UNIT 1

Beginning Number Concepts

Essential Questions

- What are math tools and how do you use them?
- How do you figure out and show how many?

Unit Story: The First Day of School

In this story, students notice and wonder about mathematical situations and express how they feel about their first day of school.

Focus on the TEKS

TEKS

Addressing

K.2.A, K.2.B, K.2.C, K.2.D, K.2.E

Math Process Standards:

K.1.A, K.1.C, K.1.D, K.1.E, K.1.F

ELPS:

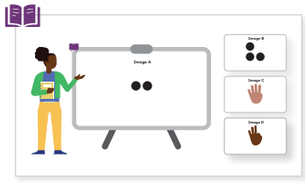
1.B, 1.C, 1.D, 1.E, 1.F, 2.B, 2.C, 2.D, 2.E, 2.F, 3.A, 3.D, 3.E, 3.F

Students explore the concept of doing math by engaging with various math tools and recognizing quantities around them. They work with partners to share and discuss mathematical ideas, improving their problem-solving skills.

Students subitize groups of up to 4 objects and answer "are there enough?" questions about groups of up to 10 objects to deepen their understanding of quantities. They determine and represent the quantity of groups up to 10 objects, and recognize that quantities remain the **same** regardless of the arrangement.

Connections and Coherence

Spotlight on Connecting the Content and Process Standards

Students engage in these Mathematical Process Standards as they . . .	
K.1.A	Apply mathematics to problems arising in everyday life by determining if there are enough pieces of fruits for each lunch box to receive 1 piece. **(Lesson 11, Activity 2)** **TEKS K.2.E**
K.1.C	Select a math tool of their choice to determine the quantity of a group of up to 10 counters. **(Lesson 16, Activity 1)** **TEKS K.2.C**
K.1.D	Use the How Many Do You See? routine and develop fluency by describing the ways they see different arrangements of dots or fingers. **(Lesson 11, Warm-Up)** **TEKS K.2.D** 
K.1.E	Create groups of objects that match the number of dots and then share how they formed their groups with a partner. **(Lesson 9, Activity 2)** **TEKS K.2.B**

Coherence

Prior Learning

- This unit is designed to be accessible to all learners, regardless of their prior experiences, and to honor every students' existing mathematical knowledge and curiosity. Students are encouraged to share their ideas, listen to others, and make connections between their school and home lives to see themselves as productive mathematical thinkers.

Future Learning

- Students will count and compare groups of up to 10 objects and images, recognize and write numerals, and make connections between representations of quantities. **(Kindergarten, Unit 2)** **TEKS K.2.B, K.2.C, K.2.E, K.2.F, K.2.G. K.2.H**
- Students will count the sides and corners of two-dimensional shapes and count and compare the quantities of pattern blocks used to create larger shapes. **(Kindergarten, Unit 3)** **TEKS K.6.A, K.6.C, K.6.D, K.6.E, K.6.F**
- Students will connect counting with addition and subtraction by representing and solving story problems. **(Kindergarten, Units 4 and 5)** **TEKS K.2.C, K.2.I, K.3.A, K.3.B, K.3.C**

See the Connections to Future Learning page for more information, including explanations and examples.

Unit at a Glance

Sub-Unit 1

1 Connecting Cubes

Exploring Math Tools

Explore, build with, and describe the characteristics and uses of connecting cubes.

Building Toward: TEKS K.2.C K.7.A K.6.F K.8.A
TEKS K.1.E

2 Pattern Blocks

Exploring Math Tools

Explore, build with, and describe the characteristics and uses of pattern blocks.

TEKS K.2.A
TEKS K.1.E

3 Solid Shapes

Exploring Math Tools

Explore, build with, and describe the characteristics and uses of solid shapes.

Building Toward: TEKS K.6.B K.6.E
TEKS K.1.C

4 Counters and 5-Frames

Exploring Math Tools

Explore and describe the characteristics and uses of counters and 5-frames.

TEKS K.2.A
TEKS K.1.E

8 Packing Up School Supplies

Subitizing Small Groups

Subitize and identify equivalent groups of up to 4 images, and explain mental strategies for subitizing.

TEKS K.2.D
TEKS K.1.C

9 Skye Goes Shopping

Subitizing and Representing Small Groups

Subitize groups of up to 4 images and represent the quantities with math tools.

TEKS K.2.D K.2.B
TEKS K.1.C, K.1.D, K.1.E

10 Designing Shoes With Skye

Representing Groups With the Same Quantity

Subitize groups of up to 4 images and represent the quantities with drawings.

TEKS K.2.D K.2.B
TEKS K.1.C, K.1.D, K.1.E

11 Are There Enough?

Using One-to-One Matching to Determine if Groups Have the Same Quantity

Create equivalent groups using movements or sounds, and answer "are there enough?" questions about groups of up to 4.

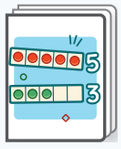
TEKS K.2.D K.2.E
TEKS K.1.A, K.1.D

15 Charlie Helps Coach Kelley

Using Strategies to Keep Track When Counting

Determine the quantities of groups of up to 10 objects, and explain strategies for keeping track while counting.

TEKS K.2.A K.2.C
TEKS K.1.C



16 Ms. Khan's Book Baggies

Using Math Tools to Keep Track When Counting

Determine the quantities of groups of up to 10 objects using various math tools, and explain strategies for keeping track while counting.

TEKS K.2.C K.2.A
TEKS K.1.C

17 Principal Mack's Problem

Different Ways to Represent Quantity

Determine the quantities of groups of up to 10 objects using math tools, and represent a quantity using drawings.

TEKS K.2.D K.2.A K.2.B K.2.C
TEKS K.1.D, K.1.E

18 Sharing More About You

Asking and Answering "How many?" Questions

Ask and answer "how many?" questions of groups of up to 10 objects, and use math tools to represent a real-world object.

TEKS K.2.C K.2.A
TEKS K.1.C

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

18 Lessons: 60 min each

Sub-Unit Quizzes: 10 min each

End-of-Unit Assessment: 60 min

Sub-Unit 2

5 Math Tools

Exploring Math Tools

Use math tools to build pictured objects and fill in simple puzzles, and explain how different math tools are used.

Building Toward: TEKS K.2.C K.6.A
TEKS K.1.C

Assess and Respond

A Quiz: Sub-Unit 1

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

Building Toward: TEKS K.2.A K.1.E

Sub-Unit 2

6 Skye's Style

Recognizing Small Groups

Recognize and describe groups of objects in the classroom, and subitize groups of up to 4 objects or images.

TEKS K.2.D
TEKS K.1.C

7 Matching Groups

Subitize to Identify Groups of Objects With the Same Quantity

Subitize to identify equivalent groups and justify how they are the same and different.

TEKS K.2.D
TEKS K.1.C

Sub-Unit 3

12 Getting Enough

Using One-to-One Matching to Create Groups With Enough Objects

Create equivalent groups using objects and drawings, and answer "are there enough?" questions about groups of up to 10.

TEKS K.2.E
TEKS K.1.A

Assess and Respond

A Quiz: Sub-Unit 2

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

TEKS K.2.B K.2.E
TEKS K.1.F

Sub-Unit 3

13 Sara Helps Out

Using One-to-One Correspondence to Determine a Quantity

Determine the quantities of groups of up to 10 objects by saying 1 number for each object.

TEKS K.2.A K.2.B K.2.C K.2.E
TEKS K.1.A

14 Counting in the Cafeteria

Developing an Understanding of Cardinality and Conservation

Determine the quantities of groups of up to 10 objects, and understand that the last number said tells how many there are in the group.

TEKS K.2.A K.2.B K.2.C K.2.E
TEKS K.1.C, K.1.F

Assess and Respond

A End-of-Unit Interview Checklist

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

TEKS K.2.A K.2.C
TEKS K.1.F

Pacing Considerations

Lesson 17: This lesson can be omitted as students will have more opportunities to represent quantities in Unit 2.

Assessments

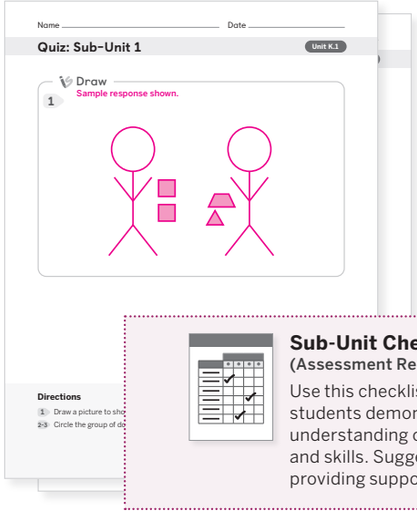
Every unit includes a variety of formative and summative assessments designed to highlight students' understanding of a variety of concepts and skills.

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 assessed on

- **Quiz: Sub-Unit 1:** Building toward K.2.A, K.1.E
- **Quiz: Sub-Unit 2:** K.2.B, K.2.E



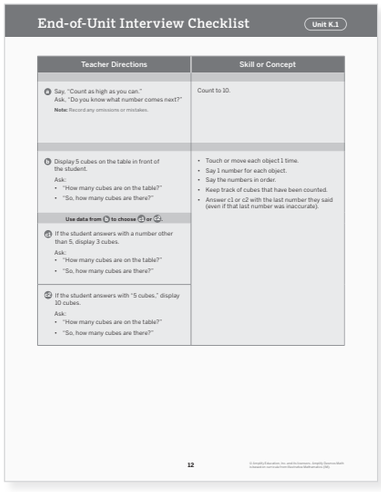
Sub-Unit Checklist
(Assessment Resources)

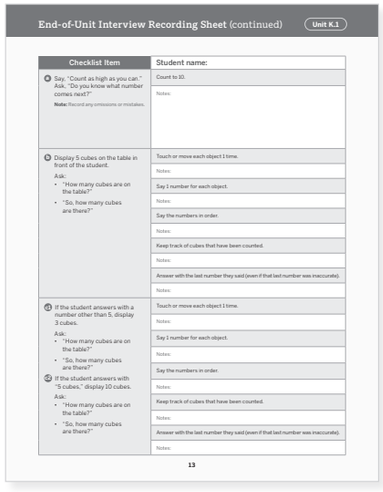
Use this checklist to look for students demonstrating their understanding of key concepts and skills. Suggestions for providing support are included.

End-of-Unit Interview Checklist

Assign the **End-of-Unit Interview Checklist for K.1** to learn about your students' understanding of the concepts and skills in this unit.

TEKS: K.2.A, K.2.C





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 Mini-Lessons	Strengthen Centers	Stretch Extensions

Sub-Unit 1
(Lessons 1–5)
	• *Students will have more opportunities to use math tools in Sub-Units 2 and 3.*	• *Connecting Cubes*
		  • *Explore*
		  • *Build to Match*
		• *Pattern Blocks*
		  • *Explore*
		  • *Puzzles*
		• *Solid Shapes*
		  • *Explore*
		  • *Build to Match*
			• **Sub-Unit 1 Extension Activities**

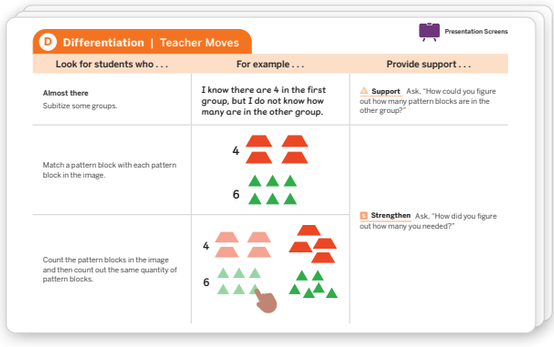
Sub-Unit 2
(Lessons 6–12)
	• **ML 1.07:** *Matching Representations of the Same Quantity*
	• **ML 1.08:** *Identifying Equal Groups*
	• **ML 1.09:** *Showing the Same Number in Different Ways*
	• **ML 1.10:** *Using Fingers or Drawings to Show a Number*
	• **ML 1.11:** *Answering the Question "Are There Enough?"*
	• **ML 1.12:** *Matching to Create Groups With Enough Objects*
		• *Connecting Cubes*
		  • *Build to Match*
		• *Pattern Blocks*
		  • *Puzzles*
			• **Sub-Unit 2 Extension Activities**

Sub-Unit 3
(Lessons 13–18)
	• **ML1.13:** *Counting to Determine the Quantity of a Group*
	• **ML 1.14:** *Exploring How Many Are in a Group*
	• **ML 1.15:** *Exploring Counting Strategies*
	• **ML 1.16:** *Counting With Math Tools*
	• **ML 1.17:** *Representing Quantities Using Drawings*
	• **ML 1.18:** *Asking and Answering "How Many?" Questions*
		• *Connecting Cubes*
		  • *Build to Match*
		• *Pattern Blocks*
		  • *Get and Build*
			• **Sub-Unit 3 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 13**, where students use one-to-one correspondence as they determine the quantity of objects in a group and say 1 number name for each object.



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

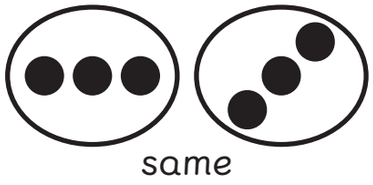
New Vocabulary	Lesson
same	7

Contextual Vocabulary	Lesson
Dance move	11

Spotlight on Vocabulary

Vocabulary Strategy

In this unit, the term **same** is defined with the following image:



Groups can have the **same** amount even if they look different.

Consider using the following vocabulary routine to support students' vocabulary development. **ELPS 1.B, 2.B, 3.F**

Total Physical Response: Invite students to hold up the number of fingers that corresponds to the quantity of classroom materials the teacher shows (e.g., 3 markers, 2 books, or 4 water bottles).

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(s)
MLR5: Co-Craft Questions	3 and 18
MLR7: Compare and Connect	5, 7, 8, 9, 10, 12, 14, 15, and 17
MLR8: Discussion Supports	1–6, 11, 13, 16, and 18

Spotlight on MLR7: Compare and Connect

In **Lesson 12, Activity 1,** students discuss what is the same and different about strategies for determining equivalence to answer the question "are there enough?". **ELPS 1.E, 2.B, 2.D, 2.E**

MLR **MLR7:** This Connect is structured using the *MLR7: Compare and Connect* routine.

Spotlight on Meaningful Language Interactions

Listening

In **Lesson 6, Activity 1,** students listen to their partner's responses describing the differences between groups of objects in the classroom environment in different ways. Then they restate or paraphrase their partner's responses to demonstrate listening comprehension.

