or 3 two-digit numbers in a sequence to practice counting by 10 and writing two-digit numbers.

Materials

- dry-erase markers (two different colors per pair), sheet protectors (one per pair) **(Classroom materials)**
- Directions, Gameboards (A–D) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Mystery Number

Two-Digit Numbers

Pairs | 15 min | Building On 1.2.B

Students use place value reasoning to guess two-digit numbers.

Materials

- two-color counters **(Manipulative Kit)**
- Directions, Reference Sheet, Gameboard (A or B) **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 3.

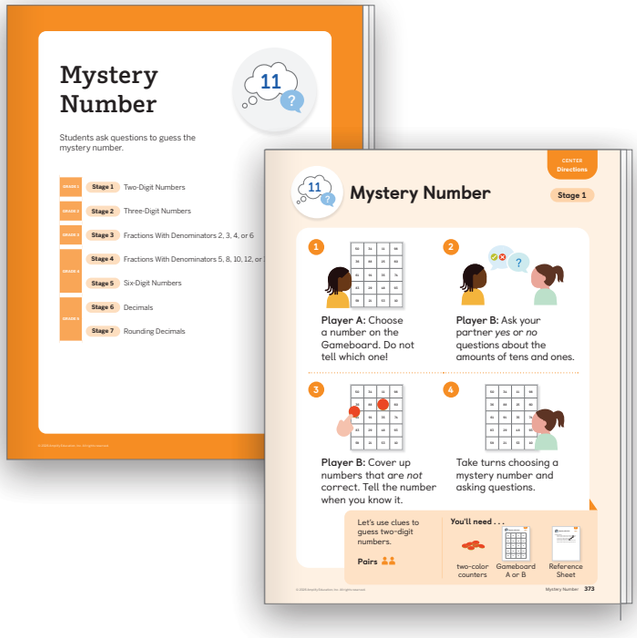
D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.



D Differentiation Use after Lesson 15

Lesson Goal: Compare 2 two-digit numbers and record 2 true comparison statements about the same numbers using the > and < symbols.

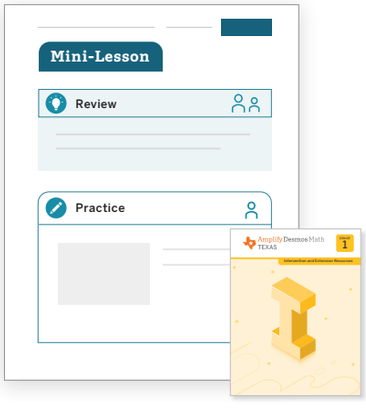
Support

Provide targeted intervention for students by using these resources.

If students write 2 statements using the numbers in the same order and reverse the symbol:

Respond:

- Assign the *Writing Two Different Comparison Statements About the Same Numbers* Mini-Lesson. | 15 min
- Review Row 2 of Activity 1 *Differentiation: Teacher Moves* table.



Strengthen

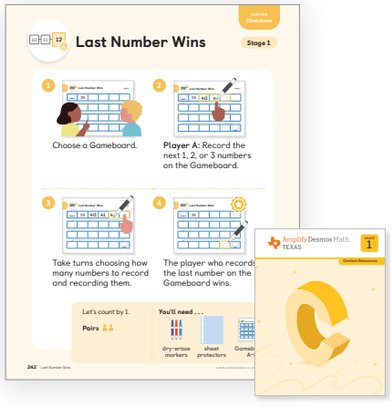
Reinforce students' understanding of the concepts assessed by using these resources.

If students write 2 true comparison statements using different symbols:

Respond:

- Invite students to play these **Centers**. | 15 min
  Last Number Wins:
  - *Numbers to 99 by 1*
  - *Numbers to 99 by 10*

  Mystery Number: Two-Digit Numbers
- Have students complete **Lesson 15 Practice**. | 15 min
- **Item Bank**



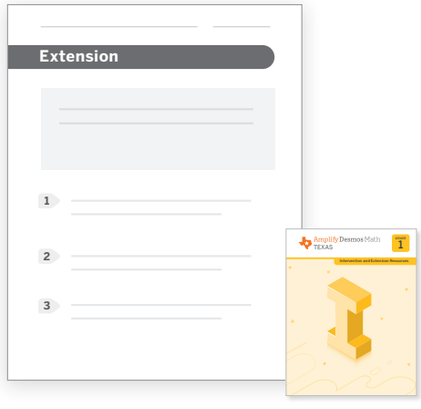
Stretch

Challenge students and extend their learning with these resources.

If students write 2 true comparison statements using different symbols and explain how they know they are both true:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

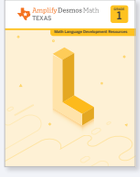


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines

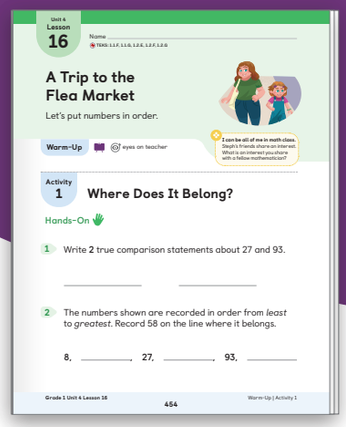


Professional Learning

When do your students feel successful in math? How do you know?

Unit 4
Lesson
16

Student Edition pages and Presentation Screens support learning in this lesson.



A Trip to the Flea Market

Comparing and Ordering One- and Two-Digit Numbers

Let's put numbers in order.

Key Concepts

Today's Goals

1. **Goal:** Compare two-digit numbers and record the comparisons using the > and < symbols.
2. **Goal:** Order one- and two-digit numbers from least to greatest and greatest to least.
3. **Language Goal:** Justify the placement of a one- or two-digit number in an ordered list. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students use place value understanding to compare and order one- and two-digit numbers from least to greatest and greatest to least. They notice that a number can be greater than 1 number while being less than another number. Students consider comparison statements that describe the relationships between numbers within an ordered list. **(TEKS 1.1.F, 1.1.G)**

Prior Learning

In Lesson 15, students wrote and evaluated comparison statements about 2 two-digit numbers.

Future Learning

In Unit 5, students will represent and interpret two-digit numbers with different amounts of tens and ones. In Grade 2, students will use place value understanding to compare 2 three-digit numbers using the >, <, and = symbols.

Integrating Rigor in Student Thinking

- Students extend their **conceptual understanding** of comparing one- and two-digit numbers to place numbers in an order based on their values.
- Students **apply** their understanding of the meanings of the digits to compare and order two-digit numbers.

Vocabulary

Review Vocabulary

greater than

less than

TEKS

Addressing

1.2.F

Order whole numbers up to 120 using place value and open number lines.

Also Addressing: **1.2.E, 1.2.G**

Math Process Standards: 1.1.F, 1.1.G

ELPS: 1.C, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 3.F

Building Toward

2.2.E

Building Math Identity

I can be all of me in math class.
Steph's friends share an interest. What is an interest you share with a fellow mathematician?

Invite students to reflect on this question as they complete this lesson.

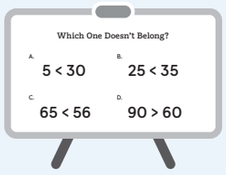
Lesson at a Glance 60 min

TEKS: 1.1.F, 1.1.G, 1.2.E, 1.2.F, 1.2.G

Warm-Up

Whole Class | 10 min

Students use the **Which One Doesn't Belong?** routine to interpret the > and < symbols and to use place value and comparison language. They should be encouraged to use precise language as they give their reasons for the one they chose. **(TEKS 1.1.F, 1.1.G)**



Activity 1

Pairs | 15 min

Students write comparison statements about 2 numbers and then place a new number in a sequence that includes the 2 numbers they compared. They recognize that a number can be less than 1 number and greater than another number.

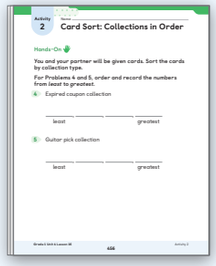
Manipulative Kit: connecting cubes (optional)
Materials: *Words to Compare* chart (from prior lessons), *Words to Describe Numbers* chart (from prior lessons)

Activity 2

Pairs | 15 min

Students order sets of cards containing 4 one- and two-digit numbers from least to greatest and greatest to least to apply their knowledge of comparing and explore strategies for ordering numbers.

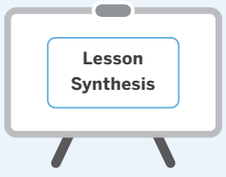
Manipulative Kit: connecting cubes (optional)
Materials: Activity 2 PDF
Additional Prep Cut out: Activity 2 PDF



Synthesis

Whole Class | 5 min

Students review and reflect on ordering numbers and the importance of attending to whether a list of numbers is in order from least to greatest or greatest to least.

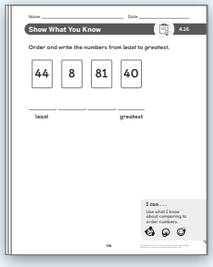


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by ordering 4 numbers from least to greatest.

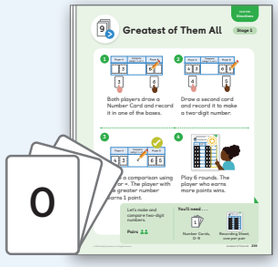
Materials: *Show What You Know* PDF



Center

Pairs | 15 min

Students are introduced to the Center, *Greatest of Them All, Two-digit Numbers*, in which they use place value understanding to create a number that is greater than their partner's number.



Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

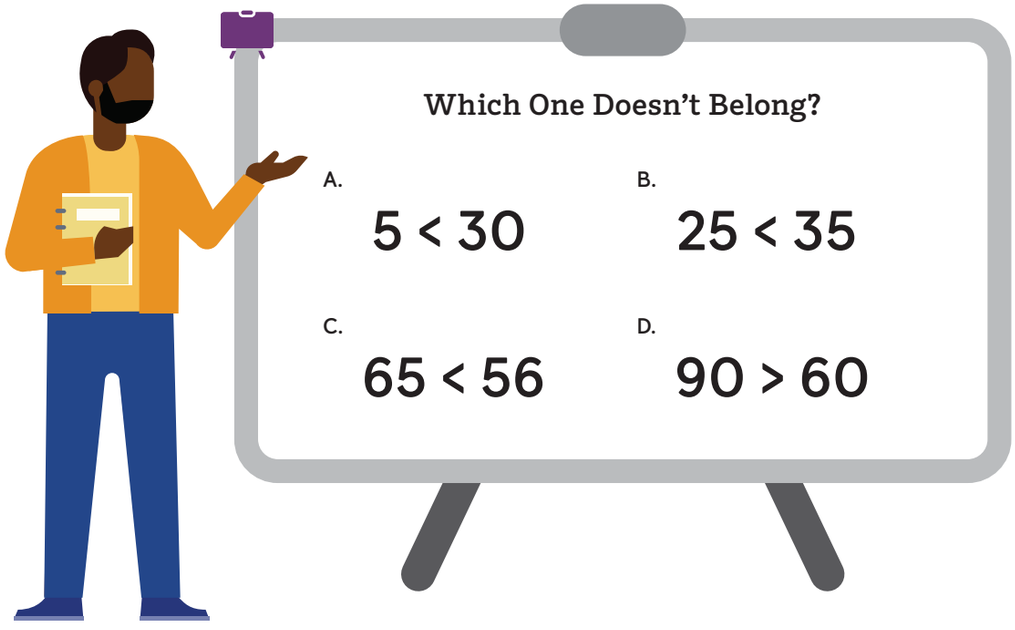
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Which One Doesn't Belong?

Purpose: Students analyze comparison statements involving one- and two-digit numbers to develop their precision with comparison language.



1 Launch

Display the 4 comparison statements.

Use the Which One Doesn't Belong? routine.

Say, "Choose one that doesn't belong. Be ready to share your reasoning."

2 Connect

Record students' responses as they share.

Ask, "How do you know Comparison statement C is false? What could you change to make it a true comparison statement?"

Students might say . . . ELPS 2.C, 2.D, 2.E

A: *It is the only statement with a one-digit number.*

B: *It is the only statement where both numbers have a 5 in the ones place.*

C: *It is the only statement that is false.*

D: *It is the only statement with a greater than symbol.*

Pairs | 15 min

Activity 1 Where Does It Belong?

Purpose: Students apply their understanding of comparing to write 2 true comparison statements about a pair of numbers and then place a new number in an ordered list that includes the 2 numbers they compared.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Classroom materials:

- Display the *Words to Compare* chart (from prior lessons) and the *Words to Describe Numbers* chart (from prior lessons).

1 Launch

Say:

- "You have compared 2 numbers. Today, you will think about how to compare more than 2 numbers."
- "When you are comparing more than 2 numbers, the word *least* describes the number that is less than all the other numbers, and the word *greatest* describes the number that is greater than all the other numbers." Record *greatest* and *least* on the *Words to Compare* chart.

Read aloud Problems 1–3.

Provide access to connecting cube towers of 10 and single cubes.

2 Monitor

After students have completed **Problem 3**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you know about the numbers 27 and 93?"
- Ask, "When writing a *greater than* statement, will you record the number that is greater or the number that is less first?"

EB **Emergent Bilinguals:** Encourage students to refer to and use the *Words to Compare* chart and the *Words to Describe Numbers* chart from previous lessons to review examples of *greater than* and *less than* statements. ELPS 3.F

3 Connect

Invite pairs to share their responses to Problem 3. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

MLR **MLR8: Discussion Supports — Active Listening** ELPS 1.E, 2.F

Encourage students to discuss how pairs determined the placement of 58 by restating another pair's idea in their own words, before adding their own ideas to the discussion.

Say (if not yet mentioned during discussion), "58 is placed between 27 and 93 because 58 is greater than 27, and 58 is less than 93."

Key Takeaway: Say, "To figure out where a number belongs in a list that is ordered from least to greatest or greatest to least, it is important to think about which numbers it is greater than and which numbers it is less than."

Student Edition

Unit 4
Lesson
16

Name

TEKS: 1.1.F, 1.1.G, 1.2.E, 1.2.F, 1.2.G

A Trip to the Flea Market

Let's put numbers in order.

I can be all of me in math class.
Steph's friends share an interest. What is an interest you share with a fellow mathematician?

Warm-Up eyes on teacher

Activity
1

Where Does It Belong?

Hands-On

1 Write **2** true comparison statements about 27 and 93.

27 < 93 93 > 27

2 The numbers shown are recorded in order from *least* to *greatest*. Record 58 on the line where it belongs.

8, _____, 27, 58, 93, _____

Activity
1

Name

Where Does It Belong? (continued)

3 Discuss

How did you decide where to record 58?

Oral activity: No writing expected. Sample response shown.

58 is greater than 27, so I know it belongs after 27. 58 is less than 93, so I know 58 belongs before 93.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Compare 58 to one of the listed numbers.	8, 58, 27, ____, 93, ____ 58 is greater than 8.	**Support** Ask, "Your work shows 58 is greater than 8. What does it show about the relationship between 58 and 27?"
Use counting or knowledge of the count sequence to determine where 58 belongs in the sequence.	8, ____, 27, 58, 93, ____ 27, 28, 29, . . . , 58 58 comes after 27 when counting.	**Strengthen** Ask, "How could you figure out where 58 belongs without counting?"
Use place value reasoning to compare 58 to the other listed numbers.	8, ____, 27, 58, 93, ____ 58 is greater than 27 and less than 93 because 5 tens is greater than 2 tens and less than 9 tens.	**Stretch** Ask, "What comparison statements could help explain why you placed 58 where you did?"

Pairs | 15 min

Activity 2 Card Sort: Collections in Order

Purpose: Students apply their knowledge of comparing to order sets of one- and two-digit numbers from least to greatest and greatest to least.

Presentation Screens

Materials

Lesson Resources:

- Distribute one set of pre-cut cards from the Activity 2 PDF to each pair.

Manipulative Kit:

- Provide students with access to connecting cubes (optional).

Short on time? Consider allowing students to choose 3 of the 4 sets of cards to order.

1 Launch

Say:

- "Steph's mom took her and her friends on a trip to the flea market. As they walked around, Steph pointed out stalls where groups of collectors were gathered. Steph explained that collectors gather to share new additions to their collections and sometimes compare how many they have in their collections."
- "You will look at some of the collections that Steph and her friends noticed at the market."

Display the set of cards labeled *Expired coupon collection*.

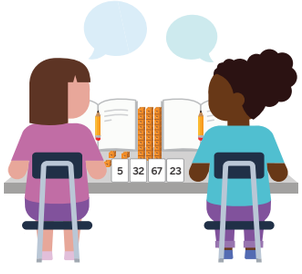
Say, "You and your partner will receive sets of cards labeled with the collection types. This set is labeled *Expired coupon collection*. Each of these cards represents the number of coupons a coupon collector has."

Read aloud the directions for Problems 4–7.

Provide access to connecting cube towers of 10 and single cubes.

A **Accessibility: Executive functioning** Vary the task demands by having students focus on completing Problems 4 and 6, and only complete Problems 5 and 7 when they have more processing time.