EB **Emergent Bilinguals** As students share their responses to the questions, invite them to restate or paraphrase responses they hear using their own words to demonstrate listening comprehension.

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

Speaking

In **Lesson 15, Activity 1**, partners shared their strategies for counting and keeping track of objects in their primary language before discussing these strategies in English.

EB **Emergent Bilinguals** Strategically pair students with partners who speak the same primary language. This will allow them to provide and receive feedback in their primary language before sharing their strategies in English with the class. **ELPS 1.C, 1.E, 2.C, 2.F**

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 4, 9, 13–18)**
- connecting cubes **(Lessons 1, 5, 9, 11, 14, 18)**
- pattern blocks **(Lessons 2, 5, 9, 12, 13, 18)**
- solid shapes **(Lessons 3, 18)**
- two-color counters **(Lessons 4, 9–12, 16, 18)**

Classroom materials

- chart paper **(Lessons 1, 13)**
- egg cartons **(Lessons 15, 16, 18)**
- markers **(Lessons 1, 13)**
- paper bags **(Lessons 2, 11–17)**
- straightedges **(Lesson 7)**

Additional Printable Resources

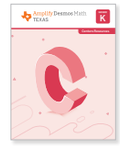
Lesson

PDF
Presentation Screens
Digital

- Activity PDFs* **(Lessons 6, 7, 10–12, 17)**

  *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

- Quiz: Sub-Unit 1
- Quiz: Sub-Unit 2
- End-of-Unit Interview Checklist

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

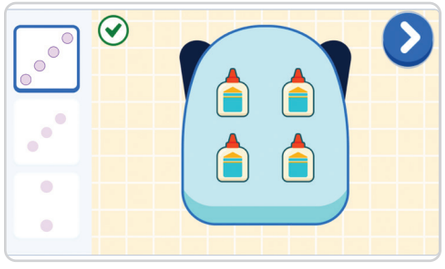
Unit 1 Caregiver Support

Centers

Technology

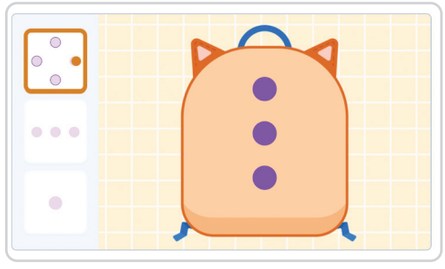
Dynamic, digital interactions are integral to Amplify Desmos Math. Powerful digital tools, such as the teacher dashboard, enable teachers to effectively facilitate rich math discussions.

A Powerful Digital Experience



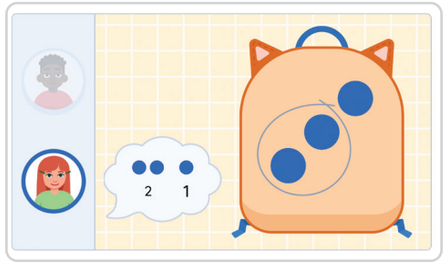
Visualize the Mathematics
(Lesson 8)

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



Receive Responsive Feedback
(Lesson 8)

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 8)

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 Packing Up School Supplies	Students subitize quantities up to 4 that are shown for a short period of time and receive Responsive Feedback when identifying an equivalent group.

Accessibility

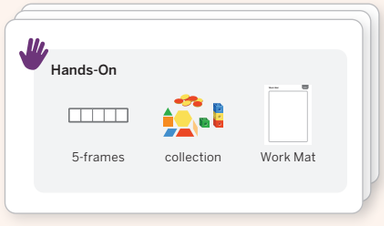
Every lesson is designed using the principles of Universal Design for Learning. Every lesson also includes support suggestions that build on students' strengths.

Universal Design for Learning

Here is one example from a lesson designed to support Action and Expression.

Spotlight on Expression & Communication . . .

Lesson 17, Activity 1: Students are provided with multiple tools to help them articulate their thinking, including objects, drawings, numbers, or words.

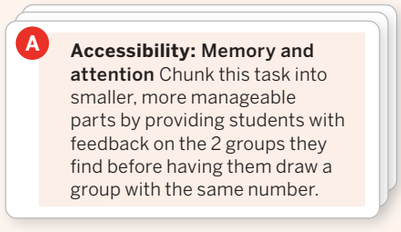


Just-In-Time Accommodations and Supports

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 10, Activity 2: 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 . . .	TEKS
Connecting Cubes	**Explore**	**Lesson 1**	Building Toward K.2.C
	Build to Match	**Lesson 5**	Building Toward K.2.C
	Get and Build	**Lesson 14**	K.2.B, K.2.E
Pattern Blocks	**Explore**	**Lesson 2**	Building Toward K.6.A
	Puzzles	**Lesson 5**	Building Toward K.6.A
	Get and Build	**Lesson 13**	K.2.B, K.2.E
Solid Shapes	**Explore**	**Lesson 3**	Building Toward K.6.B
	Build to Match	**Lesson 3**	Building Toward K.6.B

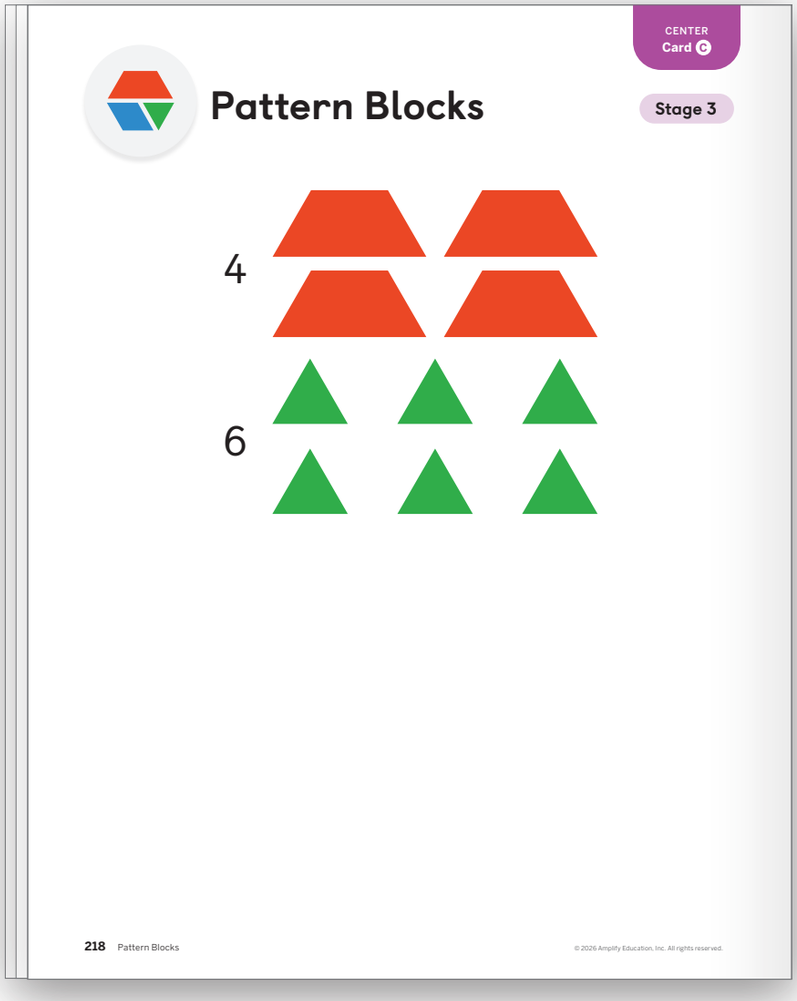
Note: *For the full list of Centers for this grade, please refer to the Centers Resources.*

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 13, Activity 1



Try This

Put on your student hat and complete Card C.

Questions for reflection

- In this activity, there are groups of 4 or less objects that can be subitized.
  - » Why is subitizing an important skill for the work of this grade and future grades?
- This is the first time students are asked to work with groups of more than 4 objects.
  - » How might students' work in this activity demonstrate where they are in the progression of counting skills, such as one-to-one correspondence?

Other lessons that attend to conceptual understanding:

- **Lesson 14:** Students determine the quantity in a group to understand that the last number said tells how many objects there are in the group.
- **Lesson 17:** Students determine how many objects are in a group and represent the quantity.

Mathematical Background

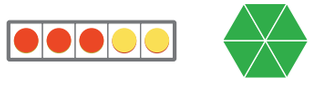
Here is an overview of the content your students will learn in this unit.

Math in Our World

Use Tools Strategically

TEKS K.1.C

- Many objects around us can be modeled using pattern blocks, solid shapes, and connecting cubes.
  - » 5-frames help visually organize counters.
  - » Pattern blocks can be used to create shapes.



Recognize Quantities by Subitizing

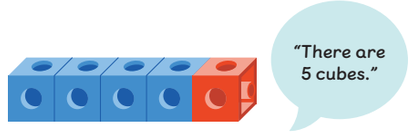
TEKS K.2.D

- Subitizing is the ability to quickly recognize the number of objects in a small group without counting them.

Count Groups of Objects Up to 10

TEKS K.2.C

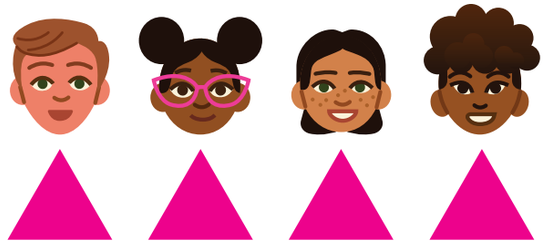
- Counting groups of objects up to 10 provides an opportunity to demonstrate that the final number spoken represents the total number of objects in the set.



Generating Groups of Objects to Match the Same Quantity as a Given Group

TEKS K.2.E

- Creating a group of objects that matches the quantity of a given group provides an opportunity to understand one-to-one matching and the concept of '**same**' quantity.



Connections to Future Learning

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

Working With Math Tools

In this unit, students explore connecting cubes, pattern blocks, 5-frames, and two-color counters, and think about how the tools could be used mathematically. In **Grade 1, Unit 2,** students will use appropriate tools strategically to represent and solve a variety of addition and subtraction story problems.

TEKS: K.1.C

Example:

James and Lola saw some worms. 2 worms were pink and 5 worms were brown. How many worms did they see?

equation: 2 + 5 = 7

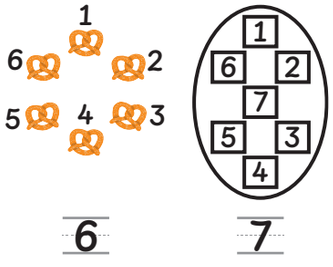
Counting to Compare

In this unit, students begin counting groups of objects, focusing on one-to-one correspondence and cardinality. **In Kindergarten, Unit 2,** students will continue to develop their counting skills, connect quantities with written numbers, and count to compare groups of objects and numbers.

TEKS: K.2.G

Example:

Circle the number or group that shows more.



I counted the pretzels. Then I drew the boxes and I had to draw 1 extra box.

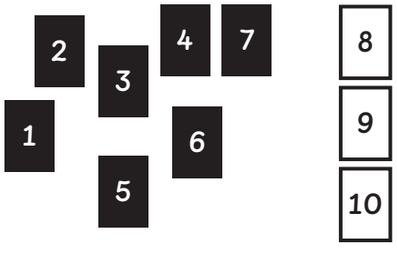
Counting to Add

In this unit, students count to answer "how many?" questions about groups of up to 10 objects. **In Kindergarten, Unit 4,** students will find the total number of objects in 2 groups and connect this counting with addition.

TEKS: K.3.A

Example:

Find the total number of books.



7 + 3

Unit Story

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

About the Story

The story gives a glimpse into the lives of different students as they prepare for the first day of school. Each character is at a different stage of the morning — from waking up to arriving at school. The children and adults are excited about starting school and many of the students express curiosity about the world around them.

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

Math in Our World

As families get ready for school, the illustrations provide opportunities for students to notice and wonder about quantities.

Throughout the unit . . .

- Students count and represent quantities that represent objects found at school.
- Students consider whether groups have enough for given situations at school and at home.

Math Connections

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

- **Lesson 6, Activity 2**
- **Lesson 7, Activity 1**
- **Lesson 8, Activity 1**
- **Lesson 9, Activity 2**
- **Lesson 10, Activity 1**
- **Lesson 11, Activities 1 and 2**
- **Lesson 12, Activity 1**
- **Lesson 13, Activity 2**
- **Lesson 14, Activity 1**
- **Lesson 15, Activity 1**
- **Lesson 16, Activities 1 and 2**
- **Lesson 17, Activities 1 and 2**
- **Lesson 18, Activity 1**

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.

What does good listening look like and sound like during math? **(Lesson 3)**

Charlie knows that a healthy meal helps him do his best. What helps you do your best in math? **(Lesson 14)**

Story Moments

Lesson 6 Activity 2

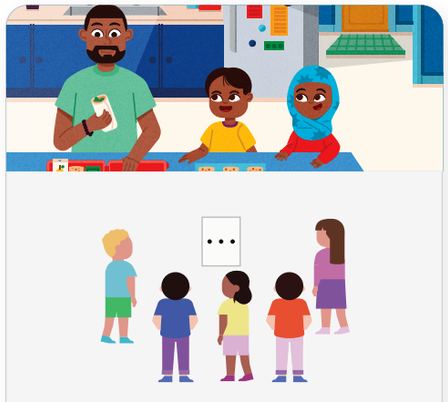
Math Connection

Students identify groups of objects in Skye's room and determine the quantities.

Lesson 10 Activity 1

Math Connection

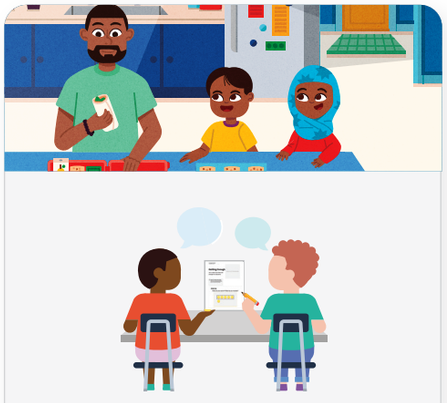
Students help Skye design a pair of polka dot shoes so each shoe has the same number of dots.



Lesson 11 Activity 1

Math Connection

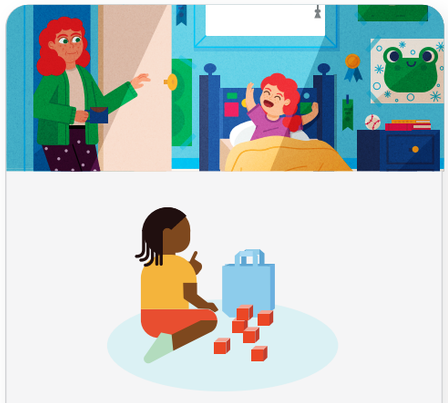
Students have a dance party like Uncle Mo's in which they watch a small quantity of dance moves and represent the same quantity with their own moves.