2 Monitor



After students have completed **Problem 4**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "In your own words, what do you need to do?"
- Ask, "How could you use what you know about comparing 2 numbers to help you order more than 2 numbers?"

3 Connect

MLR This Connect is structured using the *MLR7: Compare and Connect* routine.
ELPS 1.E, 2.B, 2.D, 2.E

Invite students to share their responses to Problem 4. Select and sequence their responses in the order shown in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "How are these strategies alike?"
- "How are these strategies different?"

Key Takeaway: Say, "There is more than 1 strategy for comparing and ordering one- and two-digit numbers."

Student Edition

Activity 2

Name _____

Card Sort: Collections in Order

Hands-On

You and your partner will be given cards. Sort the cards by collection type.

For Problems 4 and 5, order and record the numbers from *least* to *greatest*.

4 Expired coupon collection

5, 23, 32, 67
least, greatest

5 Guitar pick collection

21, 44, 48, 70
least, greatest

Activity 2

Name _____

Card Sort: Collections in Order (continued)

For Problems 6 and 7, order and record the numbers from *greatest* to *least*.

6 Snow globe collection

29, 24, 21, 2
greatest, least

7 Curioso card collection

85, 82, 63, 36
greatest, least

Presentation Screens

D Differentiation | Teacher Moves

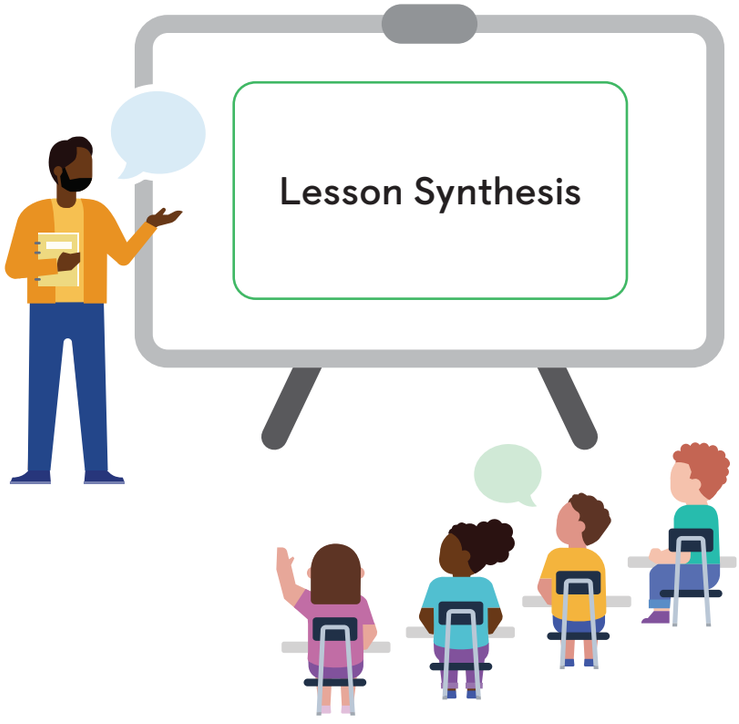
Look for students who . . .	For example . . .	Provide support . . .
Order the numbers by counting on or using knowledge of the count sequence.	*I counted on from 5 and stopped when I got to one of the numbers. I wrote that number on the line and then kept counting to find the next number.*	**Strengthen** Ask, "How could you use what you know about tens and ones to prove that these numbers are in order from least to greatest?"
Order the numbers by comparing 2 numbers at a time.	*First, I compared 32 and 5 and recorded 5 then 32. Then I compared 32 and 23 and realized 23 needs to go before 32 because it is less.*	**Strengthen** Ask, "How could you use what you know about the digits in the tens and ones places to compare more than 2 numbers at a time?"
Order the numbers by comparing more than 2 numbers at a time.	*I compared the tens place in each number and put them in order from fewest tens to most tens. When the number of tens was the same, I compared the ones.*	**Stretch** Say, "Combine this set with another set and choose how to order the larger set of cards."

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: Three or more numbers can be placed in order from greatest to least or least to greatest using different strategies. In an ordered list, a number can be described in terms of other numbers that are less or greater than the given number.



Say, "These cards are from Prashant's Curioso collection. He sorted them by character, just like Steph did, and put the stacks in order from greatest to least. He put a sticky note on each stack so he would remember how many there were, but 2 sticky notes fell off!"

Ask, "Prashant thinks 65 belongs between 83 and 67 because 65 comes before 67. Do you agree or disagree with Prashant? Why?"

Say, "You can use what you know about comparing to put numbers in order. It is important to pay attention to notice if a set of numbers is ordered from least to greatest or greatest to least to figure out where numbers belong."

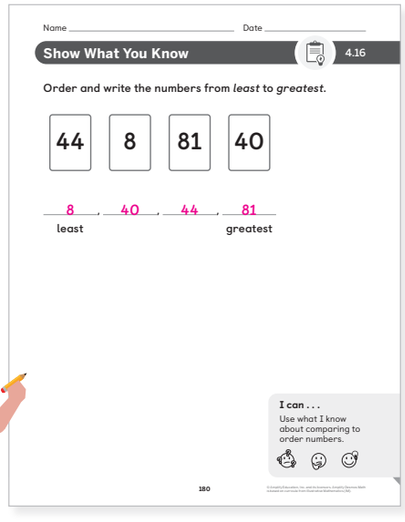
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.16

Order and write the numbers from *least* to *greatest*.

44 8 81 40

8 , 40 , 44 , 81

least greatest

I can . . .
Use what I know about comparing to order numbers.

180

Today's Goals

1. **Goal:** Compare two-digit numbers and record the comparisons using the > and < symbols.
2. **Goal:** Order one- and two-digit numbers from least to greatest and greatest to least.
   - In the *Show What You Know*, students ordered 4 numbers from least to greatest.
3. **Language Goal:** Justify the placement of a one- or two-digit number in an ordered list. **(Listening and Speaking)**
   ELPS 1.E, 2.E, 2.F

D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print

Summary 4.16

To place a number in an ordered list, you can think about which number it is greater than and which number it is less than.

6, ____, 34, 36, 50, 87

36 belongs between 34 and 50 because 36 is *greater than* 34 and *less than* 50.

Practice 4.16

You'll play this Center.

Greatest of Them All Two-Digit Numbers

Let's make and compare two-digit numbers.

Practice 4.16

Name _____

For Problems 1 and 2, order and record the numbers from *least* to *greatest*.

1. 32, 68, 45, 8

8 (least), 32, 45, 68 (greatest)

2. 45, 54, 24, 52

24 (least), 45, 52, 54 (greatest)

For Problems 3 and 4, order and record the numbers from *greatest* to *least*.

3. 53, 31, 15, 35

53 (greatest), 35, 31, 15 (least)

4. 9, 86, 68, 98

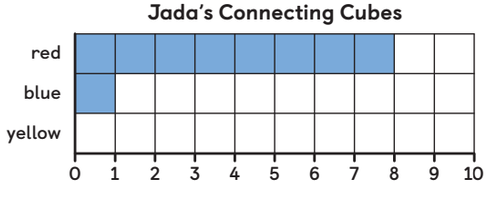
98 (greatest), 86, 68, 9 (least)

Practice 4.16

Name _____

Spiral Review

Look at the data that shows Jada's connecting cube collection.



For Problems 5 and 6, use the data to answer the question.

5. If Jada has 19 connecting cubes, how many yellow cubes does she have?

10 yellow cubes

6. How many *more* red cubes does Jada have than blue cubes?

7 red cubes

7. Circle **4** equations that show equal values on both sides.

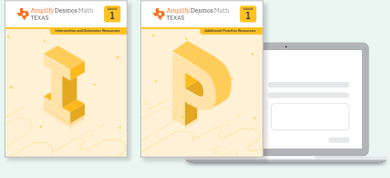
7 + 8 = 15 (circled) | 10 − 6 = 9 − 5 (circled) | 6 + 3 = 5 − 2

7 − 1 = 10 − 2 | 13 = 6 + 7 (circled) | 11 − 0 = 5 + 6 (circled)

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	1.2.F
Spiral Review			
	5, 6	2	1.8.C
Fluency	7	1	1.3.D

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Pairs | 15 min

Introducing the Center
Greatest of Them All, Two-Digit Numbers

Purpose: Students create the greatest two-digit number possible to apply place value understanding when comparing numbers.

Presentation Screen

Materials

Manipulative Kit:

- Distribute one set of number cards (0–9) to each pair of students.

Centers Resources:

- Display the Directions and Recording Sheet during the Launch.
- Distribute one Recording Sheet to each pair.

1 Launch

Display the Center materials, Directions, and Recording Sheet.

Demonstrate how to play the Center, *Greatest of Them All, Two-Digit Numbers* with a student as a partner. Monitor to ensure students are able to follow directions with accuracy. ELPS 1.C

- **Say**, "You will play *Greatest of Them All* today."
- **Say**, "First, my partner and I will each flip over a number card and record it in one of our blank boxes. The goal is to make a number greater than my partner's number."
- **Use the Think-Pair-Share routine.** Ask, "What place should we each record our digit in — the tens place or the ones place? Why?" Record the digit and have the student partner do the same.
- **Say**, "Then we will each flip over a second card and record it in our remaining box."
- **Ask**, "Next, my partner and I will discuss which symbol makes a true comparison statement. What symbol should we record here?" Record the symbol.
- **Say**, "The player with the greater number earns 1 point, and the player with more points after 6 rounds wins."

2 Monitor

Observe how students are applying place value understanding when creating their two-digit numbers and explaining which comparison symbol makes each statement true.

3 Connect

Display a Recording Sheet with the number 6 recorded in the tens place for Player A and Number card 5.

Ask, "Imagine you are Player B. Where would you record the digit 5? Why?"

Invite students to share their reasoning for why they would record the digit in the ones place or the tens place.

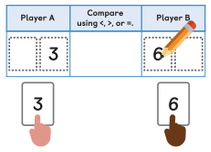
Key Takeaway: Say, "When trying to create the greater two-digit number, it is important to consider if you want a digit to represent the number of tens or the number of ones."

CENTER Directions

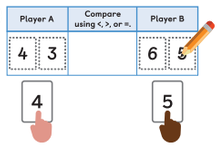
Greatest of Them All

Stage 1

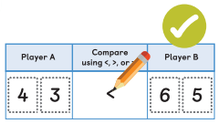
1 Both players draw a Number Card and record it in one of the boxes.



2 Draw a second card and record it to make a two-digit number.



3 Write a comparison using <, >, or =. The player with the greater number earns 1 point.



4 Play 6 rounds. The player who earns more points wins.

Let's make and compare two-digit numbers.

Pairs

You'll need . . .

Number Cards, 0–9

Recording Sheet, one per pair

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Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Record the digits in the order in which they are flipped over.	*I flipped over a 3 first and then a 7, so my number is 37.* *I flipped over an 8 first and then a 2, so my number is 82.*	**Support** Ask, "How could you use what you know about the meanings of digits in the tens place and ones place to decide where to place your first card?"
Use place value reasoning to determine the placement of the digits.	*I flipped over a 3 first and put it in the ones place because it is a small number. Then I flipped over a 7 and put it in the tens place.* *I flipped over an 8 first and put it in the tens place because it is a big number. Then I flipped over a 2 and put it in the ones place.*	**Stretch** Ask, "If you continue using this strategy, are there any numbers that would be tricky to decide where to place? Why or why not?"
Use place value reasoning and their partner's choice of digit placement to determine the placement of the digits.	*I flipped over a 7, and my partner flipped over an 8. My partner put the 8 in the tens place, so I put the 7 in the ones place because I know any number with 7 tens is less than a number with 8 tens.*	**Stretch** Ask, "Will this strategy work every time? Why or why not?"

Differentiation Use after Lesson 16

Lesson Goal: Order one- and two-digit numbers from least to greatest and greatest to least.

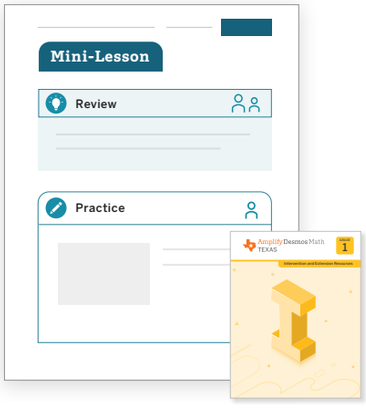
Support

Provide targeted intervention for students by using these resources.

If students order the numbers in a different order:

Respond:

- Assign the *Comparing and Ordering One-and Two-Digit Numbers* Mini-Lesson. | 15 min
- Review Row 1 of Activity 1 *Differentiation: Teacher Moves* table.



Strengthen

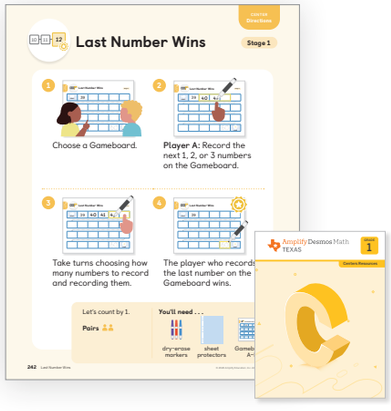
Reinforce students' understanding of the concepts assessed by using these resources.

If students order the numbers by counting on or using knowledge of the count sequence:

Respond:

- Invite students to play these **Centers**. | 15 min
  Last Number Wins:
  - *Numbers to 99 by 1*
  - *Numbers to 99 by 10*

  Mystery Number: Two-Digit Numbers
- Have students complete **Lesson 16 Practice**. | 15 min
- **Item Bank**



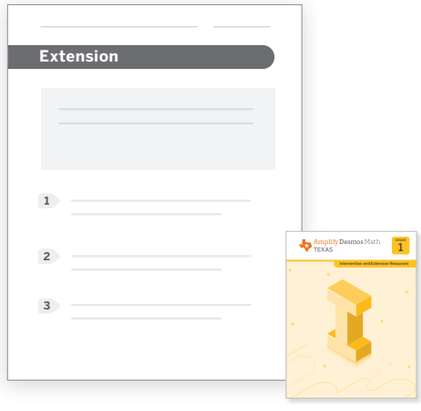
Stretch

Challenge students and extend their learning with these resources.

If students order the numbers by using place value reasoning to compare them:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



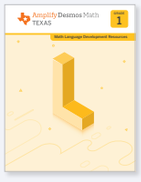
Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.

• Boost Personalized Learning • Fluency Practice • Math Adventures

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines



Professional Learning

If you were to teach this lesson again, which activity would you do differently? How would this change support students' learning?

Notes:

Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Quiz: Sub-Unit 3

Independent | 20 min

Facilitation: Assign this Sub-Unit Quiz at the end of Sub-Unit 3 to evaluate students' proficiency with the key concepts and skills addressed in this sub-unit. Read aloud the problems to students as needed.

TEKS
(S) = Supporting standard
(R) = Readiness standard

Item Analysis

Problem(s)	Concept or skill	DOK	TEKS
1	Comparing two-digit numbers	1	1.2.E 1.1.F
2–5	Recording comparisons of 2 two-digit numbers using the >, <, and = symbols	2	1.2.G, 1.5.E 1.1.D, 1.1.F
6	Ordering two-digit numbers	2	1.2.F 1.1.F

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources

Intervention and Extension Resources includes:
- Mini-Lessons • Extensions

Centers Resources includes:
- Centers

Practice

During Sub-Unit 4, if students need further review or practice with concepts or skills, consider the following resources:

- Lesson Practice (Print and Digital)
- Item Bank (Digital)

Assessment Resource PDF

Name _____ Date _____

Quiz: Sub-Unit 3

Unit 1.4

1 Circle the number that is LESS.

(19) 53

For Problems 2–5, write >, <, or = to make the statement true.

2 19 __<__ 91

3 26 __=__ 26

4 43 __>__ 38

5 37 __>__ 33

For Problem 6, order and write the numbers from LEAST to GREATEST.

6 [35] [8] [71] [24]

__8__, __24__, __35__, __71__

least greatest

151

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D Differentiation (Quiz: Sub-Unit 3)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Sub-Unit.

Sub-Unit Goal	Problem(s)	Respond to Student Thinking
Sub-Unit 3: Use place value understanding to compare 2 two-digit numbers, and record comparisons using the >, <, and = symbols.	1	**Support** • **Mini-Lesson:** *Making Comparison Statements About Two-Digit Numbers* (ML 4.12) • **Center:** *Mystery Number, Two-digit Numbers*
	2–5	**Support** • **Mini-Lesson:** *Using Comparison Symbols* (ML 4.14) • **Teacher Move:** Consider revisiting Lesson 17, Activity 1. Provide another opportunity for students to share the process they used when comparing two-digit numbers.
	6	**Support** • **Mini-Lesson:** *Comparing and Ordering One- and Two-Digit Numbers* (ML 4.16) • **Center:** *Greatest of Them All, Two-digit Numbers*

Notes:

Sub-Unit 4

Income, Spending, and Saving

Sub-Unit 4 Goals

- Recognize money is earned income that can be saved or spent.
- Understand the meaning of charitable giving and how it impacts the community.

Progression of TEKS in Sub-Unit 4

- **Lesson 17:** Recognize money as earned income to obtain goods and services.
- **Lessons 18–19:** Identify income as a means of spending, saving, and charitable giving.

Sub-Unit 4 Progression	Lesson 17	Lesson 18	Lesson 19
Numbers and Operations			
TEKS 1.3.D	●	○	○
Algebraic Reasoning			
TEKS 1.5.A	○	○	●
Personal Financial Literacy			
TEKS 1.9.A	●	○	○
TEKS 1.9.B	●	○	●
TEKS 1.9.C	○	●	●
TEKS 1.9.D	○	○	●

Math That Matters Most

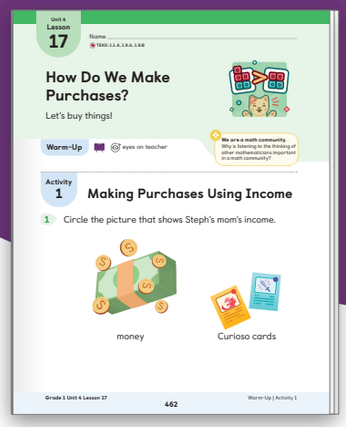
Sub-Unit 4: Identify income and as a means for spending and saving money, while also considering charitable giving.

Progression of Strategies, Skills, or Language

Progression	For example . . .		
Identifying money as income.	Income money	Curioso cards	
Identifying income as a way to purchase a good or service.	Steph's mom can hire someone to mow the lawn. (service)	Stephs' mom needs a winter jacket to keep herself warm during the winter. (good)	
Distinguishing between spending and saving money.	Steph's mom bought a snack while shopping. (spending)	Steph put 5 dollars her aunt gave her in the bank. (saving)	
Recognizing charitable giving as an option for spending or saving money.	Donate money so people can buy what they need.	Donate groceries so hungry families have food to eat.	Donate clothes so people have clean clothes to wear.

Unit 4
Lesson
17

Student Edition pages and Presentation Screens support learning in this lesson.



How Do We Make Purchases?

Income as a Means of Obtaining Goods and Services

Let's buy things!

Key Concepts

- **Today's Goals**
  1. **Goal:** Recognize money earned as income.
  2. **Language Goal:** Explain that income can be used to buy goods and services. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E
  3. **Language Goal:** Explain what someone should do when there is not enough money to buy wants and needs at once. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students apply their prior understanding of income, make connections between having an income and making purchases using the income, and recognize income as a means to buy things. They build their understanding of **goods** and **services** and continue to develop their understanding that every purchase is either a good or service. Students then explain whether a purchase can be made using income and what someone should do when there is not enough money to buy everything at once. **(TEKS 1.1.A)**

Prior Learning

In Kindergarten, students learned that having an income is a way to meet wants and needs, and that there are different ways to earn income.

Future Learning

In Lesson 18, students will learn to distinguish between spending and saving money.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of income as a means to purchase goods and services and that making choices between wants and needs is sometimes required.

Vocabulary

New Vocabulary

goods

services

Review Vocabulary

income

needs

wants

TEKS

Addressing

1.9.B

Identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs.

Also Addressing: **1.3.D, 1.9.A**

Math Process Standards: 1.1.A, 1.1.C, 1.1.D

ELPS: 1.B, 1.C, 1.D, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 3.D

Building On	Building Toward
K.9.A	**2.4.A**
K.9.B	

Building Math Identity

We are a math community.
Why is listening to the thinking of other mathematicians important in a math community?

Invite students to reflect on this question as they complete this lesson.

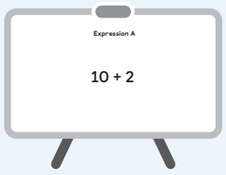
Lesson at a Glance 60 min

TEKS: 1.1.A, 1.1.C, 1.1.D, 1.3.D, 1.9.A, 1.9.B

Warm-Up Fluency

Whole Class | 10 min

Students use the **Number Talk** routine, in which they look for structure and use repeated reasoning as they study a sequence of addition expressions to make connections between addition and counting on by 2. **(TEKS 1.1.C, 1.1.D)**

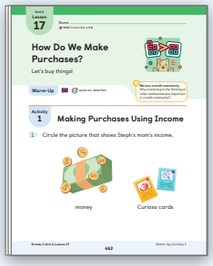


Activity 1

Pairs | 15 min

Students recognize money earned as income, which is a means to purchase **goods** and **services** they want and need. They explain whether an expensive purchase in the given scenario can be made using income.

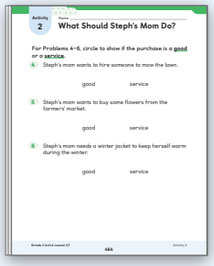
Materials: *All About Money!* chart (teacher made), chart paper, markers
Additional Prep Prepare: *All About Money!* chart



Activity 2

Pairs | 15 min

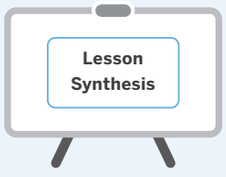
Students decide whether a given scenario is an example of purchasing a good or a service. Then they explain what a person should do when there is not enough money to buy all of their needs and wants.



Synthesis

Whole Class | 5 min

Students review and reflect on the idea that income is money earned and that having an income is a way to buy goods and services.

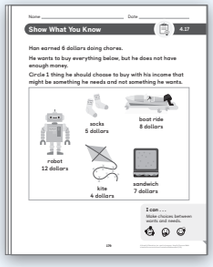


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by choosing a need over wants.

Materials: *Show What You Know* PDF



Center Choice Time

Pairs | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice counting and describing quantities using comparative language.

- Cover Up
- Greatest of Them All

Math Language Development

Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

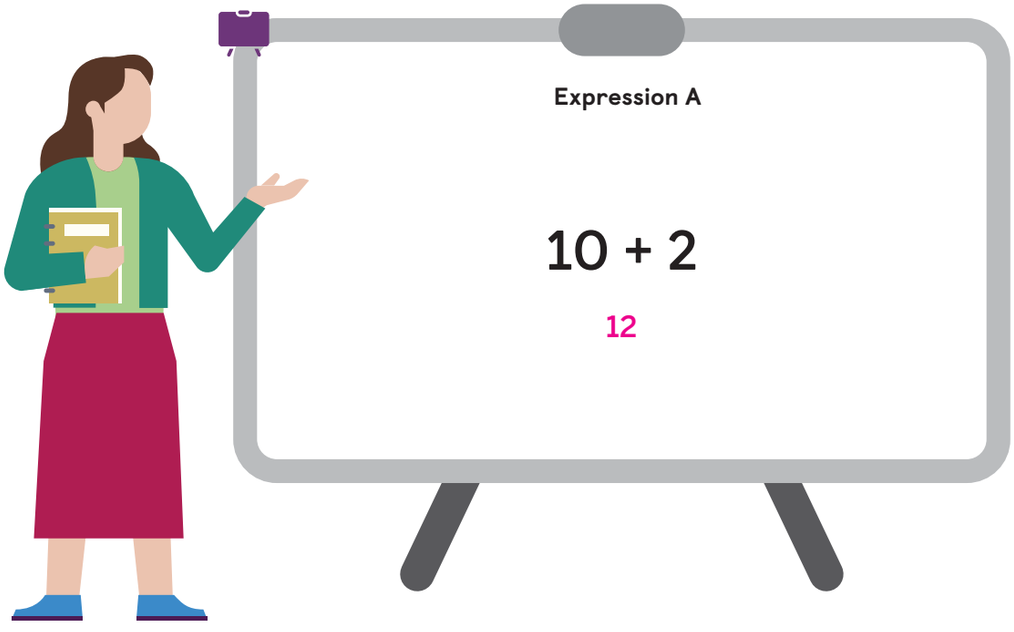
Whole Class | 10 min

Presentation Screens

Warm-Up Number Talk

Fluency

Purpose: Students add 2 to a number that is the sum of the previous expression to make connections between addition and counting on by 2.



Expression B

12 + 2

14

Expression C

14 + 2

16

Expression D

16 + 2

18

Why these problems? These expressions lend themselves to counting by 2.

1 Launch

Use the Number Talk routine.

Display 1 expression at a time.

Say, "Take your time to find the value mentally. Give me a signal when you have an answer and can explain how you found it."

2 Connect

Record sums and 2 or 3 strategies as students share, honoring all strategies and keeping expressions and work displayed.

Repeat with each expression, spending the most time discussing what they notice as they transition from Expression C to D.

Ask, "How is adding 2 like counting by 2?"

Students might say . . . ELPS 2.C, 2.D, 2.E

A: I know 2 more than 10 is 2.

B: I know 2 + 2 = 4 and 10 + 4 makes 14.

C: I know 1 more than 14 is 15 and then I added 1 more to 15 to get 16.

D: I know I can count by 2 as 2 is added to 16 to get 18.

Pairs | 15 min

Activity 1 Making Purchases Using Income

Purpose: Students recognize money earned as income and discuss how having an income is a way to purchase goods and services that are wanted and needed.

Presentation Screens

Materials

Classroom materials:

- Use chart paper and markers to prepare the *All About Money!* chart before the activity. Record the terms *goods* and *services*, and the definitions, on the chart during the Connect.

1 Launch

Display page 1 of the Unit Story, *The Collectors*.

Say, "Steph's mom wanted to buy Curioso cards for Steph at the Briarcliff Flea Market. She needs money to buy the cards."

Use the Think-Pair-Share routine. Ask:

- "How do people get money?"
- "What do people use their money for?"

Say, "Money that is earned, by working at a job, such as at the grocery store, or doing chores, is called *income*. Income can be used to buy wants and needs. *Needs* are the things people need to survive. A *want* is something that is nice to have but not needed to survive."

A **Accessibility: Memory and attention** Activate prior knowledge by having students recall the term *income* learned in Kindergarten.

Read aloud Problems 1–3.

2 Monitor

After students have completed **Problem 3**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you need to do?"
- Ask, "What are the 2 pictures shown?"

3 Connect

MLR **MLR7: Compare and Connect** ELPS 1.B, 1.E, 2.B, 2.D, 2.E

Invite students to share their responses for Problem 2.

Use the Think-Pair-Share routine. Ask, "In Problem 2, you drew something Steph's mom could purchase. How are what Steph's mom purchased and the concert ticket that Steph wants alike? How are they different?"

Say, "Everything you buy is either a good or service. **Goods** are things that can be used or eaten. **Services** are things that are done for you. For example, a singer sings for the audience, a doctor provides a service to keep people healthy, and a pilot flies a plane."

Note: If a student's response for Problem 2 is a service, share it as an example.

Record the terms *goods* and *services*, along with the definitions, on the *All About Money!* chart.

Use the Think-Pair-Share routine. Ask, "Why might Steph's mom not be able to buy the concert ticket for Steph?"

Key Takeaway: Say, "Earning an income is a way for you to buy goods and services you want and need, but sometimes you have to make choices between wants and needs if you do not have enough money to buy everything."

Student Edition

Unit 4
Lesson
17

Name

TEKS: 1.1.A, 1.9.A, 1.9.B

How Do We Make Purchases?

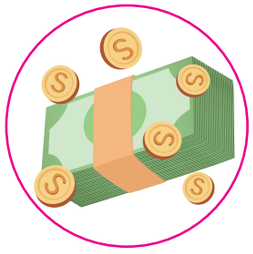
Let's buy things!

Warm-Up eyes on teacher

We are a math community. Why is listening to the thinking of other mathematicians important in a math community?

Activity 1 Making Purchases Using Income

1 Circle the picture that shows Steph's mom's income.



money

Curioso cards

Activity 1

Name

Making Purchases Using Income (continued)

2 Draw a need or a want that Steph's mom could purchase with her income. Sample response shown.

Draw

3 Discuss Oral activity: No writing expected.

Steph wants her mom to use her income to pay for an expensive concert ticket. Could Steph's mom use her income for this? Why or why not?

- Steph's mom could use her income because _____.
- Steph's mom could not use her income because _____.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Explain that Steph's mom could or could not buy the ticket for reasons unrelated to income.	*Steph's mom can't use her income because she doesn't want Steph to go to the concert.*	**Support** Ask, "If Steph's mom wants Steph to go to the concert, is there another reason her mom could or could not use her income to buy the ticket?"
Explain that Steph's mom earns enough income to buy the ticket.	*Steph's mom could use her income because she earns enough money to buy the ticket.*	**Strengthen** Ask, "If Steph must choose between buying the ticket and paying to see the dentist for a toothache, which one should she choose? Why?"
Explain that Steph's mom will not have enough money as she has to prioritize needs over wants to buy the ticket.	*Steph's mom could not use her income because she will not have enough money after buying things or food her family needs.*	**Stretch** Ask, "What could Steph do if she still wants to buy the concert ticket?"

Pairs | 15 min

Presentation Screens

Activity 2 What Should Steph's Mom Do?

Purpose: Students determine whether a purchase is a good or a service and recognize that sometimes making choices between wants and needs may be required when there is not enough income or money.

1 Launch

Display page 2 of the Unit Story, *The Collectors*.

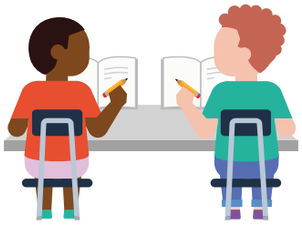
Say, "Steph is curious to know whether one of her Curioso cards is authentic or fake. She wants her mom to pay someone to verify the card for her."

Use the Think-Pair-Share routine. Ask:

- "Is paying someone to verify the cards purchasing a good or a service?"
- "Is it a need or a want?"

Read aloud Problems 4–7.

2 Monitor



After students have completed **Problem 7**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What do you need to do?"
- Ask, "What is the purchase in this problem?"

3 Connect

Invite students to share their responses for Problem 7. Select and sequence their responses in the order shown in Rows 2 and 3 in the *Differentiation* table.

EB **Emergent Bilinguals:** Encourage students to share their responses in their primary language before sharing in English. This will provide multilingual learners with additional time to make sense of the content that they are sharing. ELPS 1.C, 1.E, 2.C, 2.F

Key Takeaway: Say, "Sometimes, you need to make choices between what goods and services you want and need depending on how much income you earn or how much money you have."

Activity 2

Name _____

What Should Steph's Mom Do?

For Problems 4–6, circle to show if the purchase is a good or a service.

4 Steph's mom wants to hire someone to mow the lawn.

good (service)

5 Steph's mom wants to buy some flowers from the farmers' market.

(good) service

6 Steph's mom needs a winter jacket to keep herself warm during the winter.

(good) service

Activity 2

Name _____

What Should Steph's Mom Do? (continued)

7 Discuss

Steph's mom would like to purchase all of the things in Problems 4–6, but she does not have enough money. What could Steph's mom do?

- Steph's mom could _____.

Oral activity: No writing expected. Sample response shown.

Steph's mom could choose to buy what she needs first.
Steph's mom could work to make more money.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Explain that Steph's mom does not need to buy any of the things.	*Steph's mom could forget about buying any of these.*	**Support** Ask, "It seems she really needs to buy a jacket to stay warm during the winter. What could she do?"
Explain that Steph's mom could work for more income.	*Steph's mom can work to earn more income.*	**Strengthen** Ask, "What could she do first before working for more income?"
Explain that Steph's mom could prioritize needs over wants.	*Steph's mom could choose to buy what she needs first.*	**Stretch** Ask, "What could she do if the money she has is still not enough to buy the winter jacket she needs?"

Whole Class | 5 min

Synthesis

Presentation Screens

Lesson Takeaway: Income is money that is earned and can be used to buy **goods** and **services** that are needed or wanted. Making choices between wants and needs is an important decision about how to use income.

Use the Think-Pair-Share routine. Ask, "Steph's mom uses money she earns from her job to pay for goods and services. What is the money that you earn called?"

Say, "Money that you earn by working is called *income*. You can use your income to pay for goods and services."

Formalize vocabulary: goods, services

(optional) **Consider using the Word Connections routine** by inviting students to name 2 things that **goods** and **services** have in common and 1 thing that is different. **ELPS 1.B, 1.D, 2.B, 3.D**

Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

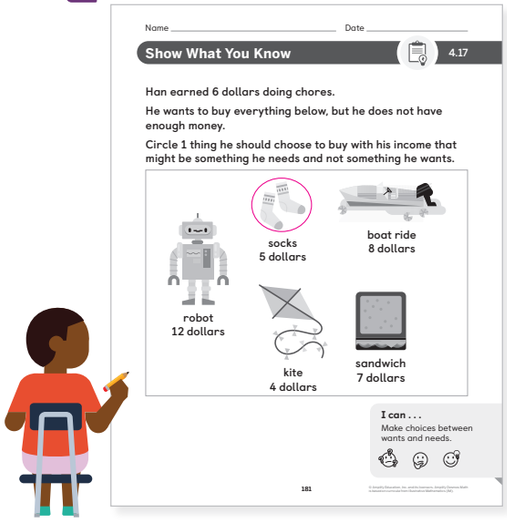
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.17

Han earned 6 dollars doing chores.