Lesson 12 Activity 1

Math Connection

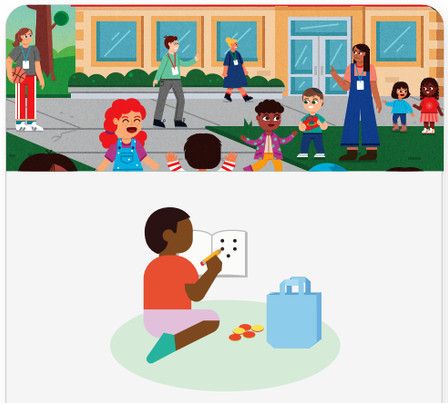
Students use matching or counting strategies to determine if Dez and Lizzy have enough plates for each family member.



Lesson 13 Activity 2

Math Connection

Students count crayons in bags as Sara helps her teacher get ready for the first day of school.



Lesson 17 Activity 1

Math Connection

Students find how many objects are in a group and represent that quantity to help Principal Mack show the teachers how many buses are in the parking lot.

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

Read-Aloud The First Day of School

2

Today at last is your first day of school!
New adventures all await.
Many friends to meet and games to play.
It is going to be just great!

3

Sara wakes up with the sun,
Excited to start her day.
She watches the shapes the sunbeams make
They dance and jump and play.

What other kids will Sara meet
And which will be her friends?
All this she wonders from her bed,
watching as the sunlight bends.

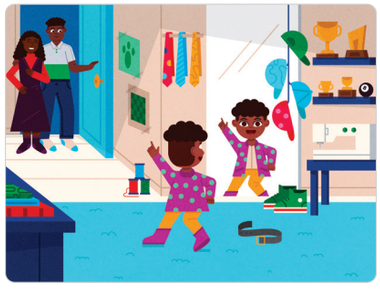
Ask: *"What do you notice? What do you wonder?"*

4

Charlie's ready for his breakfast.
Strong bodies need to eat.
When he has a balanced meal
There's no challenge he can't meet.

From the fridge he picks his favorite
Fruit and eggs and grains
To get the power that he needs
To fuel his growing brain.

5



Skye is working on his outfit,
Smart and full of flair.
Lots of polka dots add spark
To whatever he wants to wear.

Shiny buttons, fancy shoes,
A headband could be cool!
This outfit's sure to turn some heads
On the first day of school.

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

6

Dez and Lizzy patiently wait
While Uncle Mo prepares
A tasty and well-balanced lunch
So both have their equal share.

And when the two kids wave goodbye,
Mo wonders what they'll do.
What fun things will be in store
For his favorite niece and nephew?

7

As Wanda watches from the bus,
She sees so many things
Brand-new houses, beams and bricks
Mail trucks and tire swings.

Look how big this whole world is!
Check out all those tools!
She hopes to learn how it all works
on her first day of school.

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

8

All these kids now come together
To learn and laugh and grow.
There's always more to wonder about,
To add to what they know.

Now it's your turn. Now you're here!
You've made it all this way.
Get ready for a year of fun
On this, your very first school day.

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.

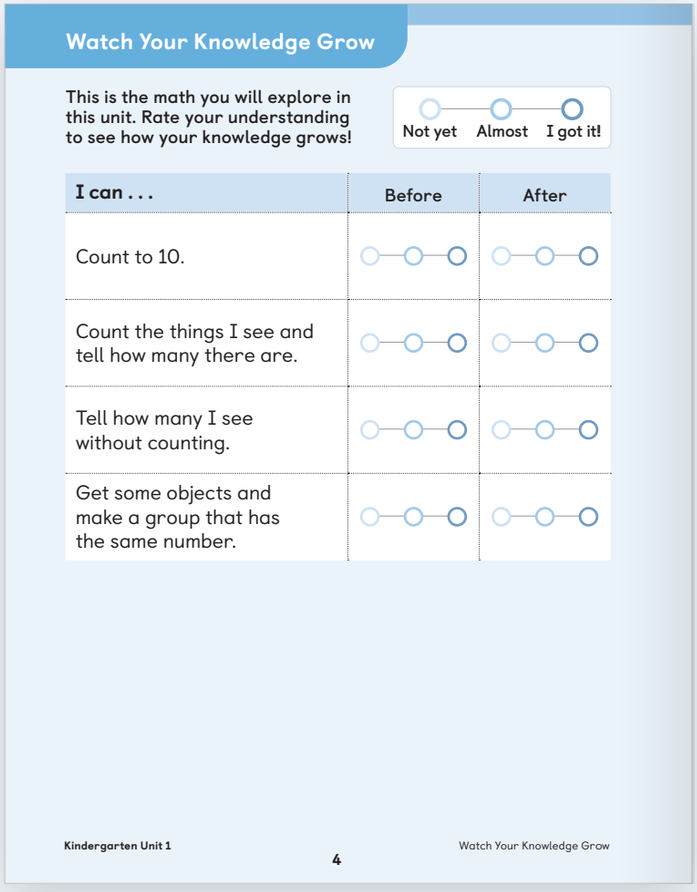
Read aloud the instructions. Let students know they are about to explore these math concepts in the upcoming unit.

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:

- "Have you ever counted before? What/ Why did you count?"
- "Are you able to quickly tell how many there are in a group without counting? If so, what does each group look like?"

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 2.D, 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 will explore in this unit. Rate your understanding to see how your knowledge grows!

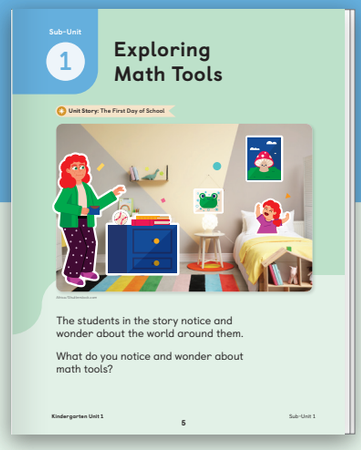
Not yet Almost I got it!

I can . . .	Before	After
Count to 10.		
Count the things I see and tell how many there are.		
Tell how many I see without counting.		
Get some objects and make a group that has the same number.		

Kindergarten Unit 1 4 Watch Your Knowledge Grow

Sub-Unit 1

Exploring Math Tools



Sub-Unit 1 Goals:

- Explore and use math tools.
- Share mathematical ideas with a partner.

Progression of TEKS in Sub-Unit 1

- **Lessons 1–5:** Students explore tools they will use in math activities and Centers throughout the year.

Sub-Unit 1 Progression	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Number and Operations					
TEKS K.2.A	○	●	○	●	○
Building Toward TEKS K.2.C	●	○	○	○	●
Geometry and Measurement					
Building Toward TEKS K.6.A	○	○	○	○	●
Building Toward TEKS K.6.B	○	○	●	○	○
Building Toward TEKS K.6.E	○	○	●	○	○
Building Toward TEKS K.6.F	●	○	○	○	○
Building Toward TEKS K.7.A	●	○	○	○	○
Data Analysis					
Building Toward TEKS K.8.A	●	○	○	○	○

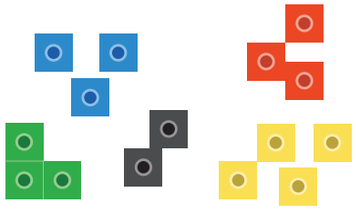
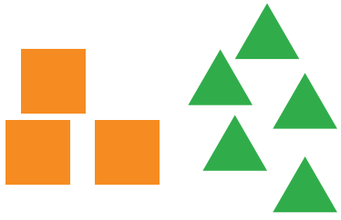
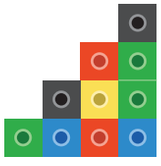
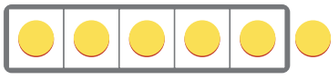
Coming Up Next

- **Sub-Unit 2, Lessons 6–12:**
  - » Number and Operations: **TEKS K.2.B, K.2.D, K.2.E**
- **Sub-Unit 3, Lessons 13–18:**
  - » Number and Operations: **TEKS K.2.A, K.2.B, K.2.C, K.2.E**

Math That Matters Most

Sub-Unit 1: Explore and use tools to reflect mathematical thinking.

Progression of Strategies, Skills, or Language

Progression	For example . . .		
Sorting the tools by attribute.	 I put all the same colors together.	 I put the shapes that look alike in their own pile.	
Making or finding patterns with the tools.	 I put them in a line — blue, yellow, blue, yellow, blue, yellow.		
Building with the tools.	 I made a tower.	 I made stairs with my cubes.	 I put them together to make a flower.
Determining the quantities of tools.	 I have 1, 2, 3, 4, 5, 6 counters.	 I have 3 cubes.	

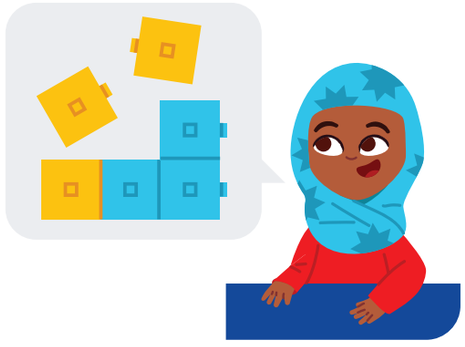
Unit 1
Lesson
1

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

Connecting Cubes

Exploring Math Tools

Let's explore and build with connecting cubes.



Key Concepts

Today's Goals

1. **Goal:** Explore and build with connecting cubes.
2. **Language Goal:** Describe characteristics and uses of connecting cubes. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students build an understanding of the characteristics and uses of connecting cubes as they explore the cubes and share their ideas about this math tool. This lesson allows students to learn the structure and routines of a math lesson, create norms for classroom learning, build habits of discussion, and begin to build a mathematical community. Exploring the characteristics and uses of connecting cubes prepares students to use connecting cubes to create representations in order to communicate and record mathematical ideas in future units. **(TEKS K.1.E)**

Prior Learning

Students come to Kindergarten with a range of mathematical experiences, concepts, and skills to share. This unit is designed to be accessible to all learners regardless of their prior experience.

Future Learning

In Lesson 2, students will explore, use, and describe pattern blocks. Throughout Sub-Unit 1, students will continue to explore and discuss mathematical tools.

TEKS

Building Toward

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Building Toward: **K.6.F, K.7.A, K.8.A**

Math Process Standards: K.1.E

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

Integrating Rigor in Student Thinking

- Students explore connecting cubes to build their **conceptual understanding** of the various ways they can use this tool to represent mathematical situations.

Building Math Identity

I can be all of me in math class.
Sara feels excited about starting school. How do you feel on the first day of school?

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

Lesson at a Glance 60 min

TEKS: K.1.E, Building Toward K.2.C, K.6.F, K.7.A, K.8.A

Warm-Up

Whole Class | 15 min

Students are introduced to the **Notice and Wonder** routine, while 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.

Materials: Unit Story, *The First Day of School*

Activity 1

Pairs | 10 min

Students are introduced to a new math tool, connecting cubes, and use the **Notice and Wonder** routine to share what they notice and wonder about the tool.

Manipulative Kit: connecting cubes
Materials: chart paper, markers, *Math Tools* chart, Visual Display PDF, *Math Tools Images*
Additional Prep Prepare: *Math Tools* chart; Cut out: Image A of connecting cubes from the *Math Tools Images* PDF

Activity 2

Pairs | 15 min

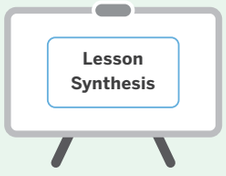
Students are introduced to the Center, *Connecting Cubes, Explore*. They build an object of their choice using connecting cubes and talk with their partner about the object they built. In the Connect, students share what they built with the class.

Manipulative Kit: connecting cubes
Materials: Directions, Work Mat

Synthesis

Whole Class | 5 min

Students review and reflect on what it means to be part of a math community.

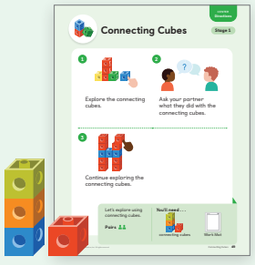


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build an understanding of math tools.

- Connecting Cubes



Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

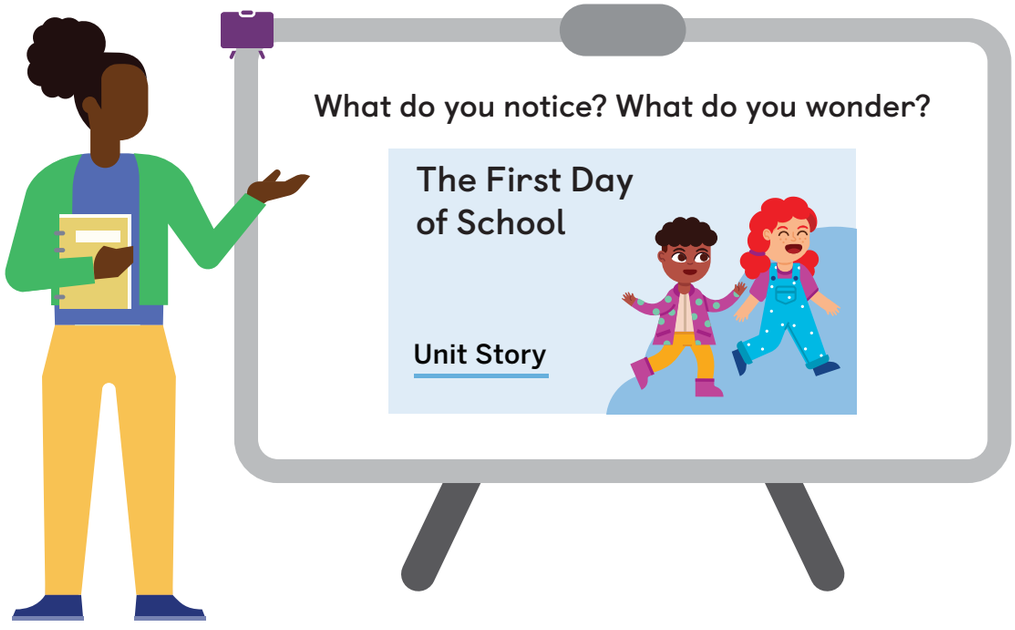
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 15 min

Presentation Screens

Warm-Up Notice and Wonder

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



1 Launch

Display the cover of the Unit Story, *The First Day of School*.