He wants to buy everything below, but he does not have enough money.

Circle 1 thing he should choose to buy with his income that might be something he needs and not something he wants.

socks
5 dollars

boat ride
8 dollars

robot
12 dollars

kite
4 dollars

sandwich
7 dollars

I can . . .
Make choices between wants and needs.

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Today's Goals

1. **Goal:** Recognize money earned as income.
   - In the *Show What You Know*, students decided how to spend earned income on a needed item.
2. **Language Goal:** Explain that income can be used to buy goods and services. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**
3. **Language Goal:** Explain what someone should do when there is not enough money to buy wants and needs at once. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**

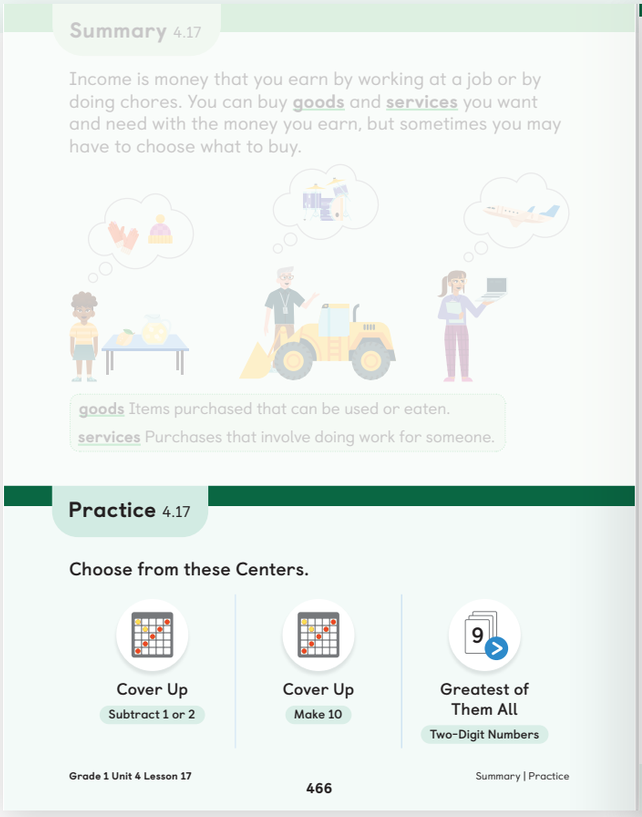
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.17

Income is money that you earn by working at a job or by doing chores. You can buy **goods** and **services** you want and need with the money you earn, but sometimes you may have to choose what to buy.

goods Items purchased that can be used or eaten.

services Purchases that involve doing work for someone.

Practice 4.17

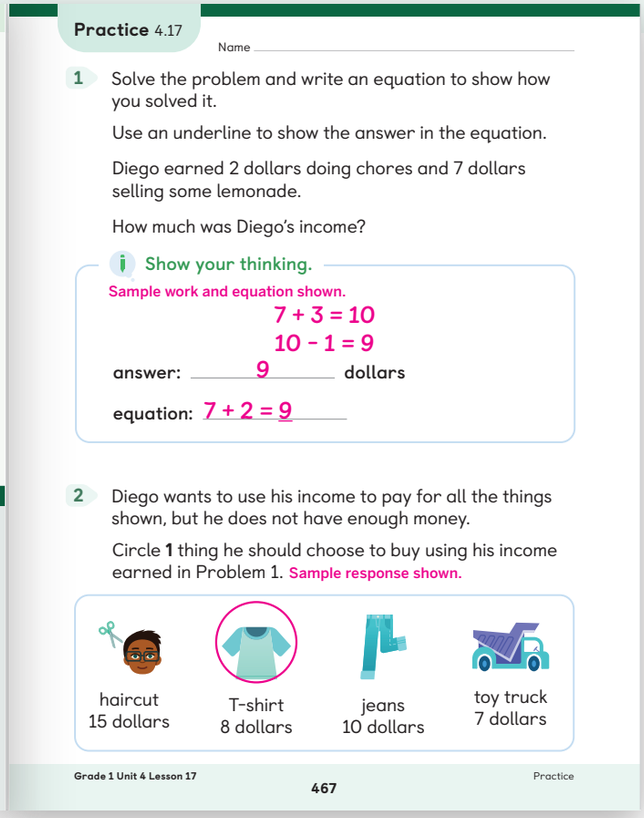
Choose from these Centers.

Cover Up — Subtract 1 or 2

Cover Up — Make 10

Greatest of Them All — Two-Digit Numbers

Grade 1 Unit 4 Lesson 17 466 Summary | Practice



Practice 4.17

Name _____

1 Solve the problem and write an equation to show how you solved it.

Use an underline to show the answer in the equation.

Diego earned 2 dollars doing chores and 7 dollars selling some lemonade.

How much was Diego's income?

Show your thinking.

Sample work and equation shown.

7 + 3 = 10

10 - 1 = 9

answer: 9 dollars

equation: 7 + 2 = 9

2 Diego wants to use his income to pay for all the things shown, but he does not have enough money.

Circle **1** thing he should choose to buy using his income earned in Problem 1. Sample response shown.

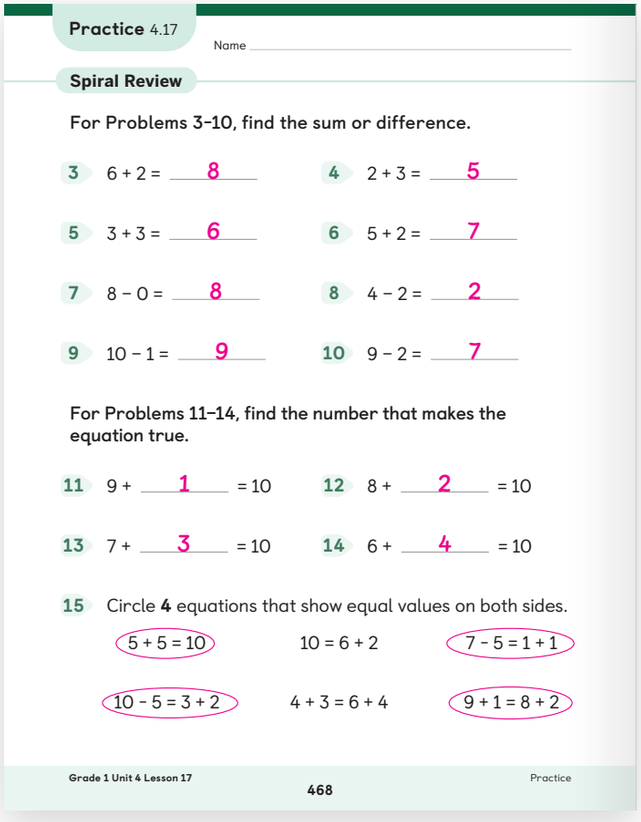
haircut 15 dollars

T-shirt 8 dollars

jeans 10 dollars

toy truck 7 dollars

Grade 1 Unit 4 Lesson 17 467 Practice



Practice 4.17

Name _____

Spiral Review

For Problems 3-10, find the sum or difference.

3 6 + 2 = 8

4 2 + 3 = 5

5 3 + 3 = 6

6 5 + 2 = 7

7 8 − 0 = 8

8 4 − 2 = 2

9 10 − 1 = 9

10 9 − 2 = 7

For Problems 11–14, find the number that makes the equation true.

11 9 + 1 = 10

12 8 + 2 = 10

13 7 + 3 = 10

14 6 + 4 = 10

15 Circle **4** equations that show equal values on both sides.

5 + 5 = 10

10 = 6 + 2

7 - 5 = 1 + 1

10 - 5 = 3 + 2

4 + 3 = 6 + 4

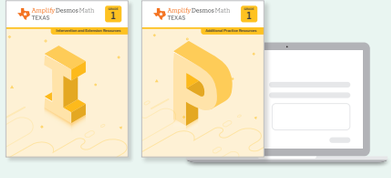
9 + 1 = 8 + 2

Grade 1 Unit 4 Lesson 17 468 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1	1	1.9.A
	2	1	1.9.B
Spiral Review			
Fluency	3–10, 15	1	1.3.D
Fluency	11–14	1	1.3.C

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Presentation Screens

Short on time? Consider omitting the Center Choice Time.

Cover Up

Subtract 1 or 2

Pairs | 15 min | 1.3.D

Students subtract 1 and 2 from a number to develop fluency with subtraction within 10.

Materials

- number cards (2–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 2.

Cover Up

Make 10

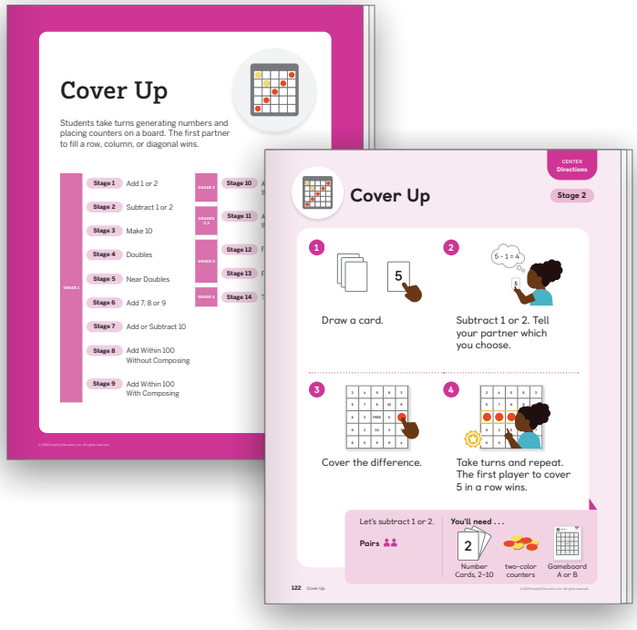
Pairs | 15 min | 1.3.C, 1.3.D

Students choose a number card and cover the number they can add to make 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 2, Sub-Unit 2.



Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Greatest of Them All

Two-digit Numbers

Pairs | 15 min | 1.2.E, 1.2.G

Students create the greatest two-digit number possible to apply place value understanding when comparing numbers.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 3.

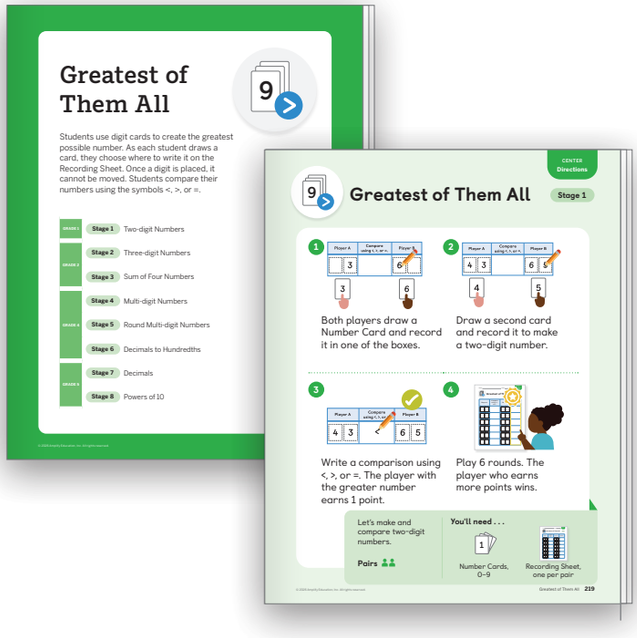
D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.



Differentiation Use after Lesson 17

Lesson Goal: Explain what someone should do when there is not enough money to buy wants and needs at once.

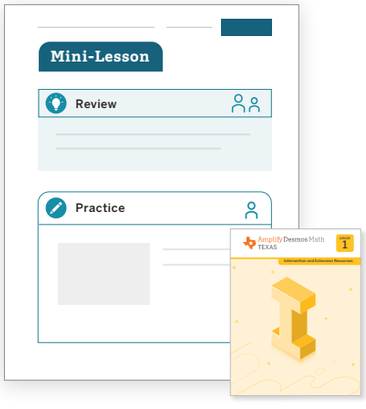
Support

Provide targeted intervention for students by using these resources.

If students circle a want:

Respond:

- Assign the *TBD* Mini-Lesson. | 15 min
- Invite students to discuss the difference between a want and a need with a partner.



Strengthen

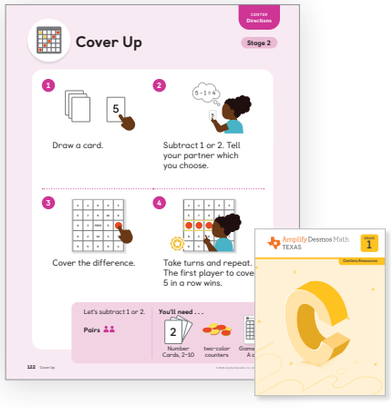
Reinforce students' understanding of the concepts assessed by using these resources.

If students circle the need that costs more than 6 dollars:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up:
  - *Subtract 1 or 2*
  - *Make 10*

  Greatest of Them All: Two-digit Numbers
- Have students complete **Lesson 17 Practice**. | 15 min
- **Item Bank**



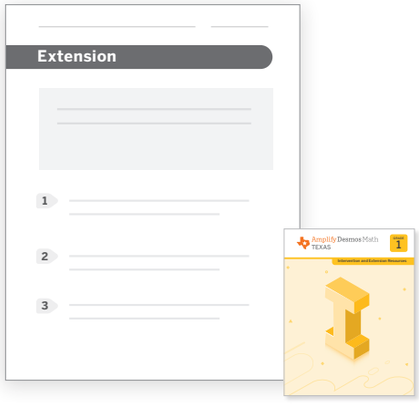
Stretch

Challenge students and extend their learning with these resources.

If students circle the need that costs less than 6 dollars:

Respond:

- Invite students to explore the **Sub-Unit 4 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



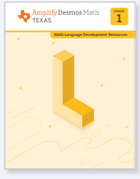
Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.

• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., services/servicios
- Frayer Model templates
- Vocabulary routines

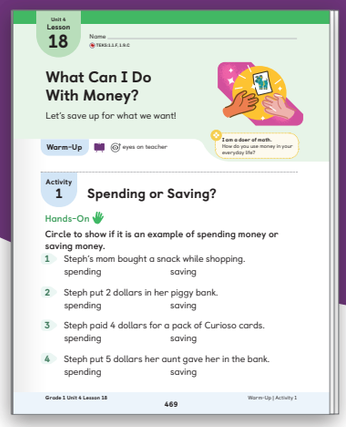


Professional Learning

Which students were able to understand what income is and distinguish between goods and services? How could you help these students make connections by relating to their life experiences?

Unit 4
Lesson
18

Student Edition pages and Presentation Screens support learning in this lesson.



What Can I Do With Money?

Distinguishing Between Spending and Saving Money

Let's save up for what we want!

Key Concepts

Today's Goals

1. **Goal:** Distinguish between spending and saving money.
2. **Goal:** Recognize that saving money is for future wants and needs.
3. **Language Goal:** Justify whether money is being saved or spent. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students recognize the difference between **spending** and **saving** money and reason about how saving money can help them buy wants or needs in the future. They discuss real-life situations and decide whether they are examples of spending or saving money. Students understand that when they save money they have received, the amount of money they have increases, and when they spend money, the amount of money they have decreases. **(TEKS 1.1.F)**

Prior Learning

In Lesson 17, students learned to identify income as a means of obtaining goods and services and recognize that making choices between wants and needs is sometimes required.

Future Learning

In Lesson 19, students will learn that charitable giving is an alternative option to spending or saving and understand the impact of charitable giving.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of spending and saving.
- Students **apply** their understanding that saving can help them get an amount of money to buy things they want or need in the future.

Vocabulary

New Vocabulary

saving

spending

Review Vocabulary

goods

services

TEKS

Addressing

1.9.C

Distinguish between spending and saving.

Math Process Standard: 1.1.F

ELPS: 1.B, 1.D, 1.E, 2.B, 2.C, 2.D, 2.E, 3.D

Building Toward

2.11.A

Building Math Identity

I am a doer of math.

How do you use money in your everyday life?

Invite students to reflect on this question as they complete this lesson.

Lesson at a Glance 60 min

TEKS: 1.1.F, 1.9.C

Warm-Up

Whole Class | 10 min

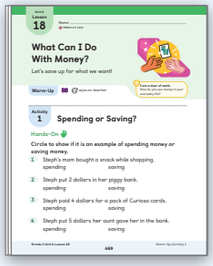
Students use the **Notice and Wonder** routine to share what they notice and wonder about images of money being saved and money being spent. This prepares them to decide whether money is being spent or saved throughout the lesson.

Activity 1

Pairs | 15 min

Students learn that there are 2 options with money — **spending** money or **saving** money. They decide whether an example shows spending or saving and discuss with a partner how they know.