Use the Think-Pair-Share routine. Activate students' background and prior experiences by asking, "What do you know about school? What are some things that happen on the first day of school?"

Read aloud the Unit Story, found on pages 1M–1N of this Teacher Edition, while displaying the illustrations on Screens 2–8.

Say, "We will use a routine called **Notice and Wonder**. I will display something. You will share what you notice, or see, and what it makes you wonder, or what you are curious about." ELPS 1.E

Pause on Screens 3, 5, and 7. Ask, "What do you notice? What do you wonder?"

Students might say . . . ELPS 2.B

I notice stickers on Sara's bed.

I notice a lot of polka dots in Skye's room.

I wonder what the trophies are for in Skye's room.

I wonder what the building that Wanda sees will be.

2 Connect

Display Screen 8 of the Unit Story.

Use the Think-Pair-Share routine. Ask, "What in this story makes you excited for math class?"

Record students' responses as they share.

Say, "In this unit, you will explore math tools, notice and wonder about math all around you, and learn different strategies for counting groups of objects."

Pairs | 10 min

Activity 1 Notice and Wonder: Connecting Cubes

Purpose: Students develop mathematical curiosity by examining connecting cubes and sharing what they notice and wonder about them.

Presentation Screens

Materials

Manipulative Kit:

- Display connecting cubes and distribute connecting cubes to each student.

Classroom materials:

- Use chart paper and markers to prepare the *Math Tools* chart before the activity.
- Add Image A from the Visual Display PDF, *Math Tools Images* **(Lesson Resources)** to the *Math Tools* chart during the Connect.

1 Launch

Say, "A tool is an object that you use to help you do a task. Wanda observed that there were tools, such as bricks and wooden beams, being used to build new houses in her neighborhood. There are many tools, even in school. Tools we use to help us do math are *math tools*."

A **Accessibility: Memory and attention** Activate background knowledge by asking students if they have ever used a tool at home or have observed their parents using tools. Invite students to share what tools they are familiar with and why they are useful.

Display a collection of connecting cubes.

Say, "We will notice and wonder about these math tools."

MLR **MLR8: Discussion Supports — Sentence Frames** ELPS 1.E, 2.C, 2.E

- Before students begin, read aloud and display these sentence frames for them to use as they share. Say, "When you share your thinking with your partner, you can use the sentence starters to help you."
- "I notice . . ."
- "I wonder . . ."

Use the Notice and Wonder routine.

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 color, shape, size, or how many there are?"
- Ask, "What questions do you have about this math tool?"

3 Connect

Display the *Math Tools* chart. Add the image of the connecting cubes from the Visual Display PDF, *Math Tools Images*.

Say, "This math tool is called connecting cubes."

Say, "We will use a routine called Think-Pair-Share. First, I will ask you a question and you will have time to think about your answer by yourself. Next, you will pair up to share your thinking. Then some students will share their thinking with the whole class." ELPS 1.E, 2.F

Use the Think-Pair-Share routine. Ask, "What did you notice or wonder about the connecting cubes?"

Key Takeaway: Say, "You will work with connecting cubes again in the next activity."

In this Activity . . .

Students discuss what they notice and wonder about connecting cubes.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I notice there are different colors.*
- *I notice that they can be stuck together.*
- *I wonder how tall I can stack them.*

Hands-On

connecting cubes

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Describe the characteristics or quantity of the cubes.	Some are red and some are yellow. or They are shaped like blocks. or I have a lot of red and only a little blue.	S **Strengthen** Ask, "What else do you notice or wonder about this math tool?"
Wonder about the cubes.	How can I use this math tool? or How many are there?	

Pairs | 15 min

Introducing the Center
Connecting Cubes, Explore

Purpose: Students explore, describe, and build with connecting cubes to develop an understanding of the characteristics and uses of math tools.

Presentation Screens

Materials

Manipulative Kit:

- Display connecting cubes and distribute connecting cubes to each student.

Centers Resources:

- Display the Directions.
- Distribute a Work Mat to each student.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Connecting Cubes, Explore*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Connecting Cubes* today."
- **Use the Think-Pair-Share routine.** Ask, "What could you do or make with connecting cubes?"
- **Say**, "First, my partner and I each build an object using connecting cubes." Build a simple object.
- **Say**, "Next, we each describe what we did or made with the connecting cubes." Describe the object.
- **Say**, "When we are done, we each build new objects and share about our objects again."

MLR8: Discussion Supports — Sentence Frames ELPS 1.E, 2.C, 2.E

- Before students begin, read aloud and display the sentence frame. Say, "When you share your thinking with your partner, you can use the sentence starter to help you."
- "I used connecting cubes to . . ."

2 Monitor

Use the Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "Did you see or hear your classmates sharing something that you want to try with the connecting cubes?"
- Ask, "What do you need to do to get started?"

3 Connect

Invite pairs to share what they did or made with the connecting cubes.

Ask, "How did each student use the connecting cubes?"

Emergent Bilinguals Use wait time to allow students to process the question before responding. Encourage them to ask for additional details, as needed. ELPS 1.E, 2.F

Key Takeaway: Say, "Connecting cubes are one of the many tools you will use during math this year."

In this Activity . . .

Students describe what they can do or make with solid shapes and ask each other questions about what they made.

Oral activity: No writing expected.

Students might say . . .

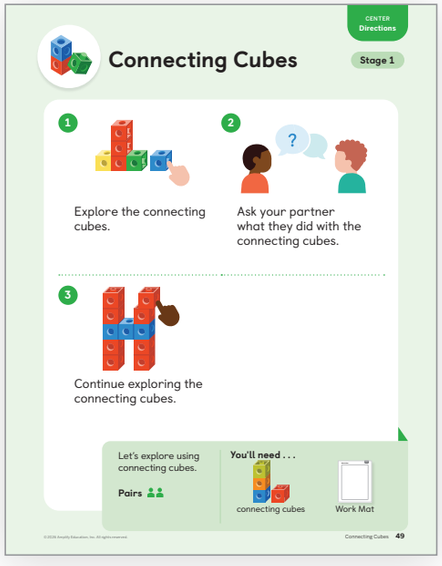
Sample responses:

- I used connecting cubes to build a robot.
- I built a really tall tower.
- I counted my connecting cubes. I have 5 cubes.
- I made groups of the same color.

Hands-On

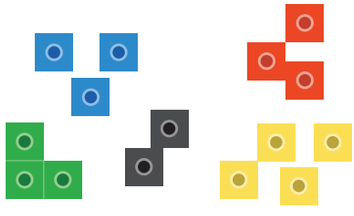
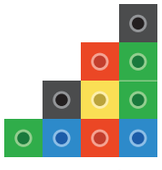
connecting cubes

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

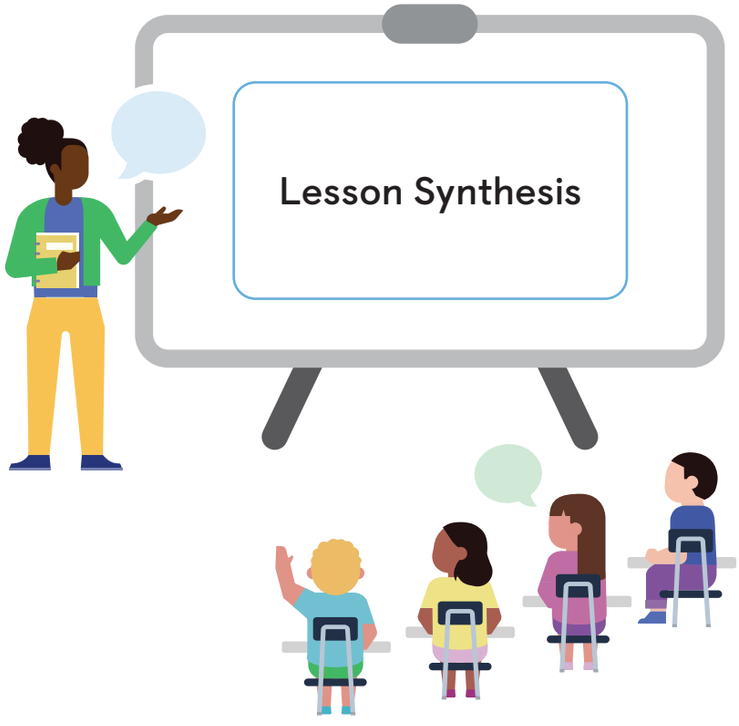
Look for students who . . .	For example . . .	Provide support . . .
Sort the cubes.	 I put all of the same colors together.	**S Strengthen** Ask, "You sorted the cubes by color. What could you build with the cubes?"
Build with the cubes.	 I made stairs with my cubes.	**S Strengthen** Ask, "You built something with the cubes. What else could you build or do with the cubes?"
Count the cubes.	 I have 3 cubes.	**S Strengthen** Ask, "You figured out how many cubes there were. What else could you do with the cubes?"

Whole Class | 5 min

Synthesis

Lesson Takeaway: Connecting cubes are tools used to do math.

Presentation Screen



Ask, "What did it look like and sound like to do math together today?"

Say, "We worked together, explored a new math tool, talked with partners, and shared our thinking with the whole class."

Ask, "What are some things you thought about and shared in math class today?"

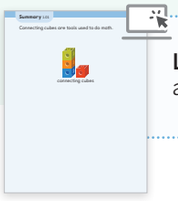
Say, "It is important to share your math ideas with others. In the next lesson, we will learn about a new math tool and think about why it is important to listen to each other."

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

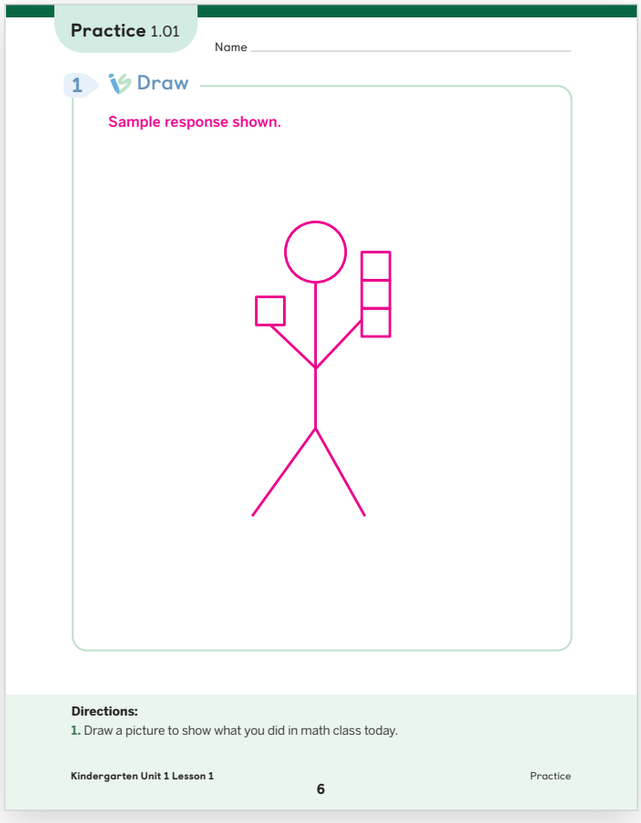
Practice

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.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Practice 1.01

Name _____

1 Draw

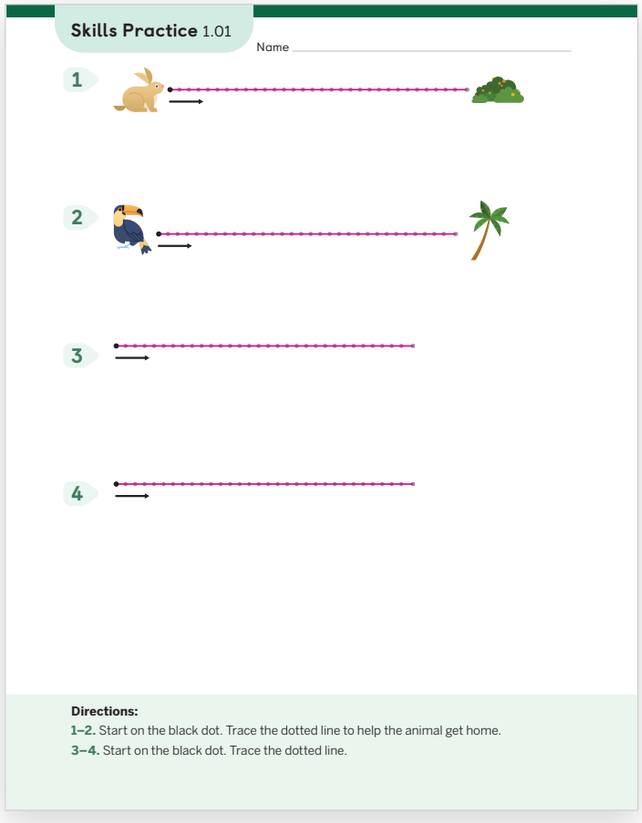
Sample response shown.

Directions:

1. Draw a picture to show what you did in math class today.

Kindergarten Unit 1 Lesson 1 6 Practice

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Skills Practice 1.01

Name _____

1

2

3

4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get home.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-lesson			
	1	1	K.1.3*

*This problem builds toward the standard shown.

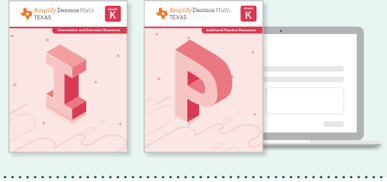
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-lesson			
	1–4	1	K.2.B*

*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).



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 16

Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Explore

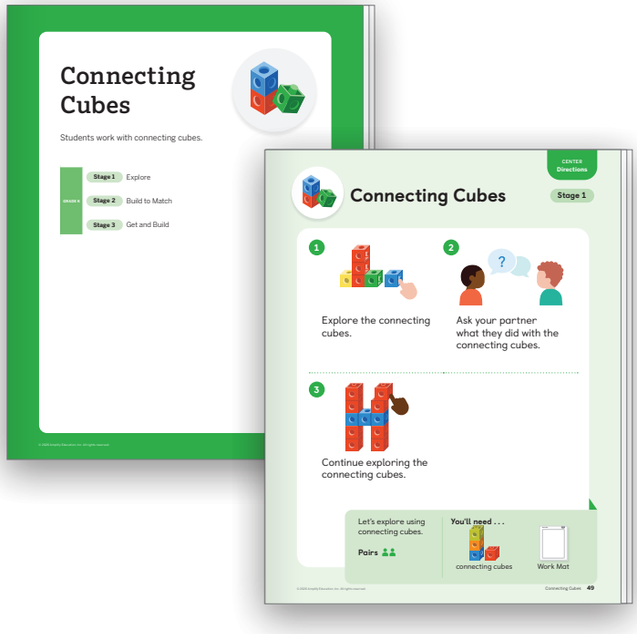
Pairs | 15 min | Building Toward K.2.C

Students explore and use connecting cubes and describe them to their partners.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.



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

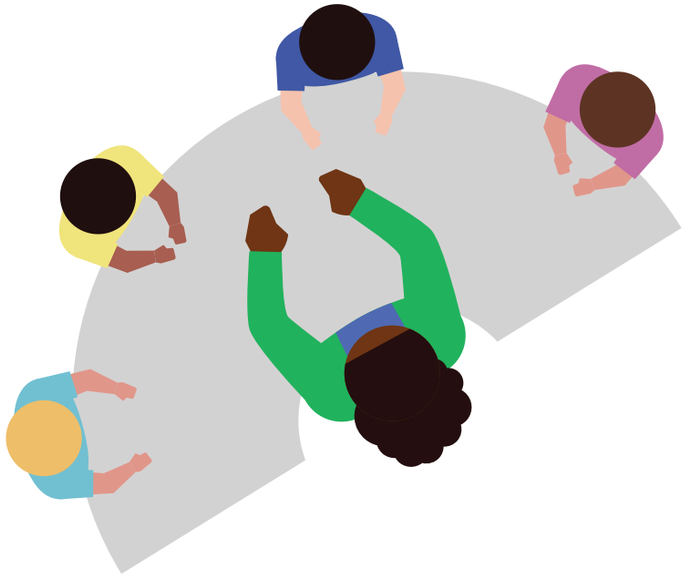
D Differentiation | Teacher Moves

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.



Differentiation Use after Lesson 1

Lesson Goal: Explore and build with connecting cubes.

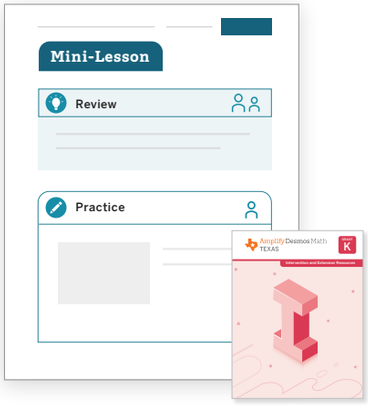
Support

Provide targeted intervention for students by using these resources.

If students notice and wonder about the cubes:

Respond:

- Students will have more opportunities to work with connecting cubes in Lesson 5.



Strengthen

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

If students sort the cubes:

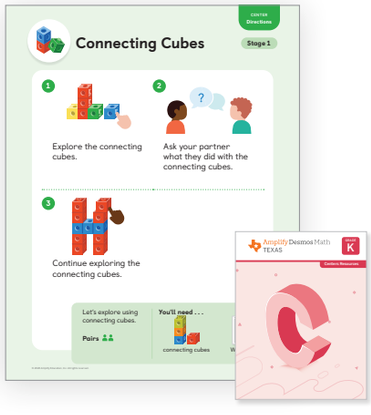
Respond:

- Invite students to play this **Center**. | 15 min
  Connecting Cubes: Explore
- Have students complete **Lesson 1 Practice.** | 15 min

If students build with the cubes:

Respond:

- Invite students to play this **Center**. | 15 min
  Connecting Cubes: Explore
- **Item Bank**



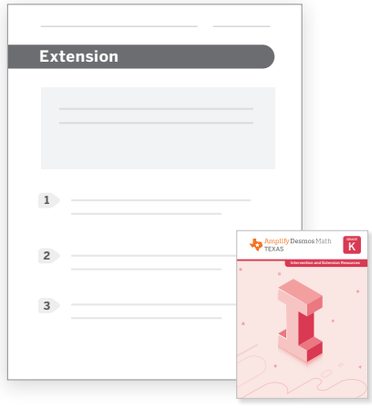
Stretch

Challenge students and extend their learning with these resources.

If students count the cubes:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 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
- Vocabulary routines

Professional Learning

What did you hear when students reflected on the importance of sharing math ideas with others?

Unit 1
Lesson
2

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

Pattern Blocks

Exploring Math Tools

Let's explore and build with pattern blocks.

Key Concepts

Today's Goals

1. **Goal:** Explore and build with pattern blocks.
2. **Language Goal:** Describe the characteristics and uses of pattern blocks. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students build an understanding of the characteristics and uses of pattern blocks as they explore and share their ideas about this math tool. They are not expected to know the names of the shapes at this time because they will explore and describe shapes in Unit 3. Students continue to form a mathematical community by building habits of discussion, practicing active listening, and applying the norms for classroom learning. Investigating the characteristics and uses of pattern blocks prepares students to use pattern blocks to create representations in order to communicate and record mathematical ideas in future units. **(TEKS K.1.E)**

Prior Learning

In Lesson 1, students explored, used, and described connecting cubes.

Future Learning

In Lesson 3, students will explore, describe, and build with solid shapes.

Integrating Rigor in Student Thinking

- Students explore pattern blocks to build their **conceptual understanding** of the various ways they can use this tool to represent mathematical situations.

TEKS

Addressing

K.2.A

Count forward and backward to at least 20 with and **without objects.**

Math Process Standards: K.1.E

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

Building Toward

K.6.A

K.6.E

Building Math Identity

We are a math community.
How would you like our math community to look, sound, and feel?

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

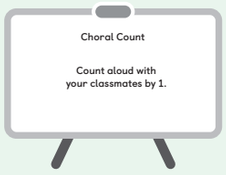
Lesson at a Glance 60 min

TEKS: K.1.E, K.2.A

Warm-Up Fluency

Whole Class | 10 min

Students are introduced to the **Choral Count** routine, in which they count as a class from 1 to 5. This routine helps to develop fluency in oral counting to 100 by 1, which is a goal for the end of the year.



Activity 1

Pairs | 10 min

Students are introduced to a new math tool, pattern blocks, and use the **Notice and Wonder** routine to share what they notice and wonder about the tool.

Manipulative Kit: pattern blocks
Materials: *Math Tools* chart (from Lesson 1), paper bags, Visual Display PDF, *Math Tools Images* (from Lesson 1)
Additional Prep Cut out: Image B of pattern blocks from the *Math Tools Images* PDF (from Lesson 1); Assemble: bags with 1 of each shape of pattern block

Activity 2

Pairs | 15 min

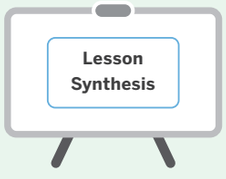
Students are introduced to the Center, *Pattern Blocks*, *Explore*. They build an object of their choice using pattern blocks. Then partners ask each other questions about the objects they built. In the Connect, students share what they built with the class.

Manipulative Kit: pattern blocks
Materials: Directions, Work Mat

Synthesis

Whole Class | 10 min

Students review and reflect on what it means to be a partner in a community with other math learners.

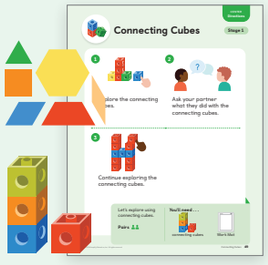


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of math tools and learn the structure of Center Choice Time.

- Connecting Cubes
- Pattern Blocks



Math Language Development

Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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.

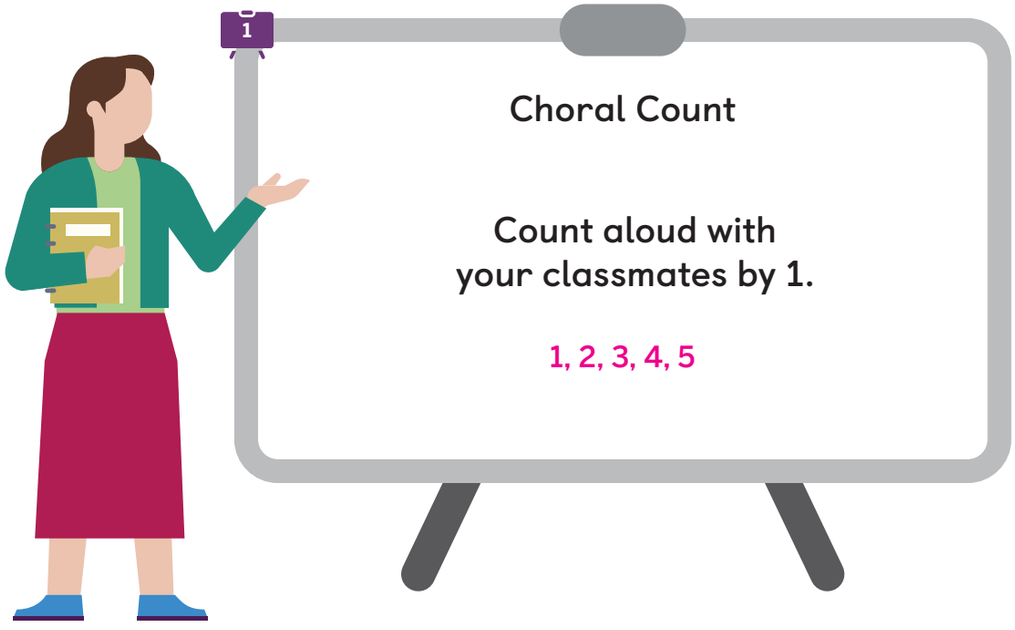
Whole Class | 10 min

Warm-Up Choral Count

Fluency

Purpose: Students count by 1 to develop fluency with oral counting to 5.

Presentation Screen



1 Launch

Use the Choral Count routine.

Say, "Let's count by 1, starting at 1 and ending at 5."

2 Connect

Display each number as students count.

Say, "Let's count again by 1, starting at 1 and ending at 5." Repeat the count using different voices or movements to engage students.

Pairs | 10 min

Activity 1 Notice and Wonder: Pattern Blocks

Purpose: Students develop mathematical curiosity by examining pattern blocks and sharing what they notice and wonder about them.

Presentation Screens

Materials

Manipulative Kit:

- Assemble bags **(Classroom materials)** with one of each shape of the pattern blocks, one bag per pair.
- Display pattern blocks and distribute one bag of pattern blocks to each pair.

Classroom materials:

- Add Image B from the Visual Display PDF, *Math Tools Images* **(Lesson Resources)** to the *Math Tools* chart during the Connect.

1 Launch

Display a collection of pattern blocks.

Say, "We will notice and wonder about a new math tool with a partner. A good math partner listens carefully to what their partner says. We can be sure we hear and understand our partner by repeating what our partner tells us."

Use the Notice and Wonder routine.

MLR **MLR8: Discussion Supports — Active Listening** ELPS 1.E, 2.C, 2.D, 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.

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 . . .

- Point to 1 pattern block and ask, "What do you notice about this tool?"
- Ask, "I notice that it has a pointy part. What else do you notice?"

A **Accessibility: Visual-spatial processing** Guide visualization by inviting students to point to a specific part of the image that inspired what they noticed or wondered.

3 Connect

Display the *Math Tools* chart. Add the image of the pattern blocks from the Visual Display PDF, *Math Tools Images*.

Say, "These tools are called pattern blocks."

Invite students to share what their partner noticed and wondered about the pattern blocks.

Key Takeaway: Say, "You will work with pattern blocks again in the next activity."

In this Activity . . .

Students discuss what they notice and wonder about pattern blocks and restate their partner's ideas.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I notice that they are each a different color.*
- *I wonder if they can all be put together.*
- *You noticed that they are different shapes.*

Hands-On

pattern blocks

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Notice characteristics of pattern blocks.	*I see different shapes.* or *I see a red shape, a blue shape, a green shape, and a yellow shape.* or *I see a shape with 4 corners.*	S **Strengthen** Ask, "What else do you notice? What else do you wonder?"
Wonder about pattern blocks.	*What is the name of the yellow shape?* or *How many shapes are there?* or *What do you do with the shapes?*	

Pairs | 15 min

Introducing the Center
Pattern Blocks, Explore

Purpose: Students explore, build with, and describe pattern blocks to develop an understanding of the characteristics and uses of math tools.

Presentation Screens

Materials

Manipulative Kit:

- Display pattern blocks and distribute pattern blocks to each pair.

Centers Resources:

- Display the Directions.
- Distribute a Work Mat to each student.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Pattern Blocks, Explore*.
While demonstrating: ELPS 1.C

- **Say**, "You will play *Pattern Blocks* today."
- **Use the Think-Pair-Share routine.** Ask, "What is something you could do or make with pattern blocks?"
- **Say**, "First, my partner and I each build an object using pattern blocks." Build a simple object.
- **Say**, "Next, my partner and I ask each other a question about our objects."
- **Ask**, "What question could you ask about my object?"
- **Say**, "Then we each build new objects and ask each other questions again."

2 Monitor

Use the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "Did you hear your classmates share something that you want to try with the pattern blocks?"
- Ask, "What do you need to get started?"

3 Connect

Say, "Another way you can be a good math partner is to ask questions to make sure you understand what your partner says. You will share what you built with a new partner. Then your partner will ask you questions to make sure they understand you."

EB Emergent Bilinguals ELPS 1.E, 2.C, 2.E

Before students share, read aloud and display these sentence frames for them to use as they ask clarifying questions:

- "What do you mean by ___?"
- "Can you tell me more about how you used pattern blocks to ____?"

Invite students to share with a new partner what they built with the pattern blocks.

Key Takeaway: Say, "Pattern blocks are one of the many tools you will use during math this year."

In this Activity . . .

Students explore, build with, and share something they did or made with pattern blocks.

Oral activity: No writing expected.

Students might say . . .