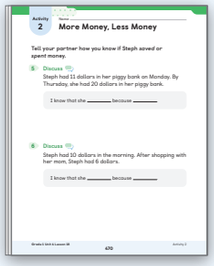
Materials: *All About Money!* chart (from Lesson 17), Reference Sheet (teacher made) (as needed)



Activity 2

Pairs | 10 min

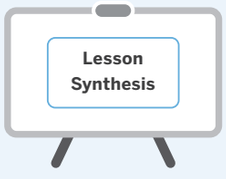
Students recognize that spending money will result in having less money, and saving money they received will result in having more money. They discuss with a partner how they know if money is spent or saved using the words *more* and *less*.



Synthesis

Whole Class | 10 min

Students review and reflect on the difference between saving and spending money and how that affects the amount of money someone has.

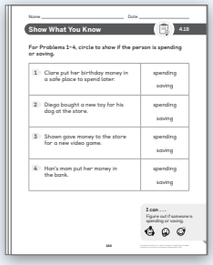


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by deciding if given scenarios represent spending or saving.

Materials: *Show What You Know* PDF



Center Choice Time

Pairs | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice counting and describing quantities using comparative language.

- Cover Up
- Greatest of Them All

Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 1, Monitor** to support math language acquisition.

- ✓ Cognates
- ✓ Visuals
- ✓ Sentence frames and word bank

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

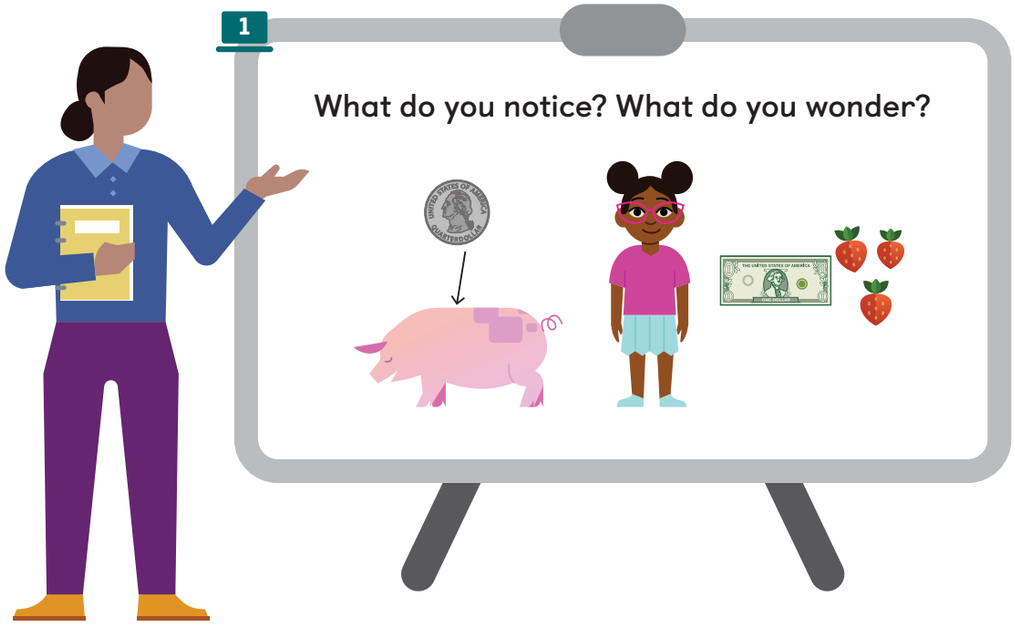
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

Whole Class | 10 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students examine pictures depicting saving and spending money to activate their prior knowledge surrounding saving and spending money.



1 Launch

Use the Notice and Wonder routine.

Use the Think-Pair-Share routine. Ask, "What do you notice? What do you wonder?"

2 Connect

Record students' responses as they share.

Say, "In the last lesson, we talked about spending money."

Ask, "Do you always have to spend your money? What other things could you do with your money?"

Students might say . . . ELPS 2.B

I notice the money is going into the piggy bank.

I notice the girl bought strawberries with her money.

I wonder where the girl got money to buy the strawberries.

I wonder if you can take money out of a piggy bank after you put it in.

Pairs | 15 min

Activity 1 Spending or Saving?

Purpose: Students classify real-world statements involving money to distinguish between spending and saving.

Presentation Screens

Materials

Classroom materials:

- Display the *All About Money!* chart (from Lesson 17). Record the terms *spending* and *saving*, and the definitions, to the chart during the Launch.
- Provide students with access to a Reference Sheet with images of a person spending and saving money (as needed).

1 Launch

Say, "Imagine you receive $10 as a birthday gift."

Use the Think-Pair-Share routine. Ask, "What would you do with the money?"

Say, "Spending is using money to buy goods or services you want now. Saving is keeping the money to buy goods or services in the future."

Record the new terms *spending* and *saving*, and the definitions, on the *All About Money!* chart.

Display page 1 of the Unit Story, *The Collectors*.

Say, "Steph went to the Briarcliff Flea Market to look for Curioso cards, but she saw many other things people were buying and selling while she was there. You will help Steph decide if she is spending money or saving money. After you have decided, share with your partner how you know."

Read aloud Problems 1–5.

2 Monitor

After students have completed **Problem 4**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "If a person is spending the money, do they still have the money?"
- Ask, "When you pay money and receive something in return, is that spending or saving?"

A **Accessibility: Cognitive function** Provide a Reference Sheet with images of a person spending money and saving money to give visual context for spending versus saving.

3 Connect

Invite students to share their selection for Problem 4.

Use the Think-Pair-Share routine. Ask:

- "What did you notice was happening when you circled 'saving'?"
- "What did you notice was happening when you circled 'spending'?"
- "How is giving money to a bank different from giving money to a store?"

MLR **MLR8: Discussion Supports — Revoicing** ELPS 1.D, 1.E, 2.B, 2.E

As students share what they notice about spending and saving, revoice their ideas in the form of a question using mathematical language or language from the context to invite them to add more detail to their response. For example:

- If a student says, "When we spend money we have less." . . .
- Revoice their ideas by asking, "Are you saying that when we spend money, we do not have that money anymore? What happens in return?"

Say, "When you give money to a bank, you are saving it. The bank helps us keep money safe, and we can go to the bank and get our money when we need it."

Key Takeaway: Say, "When you are using money, you are spending it. When you are keeping money for the future, you are saving it."

Student Edition

Unit 4
Lesson
18

Name

TEKS:1.1.F, 1.9.C

What Can I Do With Money?

Let's save up for what we want!

Warm-Up eyes on teacher

I am a doer of math.
How do you use money in your everyday life?

Activity 1

Spending or Saving?

Hands-On

Circle to show if it is an example of spending money or saving money.

1. Steph's mom bought a snack while shopping.
   spending (circled) saving
2. Steph put 2 dollars in her piggy bank.
   spending saving (circled)
3. Steph paid 4 dollars for a pack of Curioso cards.
   spending (circled) saving
4. Steph put 5 dollars her aunt gave her in the bank.
   spending saving (circled)

Grade 1 Unit 4 Lesson 18 469 Warm-Up | Activity 1

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . Problem 4		Provide support . . .
Almost there Circle "spending".	Steph put the 5 dollars her aunt gave her in the bank.	spending (circled) saving	**Support** Ask, "How do you know this is an example of spending?"
Circle "saving".	Steph put the 5 dollars her aunt gave her in the bank.	spending saving (circled)	**Stretch** Ask, "If Steph realized she had a want and need at the same time, which do you think she should spend her money on?"

Pairs | 10 min

Activity 2 More Money, Less Money

Purpose: Students recognize whether there is more or less money in given scenarios and discuss whether it represents saving or spending.

Presentation Screens

Short on time? Consider omitting Problem 7.

1 Launch

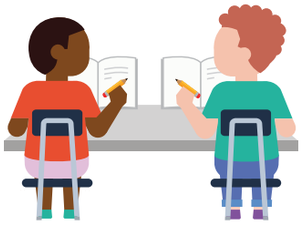
Say, "When a person gives you money and you save it, you have more money than when you started."

Ask, "What do you think happens when you spend money?"

Say, "You will decide again if Steph is saving or spending money, but this time, you will also discuss with a partner how you know using the words *more* or *less*."

Read aloud Problems 6 and 7.

2 Monitor



After students have completed **Problem 6**, refer to the **D Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "Is 11 dollars more or less than 20 dollars?"
- Ask, "If she has more money by Thursday, what does that mean?"

EB **Emergent Bilinguals:** Pair students with different levels of English language proficiency together as they discuss. This will provide a structured opportunity for multilingual learners to interact with and receive feedback from their peers with varied language backgrounds. **ELPS 1.E, 2.C, 2.D**

3 Connect

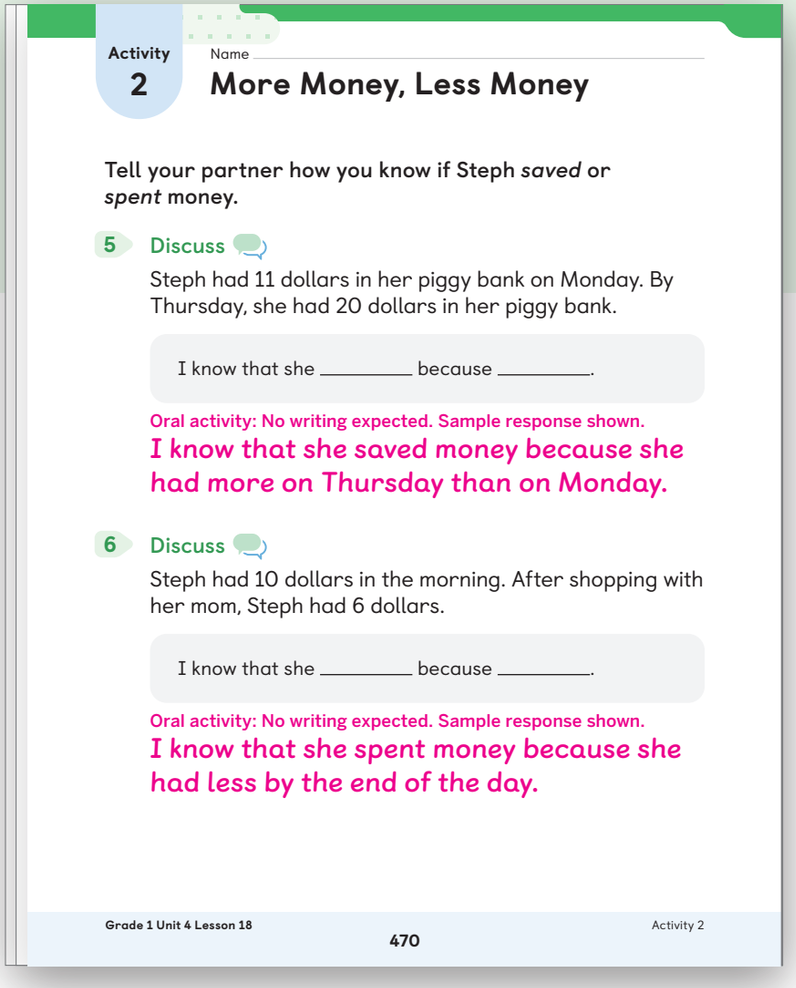
Display Problem 6.

Invite students to share how they knew whether Steph saved money or spent money. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Ask (if not yet mentioned during discussion), "When you receive money from a person and save it, what happens to your amount of money?"

Key Takeaway: Say, "When you save money that is given to you, the amount of money you have will become greater. When you spend money, the amount of money you have will become less."

Student Edition



Activity 2

Name

More Money, Less Money

Tell your partner how you know if Steph *saved* or *spent* money.

5 Discuss

Steph had 11 dollars in her piggy bank on Monday. By Thursday, she had 20 dollars in her piggy bank.

I know that she _____ because _____.

Oral activity: No writing expected. Sample response shown.

I know that she saved money because she had more on Thursday than on Monday.

6 Discuss

Steph had 10 dollars in the morning. After shopping with her mom, Steph had 6 dollars.

I know that she _____ because _____.

Oral activity: No writing expected. Sample response shown.

I know that she spent money because she had less by the end of the day.

Grade 1 Unit 4 Lesson 18 470 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

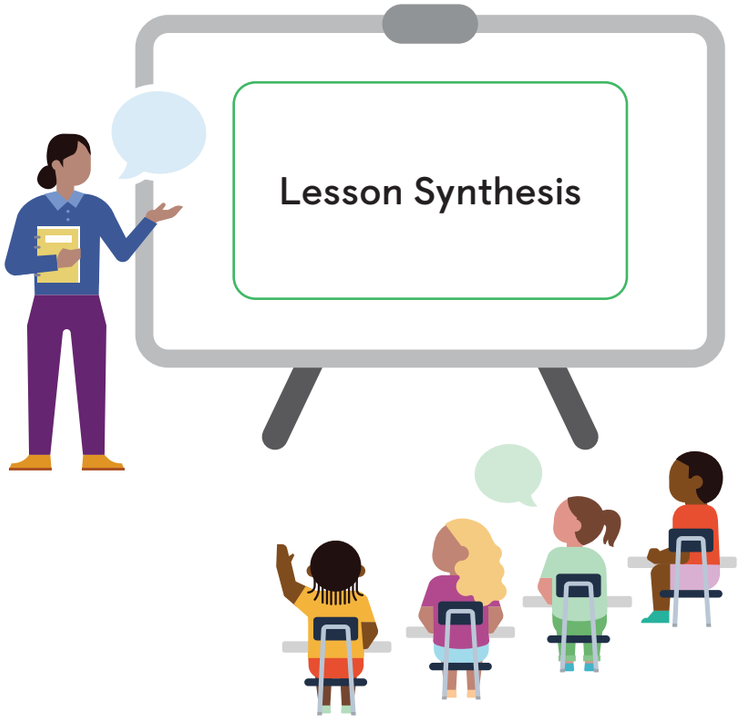
Look for students who . . .	For example . . .	Provide support . . .
Almost there Explain that Steph saved money because 10 plus 6 is 16.	10 plus 6 is 16, so Steph has 16 dollars, which is more than she started with. So, Steph saved her money.	**Support** Ask, "How did you know to add 10 and 6?"
Explain that Steph spent money because the amount decreased.	Steph went from 10 dollars to 6 dollars, so I know she spent some of her money.	**Strengthen** Ask, "What information tells you she spent the money?"
Explain that Steph spent money because 6 dollars is less than 10 dollars.	6 is less than 10. 10 minus 6 is 4, so Steph spent 4 dollars throughout the day.	**Stretch** Ask, "Can you come up with a story problem about how Steph could have spent the money?"

Whole Class | 10 min

Synthesis

Presentation Screens

Lesson Takeaway: Spending money means using money for goods or services. Saving money means keeping money that can be used later.



Say, "Today, we explored the difference between saving money and spending money."

Use the Think-Pair-Share routine. Ask, "In your own words, what is the difference between spending and saving?"

Say, "Money can be spent on goods and services, or it can be saved for later use."

Formalize vocabulary: saving, spending

(optional) **Consider using the Word Connections routine** by inviting students to name 2 things that **saving** and **spending** have in common and 1 thing that is different. **ELPS 1.B, 1.D, 2.B, 3.D**

Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

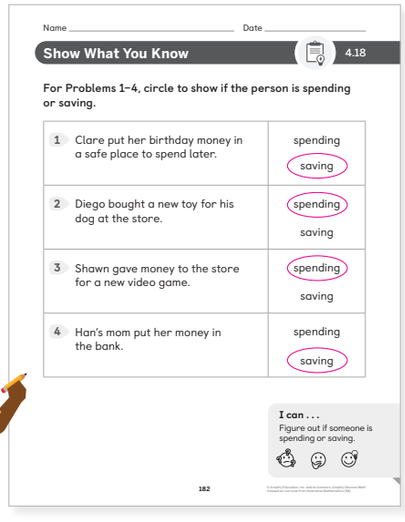
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF



Name _____ Date _____

Show What You Know 4.18

For Problems 1–4, circle to show if the person is spending or saving.

1	Clare put her birthday money in a safe place to spend later.	spending **saving**
2	Diego bought a new toy for his dog at the store.	**spending** saving
3	Shawn gave money to the store for a new video game.	**spending** saving
4	Han's mom put her money in the bank.	spending **saving**

I can . . .
Figure out if someone is spending or saving.