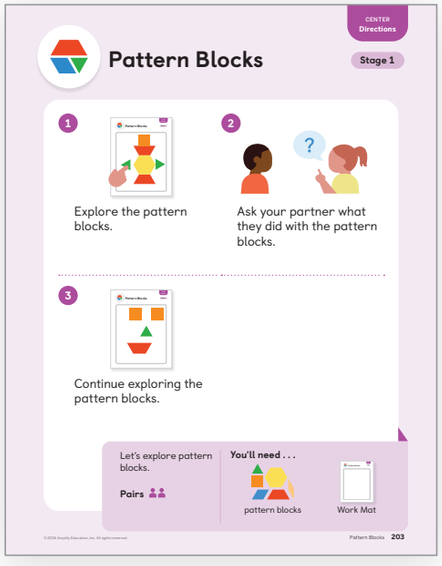
Sample responses:

- *I used pattern blocks to make piles with the same color.*
- *I used my pattern blocks to make a flower.*

Hands-On

pattern blocks

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

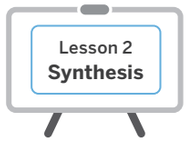
Look for students who . . .	For example . . .	Provide support . . .
Sort the pattern blocks.	*I made a pile of the blue shapes and a pile of the yellow shapes.*	**S Strengthen** Ask, "You sorted the pattern blocks by color. What else could you do with this tool?"
Make patterns with the pattern blocks.	*I put them in a line — blue, yellow, blue, yellow, blue, yellow.*	**S Strengthen** Ask, "You made a pattern with the pattern blocks. What else could you do with this tool?"
Build with the pattern blocks.	*I put them together to make a flower.*	**S Strengthen** Ask, "You made a new shape with the pattern blocks. What else could you do with this tool?"

Whole Class | 10 min

Synthesis

Lesson Takeaway: Pattern blocks are tools used to do math.

Presentation Screen



Ask, "What does being a good listener look like and sound like to you?"

Say, "When we listen to a partner, we can repeat what they said in our own words and ask our partner questions to learn more."

Ask, "What did you hear your partner share in math class today?"

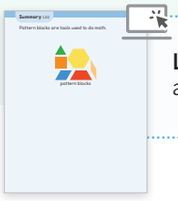
Say, "In the next lesson, you will learn about a new math tool and continue working with a partner."

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

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.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.

Practice 1.02

Name _____

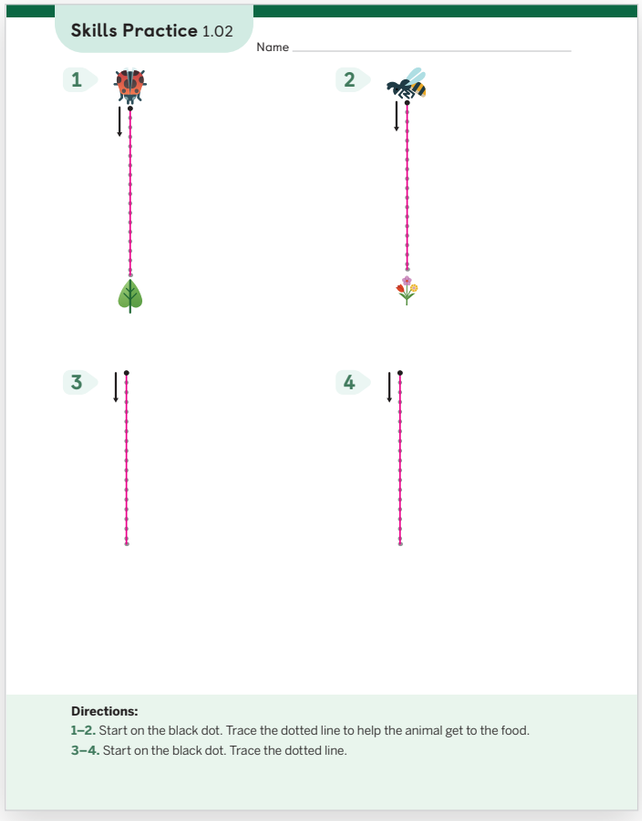
1 Draw

Sample response shown.

Directions:

1. Draw a picture of how you would like partner work to look, sound, or feel.

Kindergarten Unit 1 Lesson 2 7 Practice



Skills Practice 1.02

Name _____

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.1.E*

*This problem builds toward the standard shown.

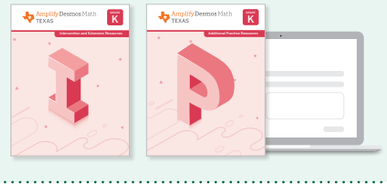
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

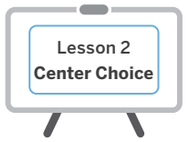
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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.

Connecting Cubes

Explore

Pairs | 15 min | Building Toward K.2.C

Students explore and use connecting cubes and describe them to their partners.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Explore

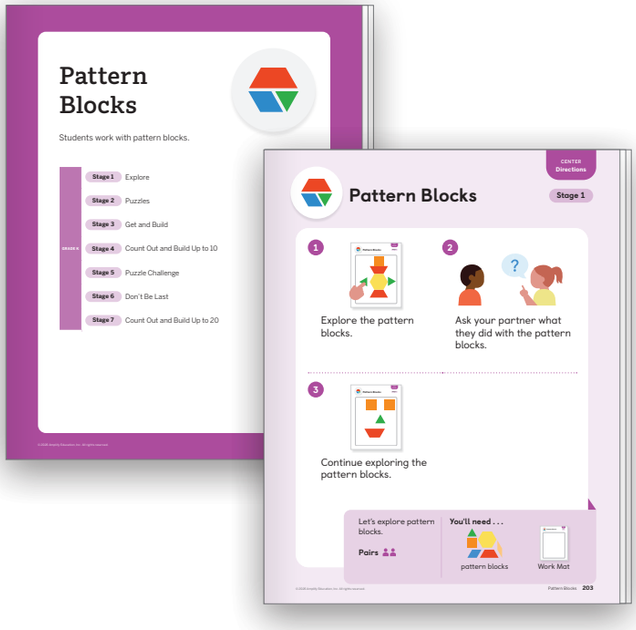
Pairs | 15 min | Building Toward K.6.A

Students explore and use pattern blocks and describe them to their partners.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.



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

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 the prior lesson.

Differentiation Use after Lesson 2

Lesson Goal: Explore and build with pattern blocks.

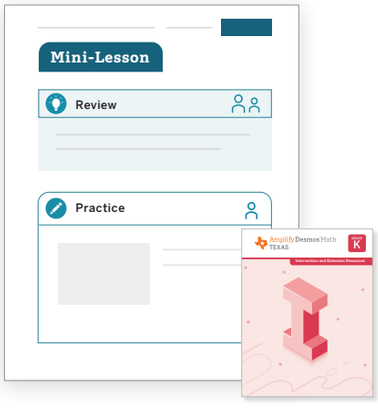
Support

Provide targeted intervention for students by using these resources.

If students notice and wonder about the pattern blocks:

Respond:

- Assign the *Title* **Mini-Lesson**. | 15 min
- Students will have more opportunities to work with pattern blocks in Lesson 5.



Strengthen

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

If students sort the pattern blocks:

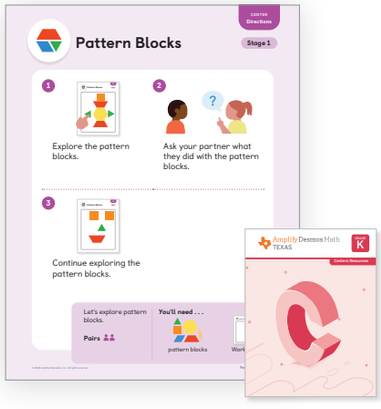
Respond:

- Invite students to play this **Center**. | 15 min
  Pattern Blocks: Explore
- Have students complete **Lesson 2 Practice.** | 15 min

If students make patterns with the pattern blocks:

Respond:

- Invite students to play this **Center**. | 15 min
  Pattern Blocks: Explore
- Have students complete **Lesson 2 Practice.** | 15 min
- **Item Bank**



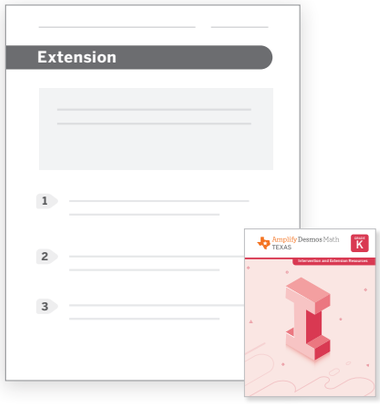
Stretch

Challenge students and extend their learning with these resources.

If students build with the pattern blocks:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 min



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- Vocabulary routines

Professional Learning

Reflect on who participated in math class today. What assumptions are you making about those who did not participate? How could you support them in being seen and heard in tomorrow's math class?

Unit 1
Lesson
3

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

Solid Shapes

Exploring Math Tools

Let's explore and build with solid shapes.

Key Concepts

Today's Goals

1. **Goal:** Explore and build with solid shapes.
2. **Language Goal:** Describe the characteristics and uses of solid shapes. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students build an understanding of the characteristics and uses of solid shapes as they explore, build with, and share their ideas about this math tool. They are not yet expected to know the names of the shapes or use specific mathematical terms when describing them, as they will continue to explore and describe solid shapes in Unit 7. Students continue to build mathematical community by asking their partner questions and responding to their partner's questions and ideas. Students select which solid shapes to use to build objects, which prepares them to select tools to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lessons 1 and 2, students explored and built with connecting cubes and pattern blocks.

Future Learning

In Lesson 4, students will explore two-color counters and 5-frames.

Integrating Rigor in Student Thinking

- Students explore solid shapes to build their **conceptual understanding** of the various ways they can use this tool to represent mathematical situations.

TEKS

Building Toward

K.6.B

Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world.

Also Building Toward: **K.6.E**

Math Process Standards: K.1.C

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

Building Math Identity

I can be all of me in math class.
What does good listening look like and sound like during math?

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

Lesson at a Glance 60 min

TEKS: K.1.C, Building Toward K.6.B, K.6.E

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about solid shapes.

Additional Prep Cut out: Image C of solid shapes from the *Math Tools Images* PDF (from prior lessons)

Activity 1

Pairs | 15 min

Students are introduced to the Center, *Solid Shapes, Explore*, in which they explore and build with solid shapes. They generate ideas for what they could do or make with solid shapes. Then partners co-craft questions to ask each other about what they built.

Manipulative Kit: solid shapes
Materials: Directions, *Math Tools* chart (from prior lessons), Work Mat

Activity 2

Pairs | 15 min

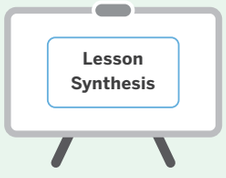
Students are introduced to the Center, *Solid Shapes, Build to Match*. They represent a picture with tools for the first time, and consider how to respond to their partner's ideas and share their own ideas. In the Connect, students discuss different ways to represent objects with the new tool.

Manipulative Kit: solid shapes
Materials: Directions, Pictures (A–J), Work Mat

Synthesis

Whole Class | 10 min

Students review and reflect on what they have learned about working with a partner, including how to respond to a partner's ideas.

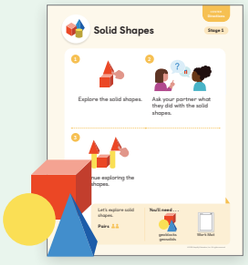


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Solid Shapes



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

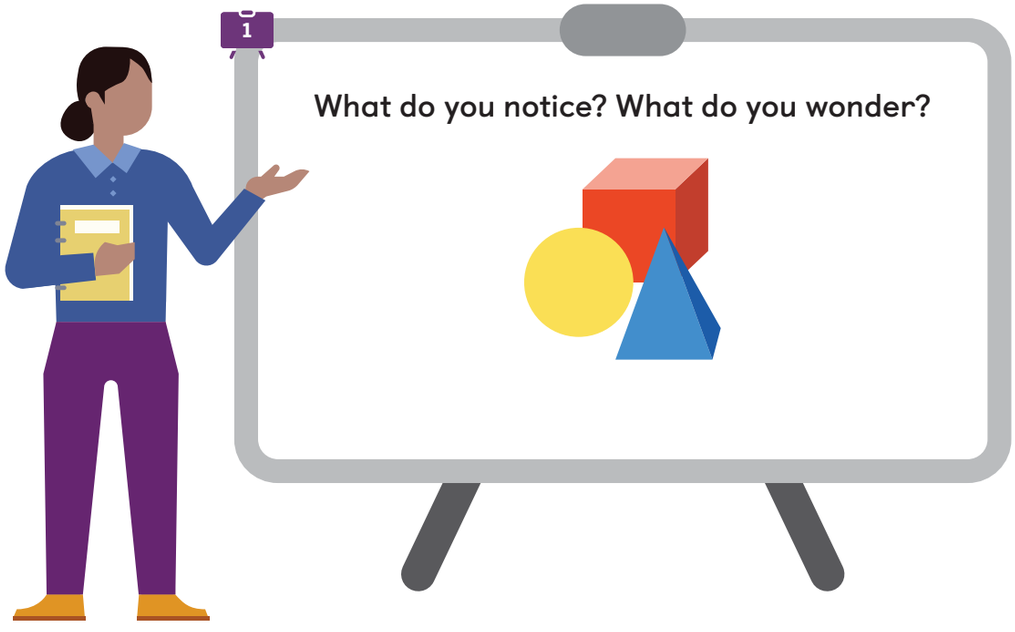
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screens

Warm-Up Notice and Wonder

Purpose: Students develop mathematical curiosity by examining solid shapes and sharing what they notice and wonder.



1 Launch

Display a collection of solid shapes or give each student a few solid shapes.

Use the Notice and Wonder routine.

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

2 Connect

Display the *Math Tools* chart. Add Image C, which is an image of solid shapes, from the Visual Display PDF, *Math Tools Images*. Label the image with the term *solid shapes*.

Say, "These tools are called *solid shapes*. Next, you will explore solid shapes."

Students might say . . . ELPS 2.B

I notice there are different shapes.

I notice one looks like a triangle and one looks like a square.

I wonder if that one is a ball.

I wonder if I can stack all of the blocks to make a tower.

Pairs | 15 min

Introducing the Center
Solid Shapes, Explore

Purpose: Students explore, build with, and describe solid shapes to develop an understanding of the characteristics and uses of math tools.

Presentation Screens

Materials

Manipulative Kit:

- Display solid shapes and distribute solid shapes to each student.

Classroom materials:

- Display the *Math Tools* chart during the Connect.

Centers Resources:

- Display the Directions.
- Distribute a Work Mat to each student.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Solid Shapes, Explore*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Solid Shapes* today."
- **Use the Think-Pair-Share routine**. Ask, "What is something you could do or make with the solid shapes?"
- **Say**, "First, my partner and I each build an object using solid shapes." Build a simple object.
- **Say**, "Next, my partner and I ask each other questions about our objects."

MLR **MLR5: Co-Craft Questions** ELPS 2.B, 2.C, 2.D, 2.F

Have students work with their partner to come up with 1–2 questions they could ask about what they did or made with the shapes.

EB **Emergent Bilinguals** Foster students' metalinguistic awareness by using a think-aloud strategy to model how to craft math questions after students have had time to come up with their own questions. ELPS 1.E, 2.F

Say:

- "Explore the solid shapes. Ask your partner questions about what they did or made and answer their questions about what you did or made."
- (if not yet mentioned) "Your questions might include colors, types of shapes, number of shapes, or other ideas."

2 Monitor

Use the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What ideas do you have about what you could do or make with the solid shapes?"
- Ask, "Did you hear your classmates share something that you want to try with the solid shapes?"

3 Connect

Display the *Math Tools* chart.

Invite pairs to share with another pair what they did or made with the solid shapes.

Ask, "What do you notice about this tool now that you have explored it together?"

Key Takeaway: Say, "You will work with solid shapes again in the next activity."

In this Activity . . .

Students describe what they can do or make with solid shapes and ask each other questions about what they made.

Oral activity: No writing expected.

Students might say . . .

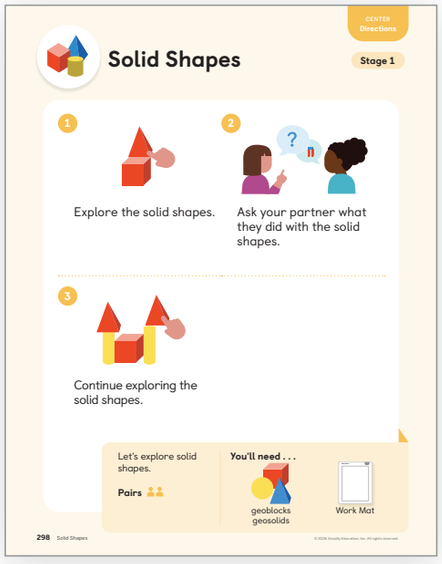
Sample responses:

- *I notice this shape rolls.*
- *I am using solid shapes to build a house.*
- *What colors are your shapes?*
- *How many shapes did you use?*

Hands-On

solid shapes

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Make towers or buildings with the solid shapes.	*I made a tower.*	S **Strengthen** Ask, "You stacked the solid shapes. What else could you do with the shapes?"
Count the solid shapes.	*I lined them up and counted 1, 2, 3, 4.*	S **Strengthen** Ask, "You counted the solid shapes. What else could you do with the shapes?"
Describe the characteristics of the solid shapes.	*This round part of the shape makes it roll.*	S **Strengthen** Ask, "You noticed part of the solid shape. What else do you notice?"
Compare the solid shapes.	*This block is big and this one is small.*	S **Strengthen** Ask, "You noticed how the solid shapes are different. What else do you notice?"
Sort the solid shapes.	*I made a pile of the balls and a pile of the boxes.*	S **Strengthen** Ask, "You sorted the solid shapes into 2 groups. What else could you do with the shapes?"

Pairs | 15 min

Let's Play
Solid Shapes, Build to Match

Purpose: Students use solid shapes to build objects pictured on cards and describe their representations to become familiar with other possible uses of solid shapes.

Presentation Screens

Materials

Manipulative Kit:

- Display solid shapes and distribute solid shapes to each pair.

Centers Resources:

- Display the Directions and Pictures (A–J).
- Distribute Pictures (A–J) and a Work Mat to each pair.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Solid Shapes, Build to Match*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Solid Shapes* again."
- **Say**, "First, I choose a picture." Display Picture A.
- **Say**, "Next, I talk with my partner about what shapes we need to build the object in the picture."
- **Use the Think-Pair-Share routine.** Ask, "What shapes do you think we will need?"
- **Say**, "Now, my partner and I work together to build what is in the picture using solid shapes. When we finish, we choose another picture and start again." Build the object.

Ask, "How could you let your partner know what you think about their idea?"

MLR **MLR8: Discussion Supports — Sentence Frames** ELPS 1.E, 2.C, 2.E
Before students begin, read aloud and display these sentence frames for them to use as they work.

- "I like that idea and I think ___."
- "I have a different idea. I think ___."

2 Monitor

Use the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Point to a picture and ask, "What do you notice?"
- Ask, "Which shapes could you use to match the picture?"

A **Accessibility: Conceptual processing** Guide processing by having pairs name what they will build and brainstorm a general plan for building it before choosing specific solid shapes to use.

EB **Emergent Bilinguals** Strategically pair students with partners who speak the same primary language. Once students have developed their thinking, encourage them to share in English with another pair. ELPS 1.E, 2.C, 2.D

3 Connect

Invite pairs to share with another pair what they built with the solid shapes.

Use the Think-Pair-Share routine. Ask, "What new ways of using solid shapes did you think about or see when working with your partner?"

Ask:

- "Did you see a group that used different solid shapes to make the same picture as you?"
- "How did they build the same object using different solid shapes?"

Key Takeaway: Say, "You used solid shapes to build and match a picture. You will continue working with solid shapes during math this year."

In this Activity . . .

Students discuss strategies with their partners about how to use solid shapes to build objects pictured on cards and describe their representations.

Oral activity: No writing expected.

Students might say . . .

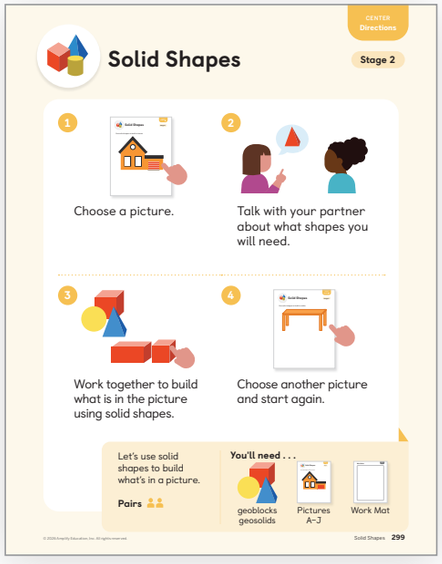
Sample responses:

- *I like that idea, and I think we can use this shape for the roof.*
- *I have a different idea. I think we should use these shapes to make a door.*

Hands-On

solid shapes

Activity PDF



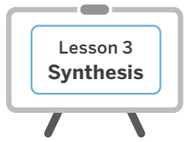
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Create their own object.	*I made a monster truck.*	**S Strengthen** Say, "You put the solid shapes together to make something new." Point to the picture and ask, "How could you put the solid shapes together to make this?"
Use any shape to make the object in the picture.	*I saw a castle, so I used the blocks that look like bricks.*	**S Strengthen** Point to the picture and ask, "You used the solid shapes to make a castle. How could you add to your castle to make it look like this castle?"
Choose shapes strategically to match the picture.	*The castle has a pointy top, so I used the shapes that look like ice cream cones.*	**S Strengthen** Ask, "You used the solid shapes to show what you saw in the picture. What else could you do or make with this tool?"

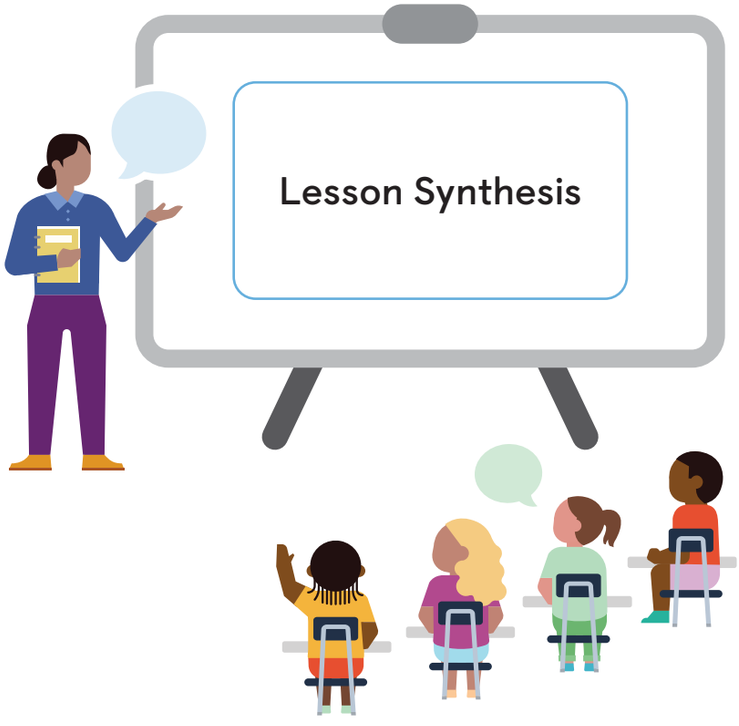
Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: Solid shapes are tools used to do math.



Say, "You and your partner asked questions and shared ideas as you did math today."

Ask:

- "What ideas did you have that were the same as your partner's ideas?"
- "What ideas did you have that were different from your partner's ideas?"
- "What did you do when you had different ideas?"

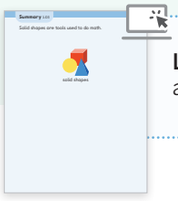
Say, "In the next lesson, you will learn about 2 new math tools and continue working with a partner."

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

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.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.

Practice 1.03

Name _____

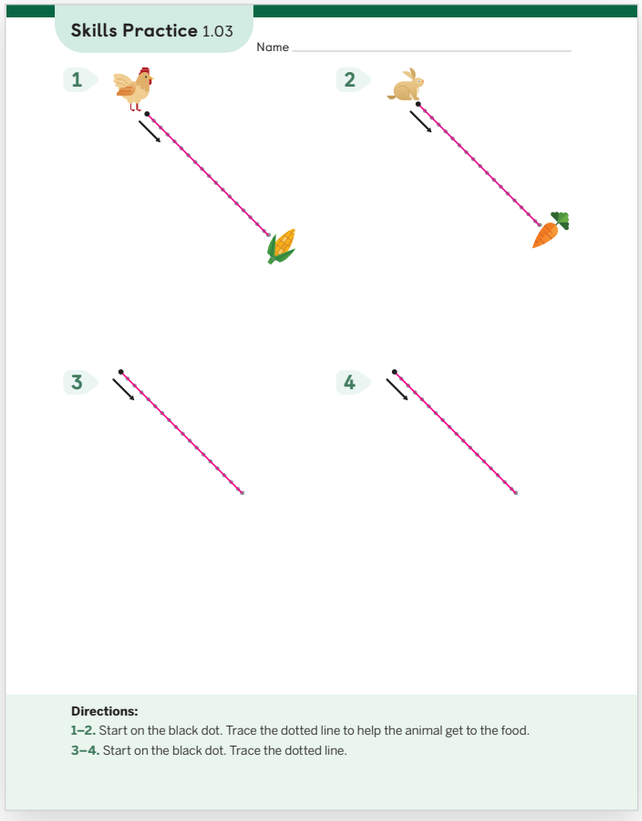
1 Draw

Sample response shown.

Directions:

1. Draw a picture to show what math tools you used today and how you used them.

Kindergarten Unit 1 Lesson 3 8 Practice



Skills Practice 1.03

Name _____

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.1.C*

*This problem builds toward the standard shown.

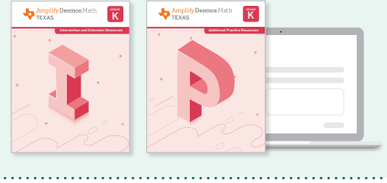
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



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 9

Short on time? Consider omitting the Center Choice Time.

Solid Shapes

Explore

Pairs | 15 min | Building Toward K.6.B

Students use solid shapes to build objects of their choice.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Solid Shapes

Explore

Pairs | 15 min | Building Toward K.6.B

Students work together to build pictures using solid shapes.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Pictures (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

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

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.

Differentiation Use after Lesson 3

Lesson Goal: Explore and build with solid shapes.

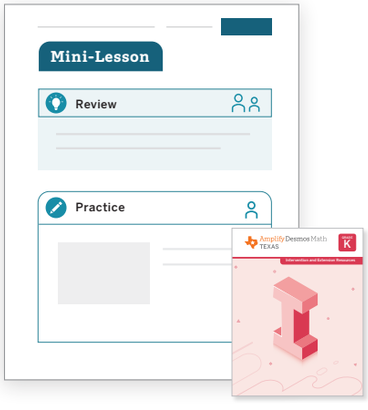
Support

Provide targeted intervention for students by using these resources.

If students notice and wonder about the solid shapes:

Respond:

- Students will have more opportunities to work with solid shapes in Lessons 11 and 12.



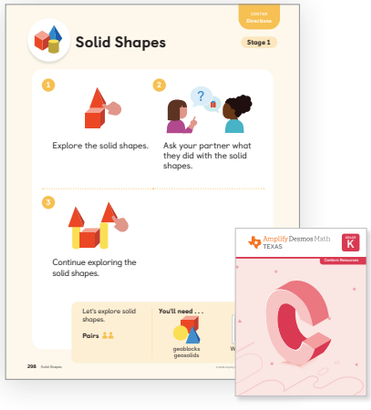
Strengthen

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

If students use any shape to make the object in the picture or create their own object:

Respond:

- Invite students to play these **Centers**. | 15 min
  Solid Shapes:
  - *Explore*
  - ***Build to Match***
- Have students complete **Lesson 3 Practice.** | 15 min
- **Item Bank**



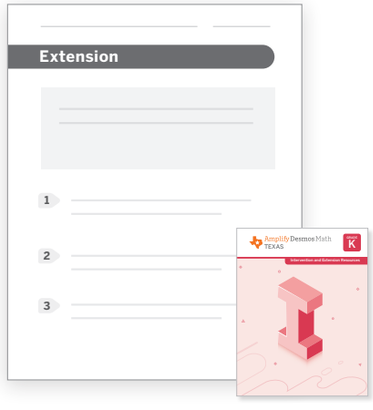
Stretch

Challenge students and extend their learning with these resources.

If students choose shapes strategically to match the picture:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 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
- Vocabulary routines

Professional Learning

Students shared their thoughts multiple times in this lesson. What have you noticed about the language students use? What support could you offer to students who struggle to communicate their ideas orally?

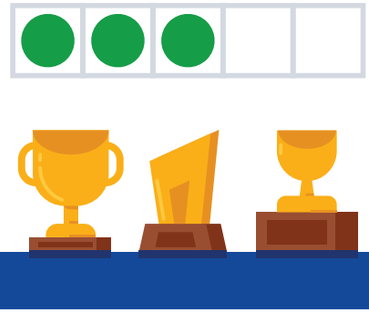
Unit 1
Lesson
4

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

Counters and 5-Frames

Exploring Math Tools

Let's explore and use counters and 5-frames.



Key Concepts

Today's Goals

1. **Goal:** Explore and use two-color counters and 5-frames.
2. **Language Goal:** Describe the characteristics and uses of two-color counters and 5-frames. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students build an understanding of the characteristics and uses of two-color counters and 5-frames as they explore and share their ideas about these math tools. The 5-frame is a common and useful tool for helping students explore number relationships using 5 as a benchmark. This lesson provides an opportunity to discover what students already know about concepts of number as they prepare to explore early number concepts in Sub-Unit 2. Investigating the characteristics and uses of two-color counters and 5-frames prepares students to use these tools to create representations in order to communicate and record mathematical ideas in future units. **(TEKS K.1.E)**

Prior Learning

In Lessons 1–3, students explored and used connecting cubes, pattern blocks, and solid shapes to build objects of their choice.

Future Learning

In Lesson 5, students will use math tools to build pictured objects and fill in puzzles.

Integrating Rigor in Student Thinking

- Students explore two-color counters and 5-frames to build their **conceptual understanding** of the various ways these tools can be used to represent mathematical situations.

TEKS

Addressing

K.2.A

Count forward and backward to at least 20 with and **without objects.**

Math Process Standards: K.1.E

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

Building Toward

K.2.C

Building Math Identity

I can be all of me in math class.
We will work with partners every day in math class. What do you want your partners to know about you?

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

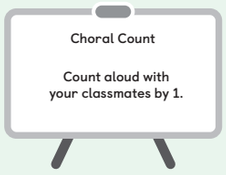
Lesson at a Glance 60 min

TEKS: K.1.E, K.2.A

Warm-Up Fluency

Whole Class | 10 min

Students use the **Choral Count** routine, in which they count as a class from 1 to 5. This routine helps to develop fluency in oral counting to 100 by 1, which is a goal for the end of the year.



Activity 1

Pairs | 10 min

Students are introduced to new math tools, counters and 5-frames, and use the **Notice and Wonder** routine to share what they notice and wonder about them.

Manipulative Kit: 5-frames, two-color counters
Materials: *Math Tools* chart (from prior lessons), Visual Display PDF, *Math Tools Images* (from prior lessons)
Additional Prep: Cut out: Image D of counters and Image E of 5-frames from the *Math Tools Images* PDF (from prior lessons)

Activity 2

Pairs | 15 min

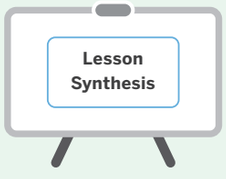
Students consider why 5-frames are called 5-frames and then explore two-color counters and 5-frames with a partner. They compare the new tools to other tools they have explored to better distinguish between their uses.

Manipulative Kit: 5-frames, two-color counters

Synthesis

Whole Class | 10 min

Students review and reflect on what they have learned about math tools and their uses. The *Math Tools* chart is displayed for students to recall the different tools they have used.

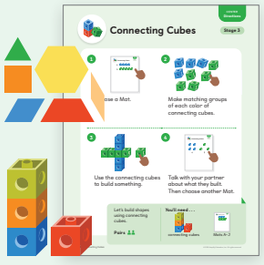


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of math tools and learn the structure of Center Choice Time.

- Connecting Cubes
- Pattern Blocks



Math Language Development

Emergent Bilinguals

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

- ✓ Cognates
- ✓ 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.

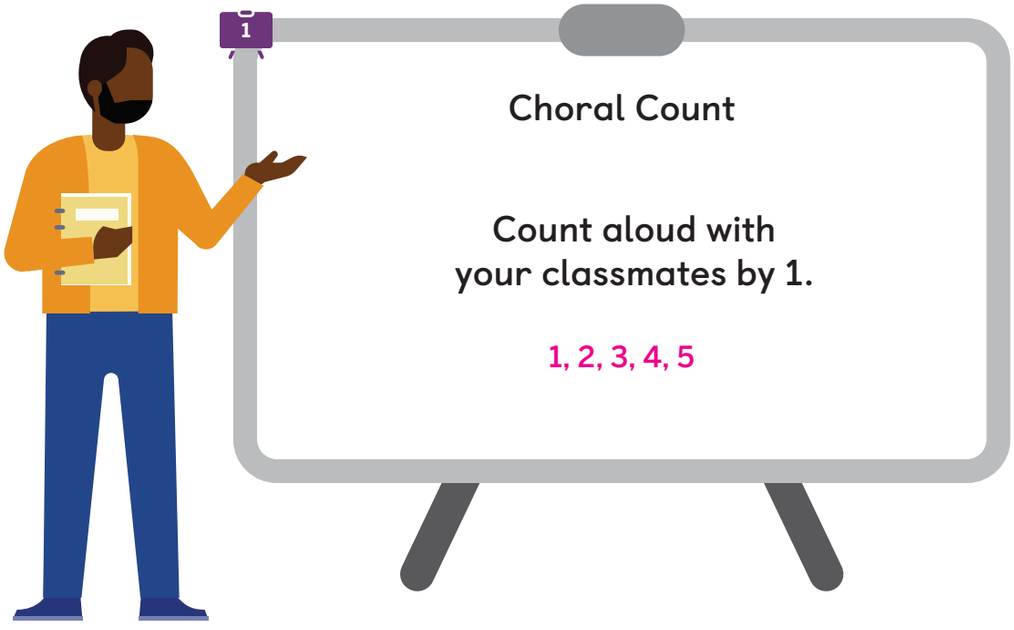
Whole Class | 10 min

Warm-Up Choral Count

Fluency

Purpose: Students count by 1 to develop fluency with oral counting to 5.

Presentation Screen



1 Launch

Use the Choral Count routine.

Say, "Let's count by 1, starting at 1 and ending at 5."

2 Connect

Display each number as students count.

Say, "Let's count again by 1, starting at 1 and ending at 5." Repeat the count using different voices or movements to engage students.

Pairs | 10 min

Activity 1 Notice and Wonder: Counters and 5-Frames

Purpose: Students develop mathematical curiosity by examining counters and 5-frames and sharing what they notice and wonder about these tools.

Presentation Screens

Materials

Manipulative Kit:

- Display a 5-frame and some two-color counters.

Classroom materials:

- Add Images D and E from the Visual Display PDF, *Math Tools Images* **(Lesson Resources)** to the *Math Tools* chart (from prior lessons) during the Connect.

1 Launch

Display a collection of two-color counters and a 5-frame.

Say, "We will notice and wonder about new math tools. When you share your thinking, you can use these sentence starters to help you."

MLR **MLR8: Discussion Supports — Sentence Frames** ELPS 1.E, 2.C, 2.E

Before students begin, read aloud and display these sentence frames for them to use as they share.

- "I notice . . ."
- "I wonder . . ."

Use the Notice and Wonder routine.

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 color or how many there are?"
- Ask, "What questions do you have about these tools?"

3 Connect

Display the *Math Tools* chart. Add the images of the counters and 5-frame from the Visual Display PDF, *Math Tools Images*.

Say, "These tools are called *counters* and *5-frames*." Point to each tool while naming it.

Invite students to share what their partner noticed and wondered about the counters and 5-frames.

Key Takeaway: Say, "Let's continue exploring counters and 5-frames in the next activity."

In this Activity . . .

Students discuss what they notice and wonder about 5-frames and two-color counters.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I notice that some circles are red and some circles are yellow.*
- *I notice there are 5 boxes.*
- *I wonder if I can fit the circles in the boxes.*
- *I wonder what each tool is called.*

Hands-On

5-frames

counters

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Describe the characteristics or uses of counters and 5-frames.	*Some of them are colorful, but the tool with 5 boxes is not.* or *You can't build or make a picture with these new tools.* or *You could count all of them.*	S **Strengthen** Ask, "What else do you notice? What else do you wonder?"
Wonder about the similarities and differences between counters and 5-frames.	*I wonder how the new tools are different.* or *I wonder if these tools can be used together.*	

Pairs | 15 min

Activity 2 Exploring Counters and 5-Frames

Purpose: Students explore and describe counters and 5-frames to build an understanding of the characteristics and uses of math tools.

Presentation Screens

Materials

Manipulative Kit:

- Display a 5-frame and some two-color counters. Distribute a 5-frame and at least five two-color counters to each student.

1 Launch

Display a collection of counters and a 5-frame.

Use the Think-Pair-Share routine. Ask:

- "Why do you think this tool is called a 5-frame?"
- "Why do you think these tools are called counters?"
- "What ideas does this give you about how you could use these tools to help you do math?"

Distribute a collection of counters and one 5-frame to each student.

Say, "Explore the counters and 5-frame. Then tell your partner what you did."

MLR **MLR8: Discussion Supports — Active Listening** ELPS 1.E, 2.C, 2.D, 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.

A **Accessibility: Memory and attention** Clarify vocabulary by discussing the various meanings of the word *frame* and how they are similar to and different from the word *frame* in this context. ELPS 3.D

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 will you need to do to get started?"
- Ask, "Did you hear your classmates share something that you want to try with the counters and 5-frame?"

3 Connect

Invite pairs to share what they did with the counters and 5-frame. Select and sequence their responses in the order shown in the *Differentiation* table.

Ask:

- "What did you find out about counters and 5-frames?"
- "How are these tools alike or different from other tools you have used?"
- "How might these tools help you do math?"

EB **Emergent Bilinguals** Use wait time to allow students to process each question before responding. Encourage them to ask for additional details, as needed. ELPS 1.E, 2.F

Key Takeaway: Say, "Counters and 5-frames are some of the many tools you will use during math this year."

In this Activity . . .

Students explore and describe counters and 5-frames, and then share with a partner.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I used counters and 5-frames to fill the boxes.*
- *I made a pattern of red and yellow.*
- *I made 6 because the 5-frame is full and there's 1 more.*

Hands-On

5-frames

counters

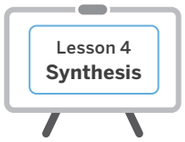
D Differentiation | Teacher Moves

Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Sort the counters.	 *I put all of the same colors together.*	**S Strengthen** Ask, "You noticed the color of the tools. What else do you notice?"
Use 5-frames to organize the counters.	 *I put a counter on each box.*	**S Strengthen** Ask, "You filled the 5-frame with the counters. What else could you do with these tools?"
Count the counters.	 *I have 1, 2, 3, 4, 5, 6 counters.*	**S Strengthen** Ask, "You counted the counters. What else could you do with these tools?"

Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: Counters and 5-frames are tools used to do math.

Ask:

- "Which tools can you use to count?"
- "Which tools can you use to build?"

Say, "In the next lesson, you will learn new ways to use some of our math tools."

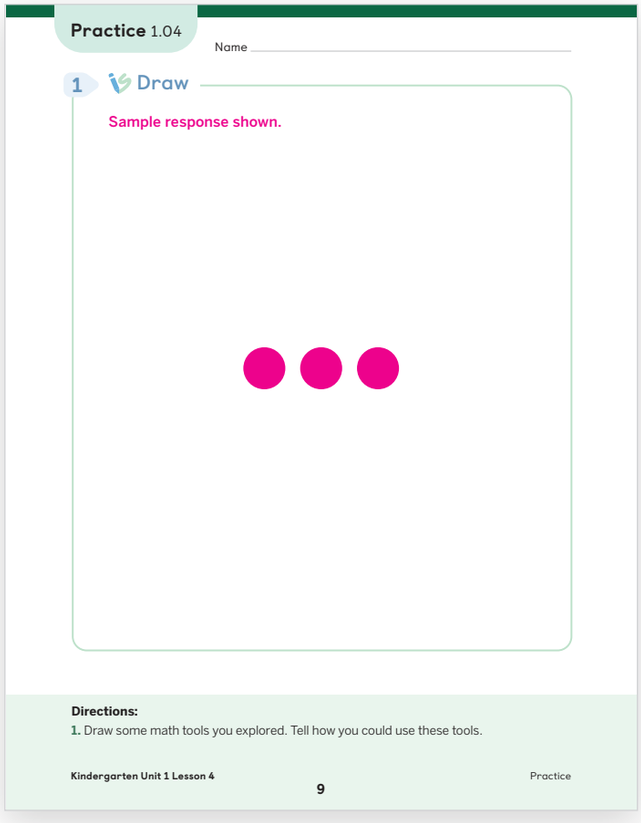
Invite students to refer to the **Summary** during Practice or anytime during the year.

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.

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Practice 1.04

Name _____

1 Draw

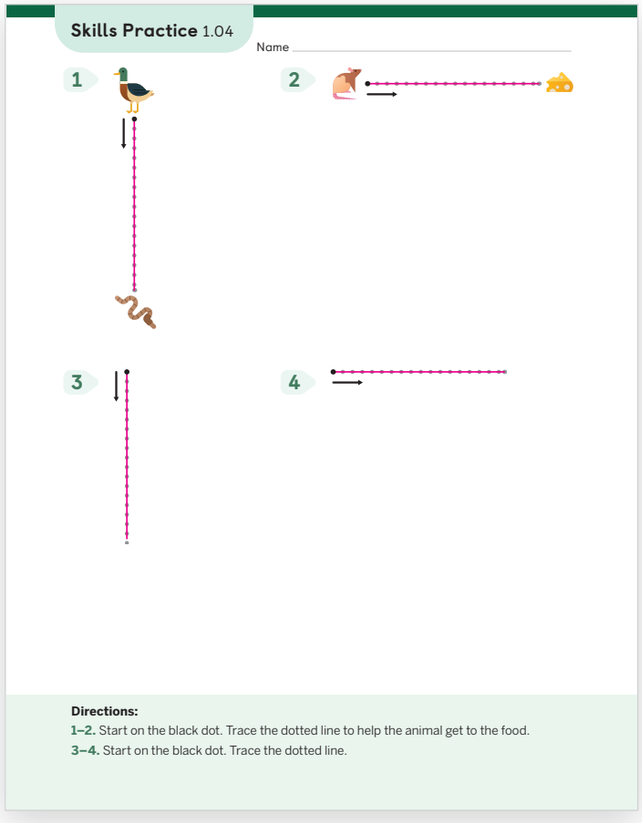
Sample response shown.

Directions:

1. Draw some math tools you explored. Tell how you could use these tools.

Kindergarten Unit 1 Lesson 4 9 Practice

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Skills Practice 1.04

Name _____

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.1.E*

*This problem builds toward the standard shown.

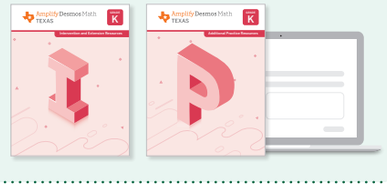
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



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 8

Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Explore

Pairs | 15 min | Building Toward K.2.C

Students explore and use connecting cubes and describe them to their partners.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Explore