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Today's Goals

1. **Goal:** Distinguish between spending and saving money.
   - In Problems 1–4 in the *Show What You Know*, students decided if a person was spending or saving money in given scenarios.
2. **Goal:** Recognize that saving money is for future wants and needs.
3. **Language Goal:** Justify whether money is being saved or spent. **(Listening and Speaking)** **ELPS 1.B, 2.B, 2.E**

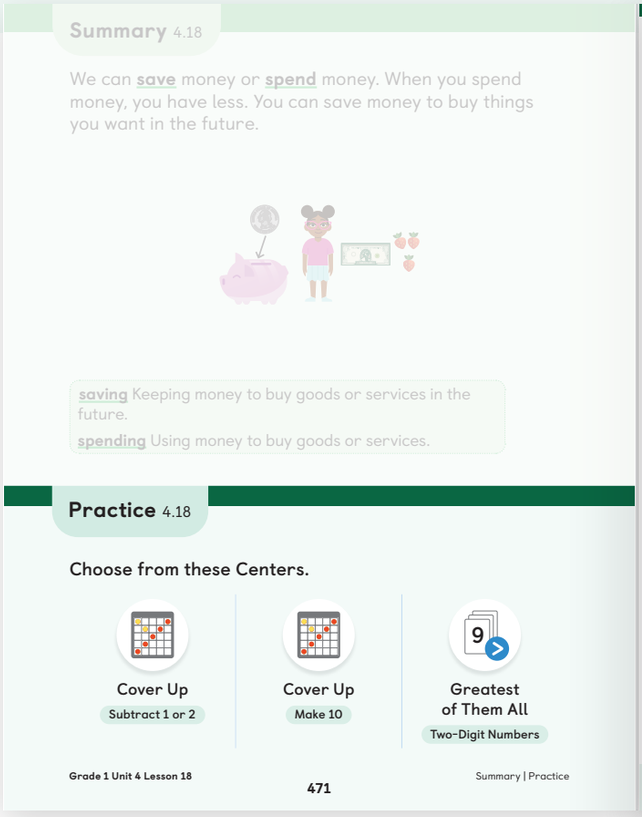
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.18

We can **save** money or **spend** money. When you spend money, you have less. You can save money to buy things you want in the future.

saving Keeping money to buy goods or services in the future.

spending Using money to buy goods or services.

Practice 4.18

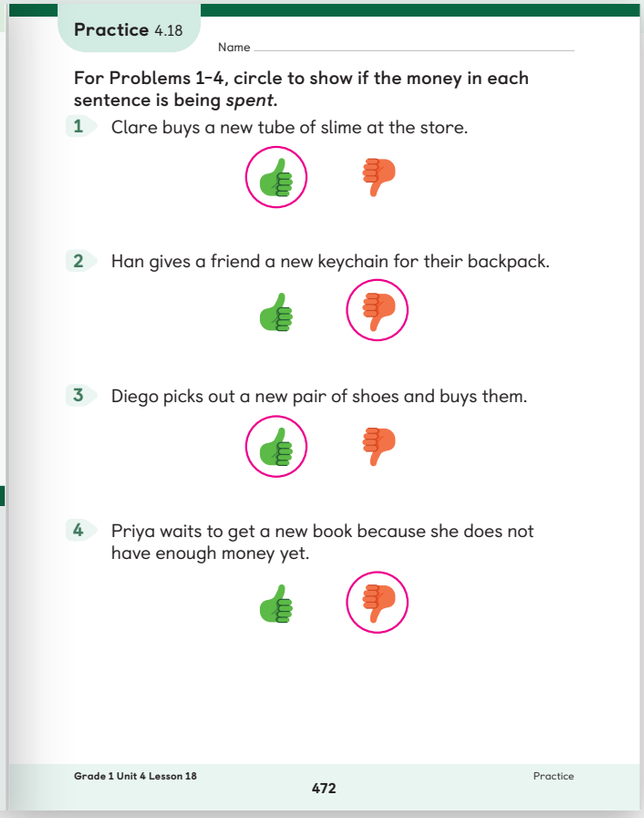
Choose from these Centers.

Cover Up — Subtract 1 or 2

Cover Up — Make 10

Greatest of Them All — Two-Digit Numbers

Grade 1 Unit 4 Lesson 18 471 Summary | Practice



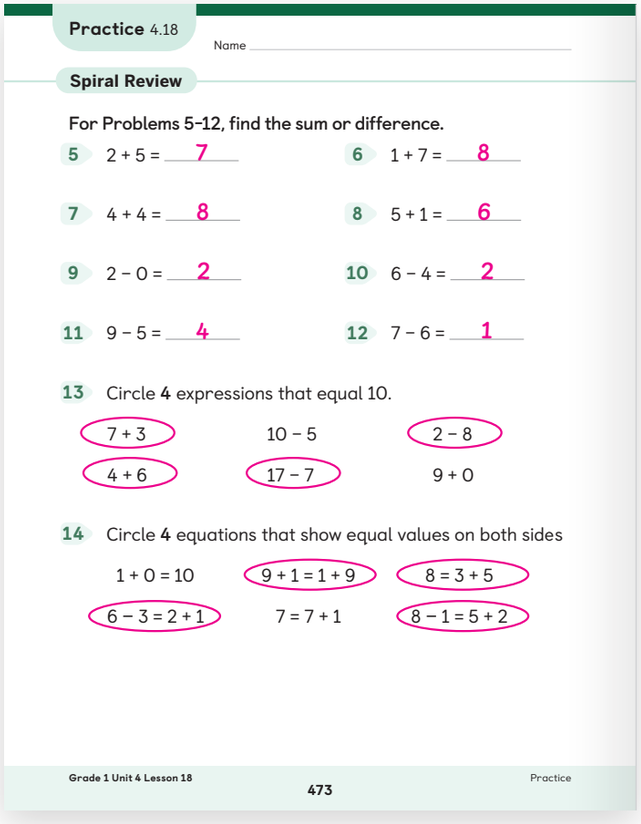
Practice 4.18

Name _____

For Problems 1–4, circle to show if the money in each sentence is being *spent*.

1. Clare buys a new tube of slime at the store.
2. Han gives a friend a new keychain for their backpack.
3. Diego picks out a new pair of shoes and buys them.
4. Priya waits to get a new book because she does not have enough money yet.

Grade 1 Unit 4 Lesson 18 472 Practice



Practice 4.18

Name _____

Spiral Review

For Problems 5–12, find the sum or difference.

5. 2 + 5 = 7
6. 1 + 7 = 8
7. 4 + 4 = 8
8. 5 + 1 = 6
9. 2 − 0 = 2
10. 6 − 4 = 2
11. 9 − 5 = 4
12. 7 − 6 = 1

13. Circle **4** expressions that equal 10.

7 + 3 (circled) | 10 − 5 | 2 − 8 (circled)
4 + 6 (circled) | 17 − 7 (circled) | 9 + 0

14. Circle **4** equations that show equal values on both sides

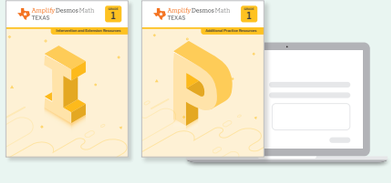
1 + 0 = 10 | 9 + 1 = 1 + 9 (circled) | 8 = 3 + 5 (circled)
6 − 3 = 2 + 1 (circled) | 7 = 7 + 1 | 8 − 1 = 5 + 2 (circled)

Grade 1 Unit 4 Lesson 18 473 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	1.9.C
Spiral Review			
Fluency	**5–12, 14**	1	1.3.D
Fluency	**13**	1	1.3.C

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Presentation Screens

Cover Up

Subtract 1 or 2

Pairs | 15 min | 1.3.D

Students subtract 1 and 2 from a number to develop fluency with subtraction within 10.

Materials

- number cards (2–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Cover Up

Make 10

Pairs | 15 min | 1.3.C, 1.3.D

Students choose a number card and cover the number they can add to make 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 2, Sub-Unit 2.

Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Greatest of Them All

Two-digit Numbers

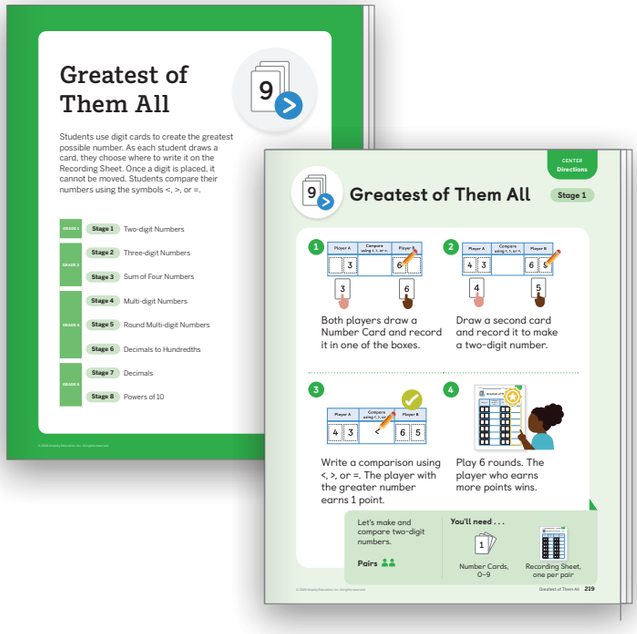
Pairs | 15 min | 1.2.E, 1.2.G

Students create the greatest two-digit number possible to apply place value understanding when comparing numbers.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 3.



D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.

Differentiation Use after Lesson 18

Lesson Goal: Distinguish between spending and saving money.

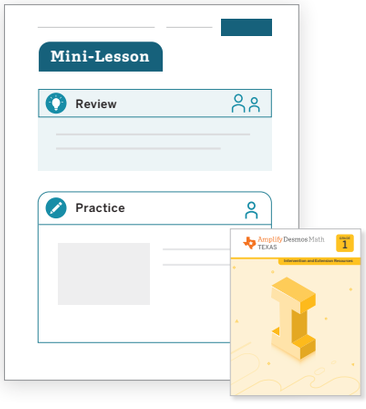
Support

Provide targeted intervention for students by using these resources.

If students recognize saving as spending and spending as saving:

Respond:

- Assign the *Exploring the Difference Between Spending and Saving* Mini-Lesson. | 15 min
- Review Row 1 of Activity 1 *Differentiation: Teacher Moves* table.



Strengthen

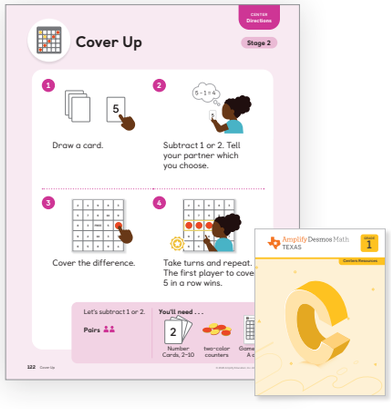
Reinforce students' understanding of the concepts assessed by using these resources.

If students recognize putting money in the bank as spending:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up:
  - *Subtract 1 or 2*
  - *Make 10*

  Greatest of Them All: Two-digit Numbers
- Have students complete **Lesson 18 Practice**. | 15 min
- **Item Bank**



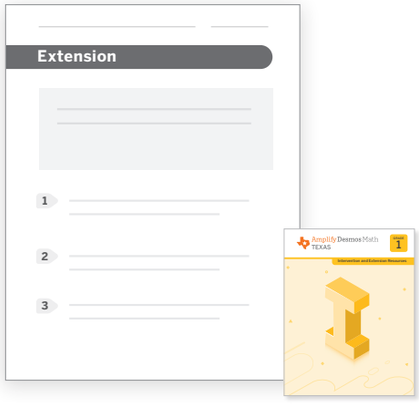
Stretch

Challenge students and extend their learning with these resources.

If students recognize putting money in the bank as saving:

Respond:

- Invite students to explore the **Sub-Unit 4 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

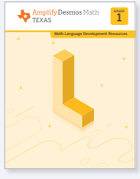


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates
- Frayer Model templates
- Vocabulary routines

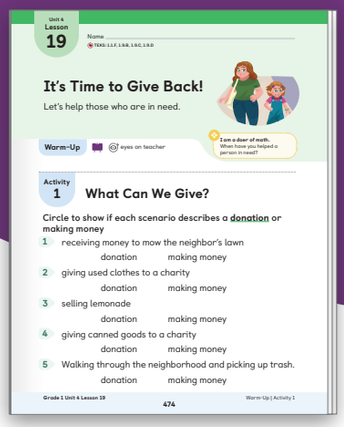


Professional Learning

Reflect on how students' thinking changed from the **Notice and Wonder** routine in the Warm-Up to the Synthesis discussion. What gains did students make in their knowledge? What gaps are still present?

Unit 4
Lesson
19

Student Edition pages and Presentation Screens support learning in this lesson.


Unit 4 Lesson 19

Name

It's Time to Give Back!

Let's help those who are in need.

Warm-Up — eyes on teacher

I am a doer of math. When have you helped a person in need?

Activity 1 — What Can We Give?

Circle to show if each scenario describes a donation or making money

1. receiving money to mow the neighbor's lawn — donation / making money
2. giving used clothes to a charity — donation / making money
3. selling lemonade — donation / making money
4. giving canned goods to a charity — donation / making money
5. Walking through the neighborhood and picking up trash. — donation / making money

Grade 1 Unit 4 Lesson 19 474 Warm-Up | Activity 1

It's Time to Give Back!

Considering Charitable Giving

Let's help those who are in need.

Key Concepts

Today's Goals

1. **Goal:** Recognize charitable giving as another option, other than spending and saving money.
2. **Goal:** Understand the impacts of charitable giving.
3. **Language Goal:** Explain what kind of donation can be made and the positive impact of it. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students explore charitable giving and identify ways that people can donate money, goods, and services to help those in need. They consider different types of donations and the positive impacts those donations could have on the recipients. **(TEKS 1.1.F)**

Prior Learning

In Lesson 18, students learned that money can be saved or spent. They recognized that spending money results in having less money and money can be saved to purchase wants or needs in the future.

Future Learning

In Unit 5, students will learn about numbers up to 120, by counting coins, representing numbers as so many hundreds, tens, and ones, and ordering numbers on an open number line.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of charitable giving as an option other than spending and saving money.

Vocabulary

New Vocabulary

donating

Review Vocabulary

spending

saving

TEKS

Addressing

1.9.D

Consider charitable giving.

Also Addressing: **1.5.A, 1.9.B, 1.9.C, 1.9.D**

Math Process Standard: 1.1.F

ELPS: 1.B, 1.D, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F, 3.E, 3.F

Building On	Building Toward
K.5.A	2.11.A
K.9.D	

Building Math Identity

I am a doer of math.

When have you helped a person in need?

Invite students to reflect on this question as they complete this lesson.

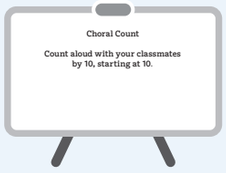
Lesson at a Glance 60 min

TEKS: 1.1.F, 1.5.A, 1.9.B, 1.9.C, 1.9.D

Warm-Up Fluency

Whole Class | 10 min

Students use the **Choral Count** routine, in which they count as a class by 10, 5, and 2, starting with 10 each time. As the counts are displayed, students may notice patterns or structures in or between the counts and consider why those patterns or structures show up. **(TEKS 1.1.F)**

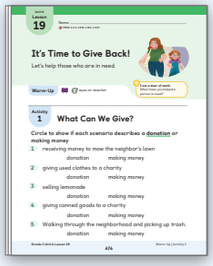


Activity 1

Pairs | 15 min

Students distinguish between scenarios that describe **donating** and scenarios that describe earning money. Then, they apply their understanding of charitable giving and donations to solve a story problem.

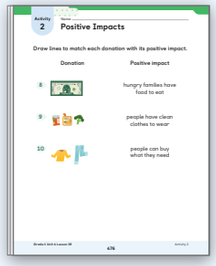
Materials: *All About Money!* chart (from prior lessons)



Activity 2

Pairs | 10 min

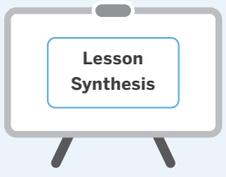
Students analyze different types of donations to determine the positive impact they can have on the community. They discuss why it is important to prioritize donating items people need instead of items people want.



Synthesis

Whole Class | 10 min

Students review and reflect on the different actions they can take with their money, including donating to a charity.

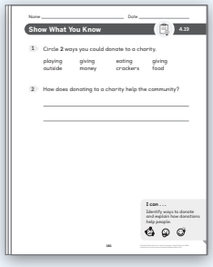


Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by identifying ways to donate to a charity and describing how donating helps the community.

Materials: *Show What You Know* PDF



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and practice counting and describing quantities using comparative language.

- Cover Up
- Greatest of Them All

Math Language Development

EB Emergent Bilinguals

Consider using the *Math Language Development Resources* with the **Activity 2, Monitor** to support math language acquisition.

✓ Visuals ✓ Sentence frames

ELPS 1.B, 1.E, 2.B, 2.C, 2.D, 2.E, 2.F

Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** to spoken English and **speak** using short phrases or simple sentences.	Students **listen** to spoken English and **speak** using a variety of sentence types.	Students **listen** to spoken English and **speak** using longer sentences. Exemplar responses are provided.

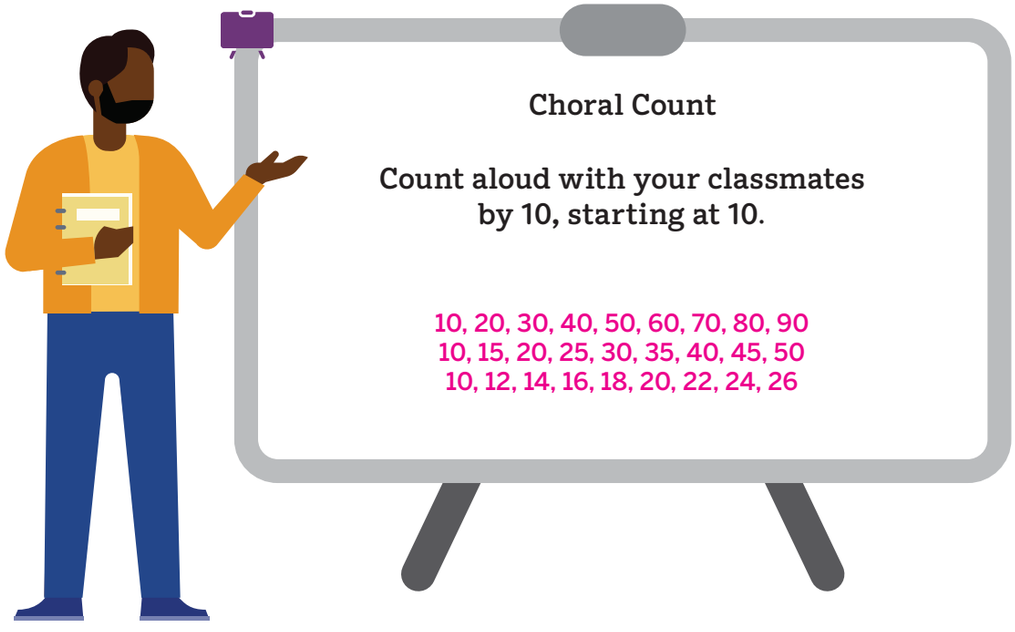
Whole Class | 10 min

Presentation Screens

Warm-Up Choral Count

Fluency

Purpose: Students count by 10, 5, and 2 to develop fluency with skip counting.



1 Launch

Use the Choral Count routine.

Say, "Let's count by 10, starting at 10 and ending at 90."

Display each number as students count.

Say:

- "Now, let's count by 5, starting at 10 and ending at 50."
- "Now, let's count by 2, starting at 10 and ending at 26."

2 Connect

Record students' responses as they share. Consider highlighting different patterns using different colors.

Ask, "What is alike and what is different about counting by 10, 5, and 2?"

Say, "When you count by a greater number, you get to greater numbers sooner than when you count by a smaller number."

Students might say . . . ELPS 2.E

I notice that the numbers in the first row have a 0 at the end.

The numbers are only the same at the start.

In the middle row, the number at the end goes back and forth between 0 and 5.

The numbers in the top row are the biggest.

Pairs | 15 min

Activity 1 What Can We Give?

Purpose: Students determine whether a scenario describes **donating** or earning money to deepen their understanding of charitable giving.

Presentation Screens

Materials

Classroom materials:

- Display the *All About Money!* chart (from prior lessons). Record the term *donate*, and the definition, on the chart during the Launch.

Short on time? Consider allowing students to choose Problem 6 or 7.

1 Launch

Display page 1 of the Unit Story, *The Collectors*.

Say, "While at the Briarcliff Flea Market, Steph and her mom noticed a stall that was collecting donated clothes for a charity. Steph told her mom she had a lot of clothes that do not fit anymore and asked if she could donate them. Steph's mom said that would be a great idea and they would return with the clothes tomorrow."

Say, "To **donate** means to give money, goods, or services to those who are in need."

Record the term *donate*, along with the definition, on the *All About Money!* chart.

Use the Think-Pair-Share routine. Ask:

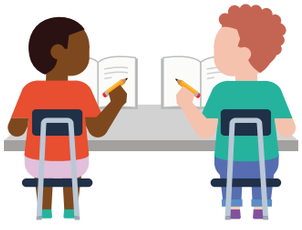
- "What are some items you could donate?"
- "What are some services you could donate?"

Read aloud Problems 1–5.

Have students complete Problems 1–5, and pause for a class discussion before completing Problems 6 and 7.

Read aloud Problems 6 and 7.

2 Monitor



While students complete **Problem 1**, refer to the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "How will you know if the scenario describes a donation or making money?"

3 Connect

Use the Think-Pair-Share routine. Ask, "Why might someone choose to donate money, goods, or services instead?"

Say, "Charitable giving is one way to help others in your communities to get the things they need."

EB **Emergent Bilinguals:** Pair students with different levels of English language proficiency together as they share their thinking. This will provide a structured opportunity for multilingual learners to interact with and receive feedback from their peers with varied language backgrounds. **ELPS 1.E, 2.C, 2.D**

Key Takeaway: Say, "Donating goods, services, and money is one way to help others in your communities to get the things they need."

Student Edition

Unit 4
Lesson
19

Name

TEKS: 1.1.F, 1.9.B, 1.9.C, 1.9.D

It's Time to Give Back!

Let's help those who are in need.

I am a doer of math.
When have you helped a person in need?

Warm-Up eyes on teacher

Activity
1

What Can We Give?

Circle to show if each scenario describes a donation or making money

1 receiving money to mow the neighbor's lawn

donation (making money)

2 giving used clothes to a charity

(donation) making money

3 selling lemonade

donation (making money)

4 giving canned goods to a charity

(donation) making money

5 Walking through the neighborhood and picking up trash.

(donation) making money

Activity
1

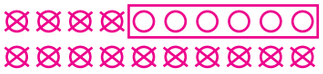
Name

What Can We Give? (continued)

6 Steph received 20 dollars for her birthday. She spent 4 dollars on a toy. She will save 10 dollars and donate the rest to a charity. How much will she donate?

Show your thinking.

Sample work shown.



20 − 4 = 16

16 − 10 = 6

answer: 6 dollars

7 Steph and her friend collected canned food to donate. Steph collected 8 cans and her friend collected 7 cans. How many cans did they collect in all?

Show your thinking.

Sample work shown.

8 + 7 = 15

answer: 15 cans

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . . Problem 1		Provide support . . .
Almost there Circle "donation".	receiving money to mow the neighbors lawn	(donation) making money	**Support** Ask, "How would this scenario be different if it described making money?"
Circle "making money".	receiving money to mow the neighbor's lawn	donation (making money)	**Stretch** Ask, "Could mowing the lawn also be a donation? Why or why not?"

Pairs | 10 min

Presentation Screens

Activity 2 Positive Impacts

Purpose: Students analyze ways of giving to determine the positive impacts of donating to a charity.

1 Launch

Say, "Steph donated the clothes from her closet like she and her mother talked about."

Ask, "Who do you think will benefit from those clothes?"

Say, "Every donation has a positive effect on someone's life."

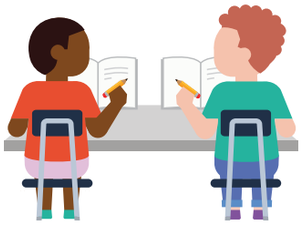
Read aloud Problems 8–10.

Have students complete Problems 8–10 and pause for a class discussion before completing Problem 11.

Read aloud Problem 11.

EB **Emergent Bilinguals:** Invite students to share what the new term, *benefit*, reminds them of (e.g., "When I hear *benefit*, I think . . ."). This may help surface multiple meanings and encourage students to connect to their prior knowledge. ELPS 1.D, 1.E, 2.F

2 Monitor



After students have completed **Problem 11**, refer to the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What are some items you think people *need*?"
- Ask, "Is that something you could donate?"

A **Accessibility: Conceptual processing** Provide labels under pictures to help students make connections between items and positive impacts.

3 Connect

Invite students to share their responses for Problem 11. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "Do some donated items have more of a positive impact than others?"

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share about the impact of donated items, press for details in their reasoning. For example:

- If a student says, "Some donated items can have a more positive impact than others." . . .
- Press for details by asking, "What makes an item more impactful than another item?"

Say, "Donating items people want can make them happy, but donating items people need can change their lives for the better."

Key Takeaway: Say, "Donating goods and services is a type of charitable giving that can have a positive effect on someone's life."

Activity 2

Name _____

Positive Impacts

Draw lines to match each donation with its positive impact.

Donation	Positive impact
8	hungry families have food to eat
9	people have clean clothes to wear
10	people can buy what they need

Activity 2

Name _____

Positive Impacts (continued)

11 **Discuss**

If you had a chance, what would you donate to a charity? Who would benefit from it? Why?

- I would donate _____.
- _____ would benefit from it because _____.

Oral activity: No writing expected. Sample response shown.

I would donate a winter coat. Kids would benefit from it because it can be cold outside.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Say they would donate something classified as a "want."	*I would donate candy. Kids would benefit from it because kids love candy.*	**Support** Ask, "Is candy a want or a need? Is there a different food that would be more filling or healthy?"
Say they would donate clothes.	*I would donate one of my jackets. Someone without a jacket would benefit from it because it's cold outside.*	**Stretch** Ask, "What types of items do you think people need the most?"
Say they would donate money.	*I would donate money. Families with needs would benefit from it because they can buy things they don't have.*	

Whole Class | 10 min

Synthesis

Lesson Takeaway: Money, goods, and services can be **donated** to others to help them get the things they need.

Presentation Screens

Use the Think-Pair-Share routine. Ask "What are some of the ways the community could benefit from your donations?"

Say, "Giving to charity is a way to help people in need. We can give money, goods, and services so people and families can buy what they need or we can donate items like food and clothes."

Formalize vocabulary: **Donating** is to give money, goods or services to those who are in need.

(optional) **Consider using the Frayer Model routine** with the word **donating**. ELPS 3.E, 3.F

Refer to the *Math Language Development Resources* for a description of this routine and for more vocabulary support.

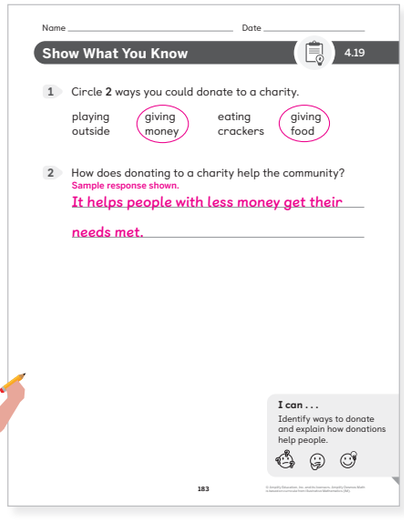
Invite students to refer to the **Summary** during Practice or anytime during the year.

Show What You Know

Independent | 5 min

(Optional)

Show What You Know PDF


Name _____ Date _____

Show What You Know 4.19

1 Circle **2** ways you could donate to a charity.

playing outside | giving money | eating crackers | giving food

2 How does donating to a charity help the community?

Sample response shown.

It helps people with less money get their needs met.

I can . . .
Identify ways to donate and explain how donations help people.

183

Today's Goals

1. **Goal:** Recognize charitable giving as another option, other than spending and saving money.
   - In Problem 1 in the *Show What You Know*, students identified ways to donate to a charity.
2. **Goal:** Understand the impacts of charitable giving.
   - In Problem 2 in the *Show What You Know*, students described how donating to a charity helps the community.
3. **Language Goal:** Explain what kind of donation can be made and the positive impact of it. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

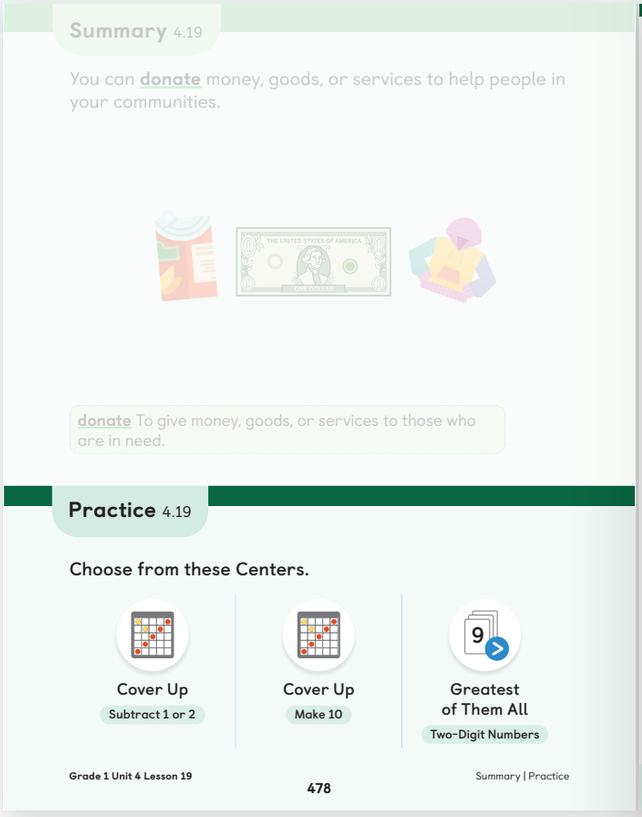
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.

Students using print



Summary 4.19

You can **donate** money, goods, or services to help people in your communities.

donate To give money, goods, or services to those who are in need.

Practice 4.19

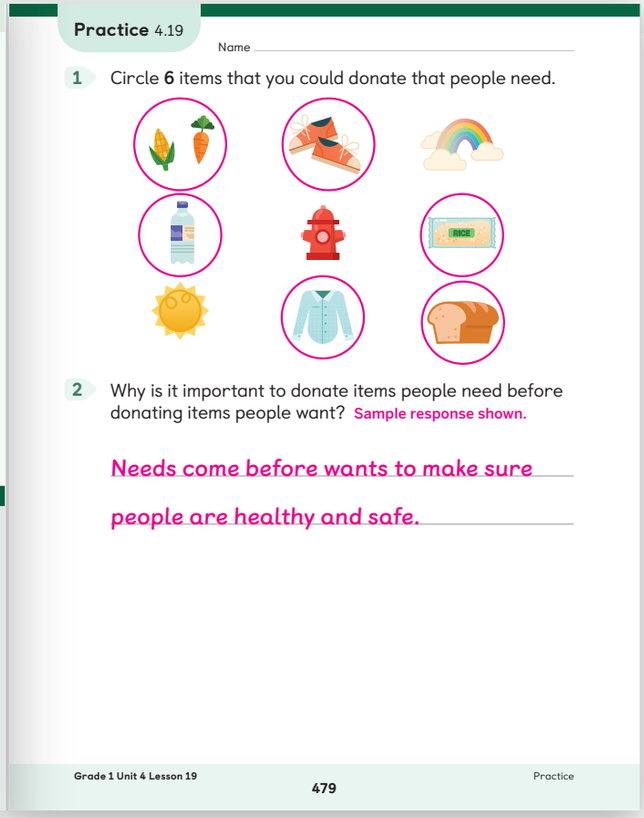
Choose from these Centers.

Cover Up
Subtract 1 or 2

Cover Up
Make 10

Greatest of Them All
Two-Digit Numbers

Grade 1 Unit 4 Lesson 19 478 Summary | Practice



Practice 4.19

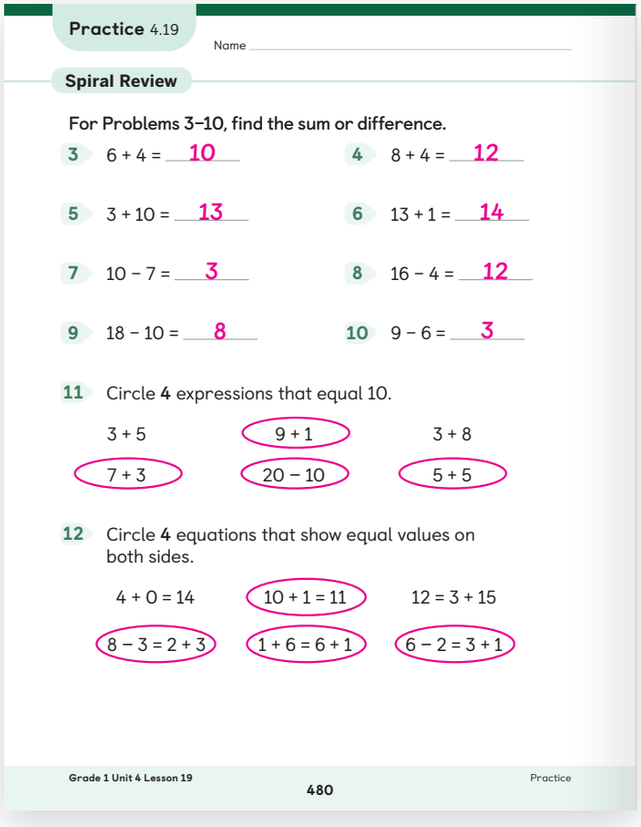
Name _____

1 Circle **6** items that you could donate that people need.

2 Why is it important to donate items people need before donating items people want? Sample response shown.

Needs come before wants to make sure people are healthy and safe.

Grade 1 Unit 4 Lesson 19 479 Practice



Practice 4.19

Name _____

Spiral Review

For Problems 3–10, find the sum or difference.

3 6 + 4 = 10

4 8 + 4 = 12

5 3 + 10 = 13

6 13 + 1 = 14

7 10 − 7 = 3

8 16 − 4 = 12

9 18 − 10 = 8

10 9 − 6 = 3

11 Circle **4** expressions that equal 10.

3 + 5 | 9 + 1 | 3 + 8
7 + 3 | 20 − 10 | 5 + 5

12 Circle **4** equations that show equal values on both sides.

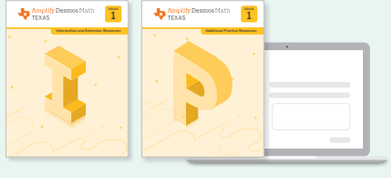
4 + 0 = 14 | 10 + 1 = 11 | 12 = 3 + 15
8 − 3 = 2 + 3 | 1 + 6 = 6 + 1 | 6 − 2 = 3 + 1

Grade 1 Unit 4 Lesson 19 480 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	1	1.9.D
Spiral Review			
Fluency	3–10, 12	1	1.3.D
Fluency	11	1	1.3.C

Need more Practice?



Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).

Center Choice Time

Purpose: Use this time to support students working in Centers, gather formative assessment data, or work with a small group of students on targeted skills.

Presentation Screens

Cover Up

Subtract 1 or 2

Pairs | 15 min | 1.3.D

Students subtract 1 and 2 from a number to develop fluency with subtraction within 10.

Materials

- number cards (2–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Cover Up

Make 10

Pairs | 15 min | 1.3.C, 1.3.D

Students choose a number card and cover the number they can add to make 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 2, Sub-Unit 2.

Use Centers as games to offer fun and engaging ways for students to practice math skills.

GAMES

Greatest of Them All

Two-Digit Numbers

Pairs | 15 min | 1.2.E, 1.2.G

Students create the greatest two-digit number possible to apply place value understanding when comparing numbers.

Materials

- number cards (0–9) **(Manipulative Kit)**
- Directions, Recording Sheet **(Centers Resources)**

Corresponds with the checklist from Unit 4, Sub-Unit 3.

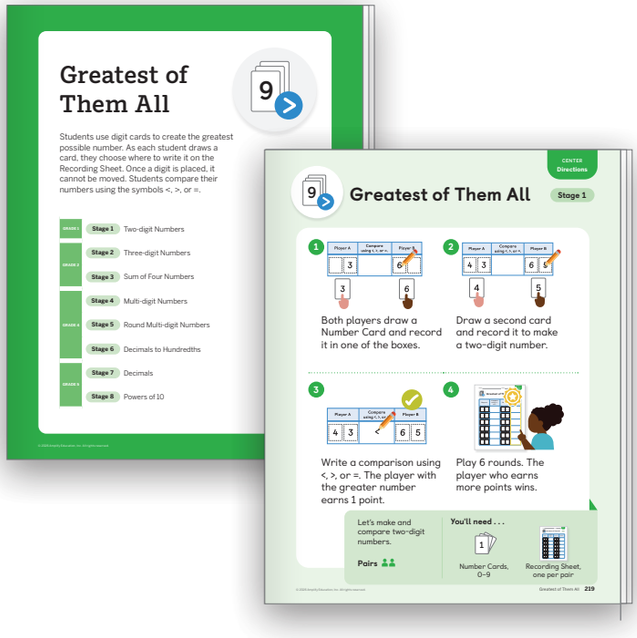
D Differentiation | Teacher Moves

Work with students in their Centers by:

- Reinforcing Center routines and positive interactions.
- Asking probing questions to propel student thinking forward.
- Recording observations using the checklist provided.

Consider pulling a small group of students for:

- Reviewing the lesson's learning goal by using the *Mini-Lesson* or the supports provided in the lesson.
- Reviewing essential skills from prior lessons or units.



Differentiation Use after Lesson 19

Lesson Goal: Recognize charitable giving as another option, other than spending and saving money.

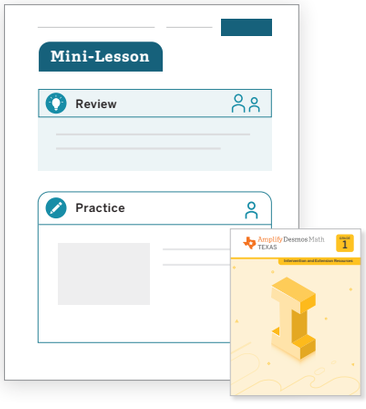
Support

Provide targeted intervention for students by using these resources.

If students recognize donating items as donating money:

Respond:

- Assign the *Exploring Giving Help to Others* Mini-Lesson. | 15 min
- Invite students to discuss the difference between an item and money with a partner.



Strengthen

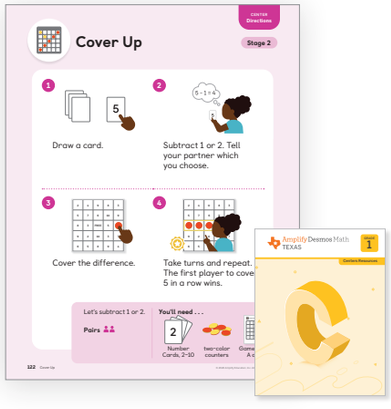
Reinforce students' understanding of the concepts assessed by using these resources.

If students suggest they could donate a wanted item rather than a needed item:

Respond:

- Invite students to play these **Centers**. | 15 min
  Cover Up:
  - *Subtract 1 or 2*
  - *Make 10*

  Greatest of Them All: Two-digit Numbers
- Have students complete **Lesson 19 Practice**. | 15 min
- **Item Bank**



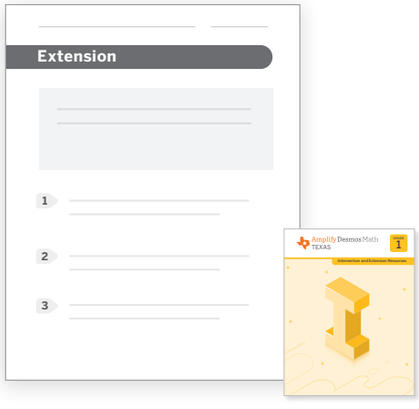
Stretch

Challenge students and extend their learning with these resources.

If students suggest they could donate a needed item rather than a wanted item:

Respond:

- Invite students to explore the **Sub-Unit 4 Extension Activities.** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min

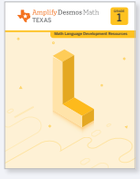


Support, *Strengthen*, and *Stretch* learning by assigning these digital resources that adjust to each student's current level of skill and understanding.
• **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

Math Language Development

EB Use the ***Math Language Development Resources*** for further language support with all your students, including those building English proficiency.

- English/Spanish cognates, e.g., **donating**/**donando**
- Frayer Model templates
- Vocabulary routines



Professional Learning

Reflect on the opportunities students had in this lesson to connect the math to the real world. How can you support students in continuing to reflect on the different ways they can use their money?

Notes:

Watch Your Knowledge Grow (Optional)

Purpose: At the beginning of the unit, students rated their understanding of the concepts they were about to explore in the unit. Return to this page at the end of the unit and invite them to rate their understanding again to see how their knowledge has grown.

Invite students to return to the *Watch Your Knowledge Grow* page at the beginning of their Student Edition for this unit.

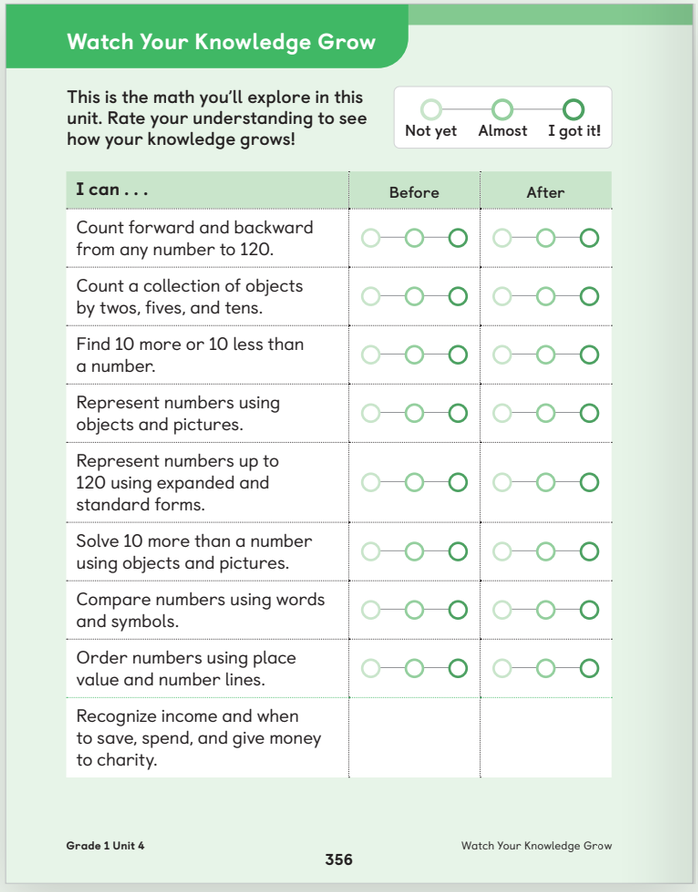
Say, "These were the math concepts that you explored in this unit." Read aloud, or ask a student volunteer to read aloud, the *I can* statements.

Invite students to rate their understanding of each concept now that they have completed the unit. Then invite them to compare their new understanding to how they rated it at the beginning of the unit. Consider pairing students with a partner and inviting them to discuss these questions:

- "What do you notice? What do you wonder?"
- "How did your knowledge grow in this unit?"
- "What questions do you still have?"

EB **Emergent Bilinguals** Consider pairing students with partners who speak the same primary language and inviting them to respond to your questions first in their primary language or using a mixture of their primary language and English. **ELPS 1.E, 2.C, 2.D**

Math Identity and Community Celebrate the growth of student knowledge throughout the unit, as well as any questions that students still may have about the math concepts they explored. Remind students that it is a normal part of learning to continue to have questions. If you displayed a chart in Unit 1 of students' questions, refer back to it and ask if any of their questions from Unit 1 have been answered. Celebrate any new growth in knowledge, as well as any additional questions that may get added to the chart for this unit!



Watch Your Knowledge Grow

This is the math you'll explore in this unit. Rate your understanding to see how your knowledge grows!

Not yet Almost I got it!

I can . . .	Before	After
Count forward and backward from any number to 120.		
Count a collection of objects by twos, fives, and tens.		
Find 10 more or 10 less than a number.		
Represent numbers using objects and pictures.		
Represent numbers up to 120 using expanded and standard forms.		
Solve 10 more than a number using objects and pictures.		
Compare numbers using words and symbols.		
Order numbers using place value and number lines.		
Recognize income and when to save, spend, and give money to charity.		

Grade 1 Unit 4 356 Watch Your Knowledge Grow

Notes:

Assess and Respond

Support, strengthen, and stretch learning by assigning these digital resources that adjust to each student's current level of skill and understanding: • **Boost Personalized Learning** • **Fluency Practice** • **Math Adventures**

End-of-Unit Assessment

Independent | 45 min

Facilitation: Assign the End-of-Unit Assessment to learn about your students' understanding of concepts and skills in this unit. Read aloud the problems to students as needed.

Classroom materials: Provide access to connecting cubes (Problems 7 and 8).

TEKS
(S) = Supporting standard
(R) = Readiness standard

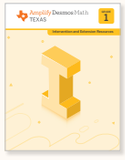
Item Analysis

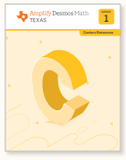
Problem(s)	Concept or skill	Addressed in	DOK	TEKS
1–4	Interpreting base-ten representations of two-digit numbers	Lessons 6, 7	2	1.2.B, 1.2.C 1.1.D
5	Representing the value of a digit in a two-digit number with an expression	Lessons 7, 8	2	1.2.E 1.1.F
6	Finding 10 more than a number within 100	Lesson 4	1	1.2.E 1.1.F
7	Adding multiples of 10 to two-digit numbers	Lesson 4	1	1.2.G, 1.5.E 1.1.F
8	Subtracting multiples of 10 from multiples of 10	Lesson 4	1	1.2.G, 1.5.E 1.1.F
9	Ordering two-digit numbers	Lesson 16	1	1.2.F 1.1.F
10	Recognizing money earned as income	Lesson 17	2	1.9.A, 1.9.B 1.1.A
11	Recognizing that saving money is for future wants and needs	Lesson 18	2	1.9.C 1.1.A
12–13	Considering charitable giving	Lesson 19	2	1.9.D 1.1.A

Assessment Resources

- Student Print Assessments
- Answer Keys and Rubrics

Differentiation Resources





Intervention and Extension Resources includes:
- Mini-Lessons
- Extensions

Centers Resources includes:
- Centers

Practice

If students need further review or practice with concepts or skills from Unit 4, consider the following resources:

- Lesson Practice (Print and Digital)
- Item Bank (Digital)

Name _____ Date _____

End-of-Unit Assessment

Unit 1.4

For Problems 1–4, write the two-digit number that matches the representation.

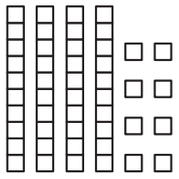
1 30 + 4

answer: 34

2 50 + 11

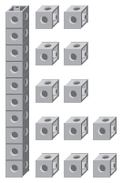
answer: 61

3



answer: 48

4



answer: 22

5 Circle **TWO** expressions that represent 53.

3 + 50 30 + 5 50 + 3 5 + 3

6 Find the sum.

10 + 87 = 97

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Name _____ Date _____

End-of-Unit Assessment (continued)

Unit 1.4

For Problems 7 and 8, find the number that makes the equation true. Sample work shown.

Show your thinking.

7 24 + 30 = 54

24, 34, 44, 54

8 60 − 20 = 40

For Problem 9, order and write the numbers from GREATEST to LEAST.

9 36 5 82 74

82, 74, 36, 5

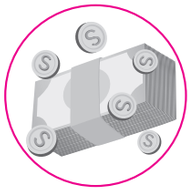
greatest least

Name _____ Date _____

End-of-Unit Assessment (continued)

Unit 1.4

10 Diego earned 10 dollars. He spent the money he earned on movie tickets. Circle the picture that shows Diego's income.



money

movie ticket

11 If you earned 10 dollars, would you SPEND the money or SAVE the money? Why? Sample response shown.

spend

save

Explain your answer.

I would save the money so that I would have more money to buy things in the future.

D Differentiation (End-of-Unit Assessment)

To **Strengthen** and **Stretch** students' learning, refer to the differentiation resources suggested throughout this Unit.

Sub-Unit Goals	Problem(s)	Respond to Student Thinking
Sub-Unit 1: Add and subtract two-digit multiples of 10.	8	**Support** • **Center:** *Cover Up, Add or Subtract 10* • **Teacher Move:** Have students review the problem by counting backward by multiples of 10.
Sub-Unit 2: Understand that the 2 digits of a two-digit number represent amounts of tens and ones.	1–4	**Support** • **Mini-Lessons:** » *Counting a Collection With Tens and Ones* (ML 4.05) » *Representing Two-Digit Numbers With Tens and Ones* (ML 4.06) • **Teacher Move:** Consider revisiting Lesson 9. Provide another opportunity for students to share their strategies for comprising their two-digit number.
	5	**Support** • **Mini-Lesson:** *Matching Representations of Two-Digit Numbers* (ML 4.09) • **Center:** *Counting Collections, Up to 99*
Sub-Unit 2: Mentally find 10 more and 10 less than a two-digit number.	6	**Support** • **Mini-Lesson:** *Adding and Subtracting 10* (ML 4.04) • **Center:** *Cover Up, Add or Subtract 10*
Sub-Unit 2: Add two-digit numbers and multiples of 10.	7	**Support** • **Mini-Lesson:** *Adding and Subtracting 10* (ML 4.04)
Sub-Unit 3: Use place value understanding to compare 2 two-digit numbers, and record comparisons using the >, <, and = symbols.	9	**Support** • **Mini-Lesson:** *Comparing and Ordering One- and Two-Digit Numbers* (ML 4.16) • **Centers:** » *Greatest of Them All, Two-digit Numbers* » *Mystery Number, Two-digit Numbers* EB **Emergent Bilinguals** Invite students to use colored pencils to color code keywords, such as *greatest* and *least*, to help make connections. **(Reading)** ELPS 3.E, 3.F
Sub-Unit 4: Recognize that money is earned income that can be saved or spent.	10	**Support** • **Mini-Lesson:** *Using Income to Buy Goods and Services* (ML 4.17) EB **Emergent Bilinguals** Invite students to review the problem and then provide translations for key terms, such as *earned*, *spent*, and *income*, in their primary language. **(Learning Strategy)** ELPS 3.F
	11–13	**Support** • **Mini-Lesson:** *Exploring the Difference Between Spending and Saving* (ML 4.18) • **Teacher Move:** Invite students to review the problem and then provide additional opportunities for students to share everyday life examples and connections regarding saving and spending. EB **Emergent Bilinguals** Invite students to review the problem. Have them write a revised draft of their explanation using their primary language and then write a second draft in English. Consider pairing students who speak the same primary language. **(Writing)** ELPS 4.C, 4.D, 4.E, 4.F

Notes: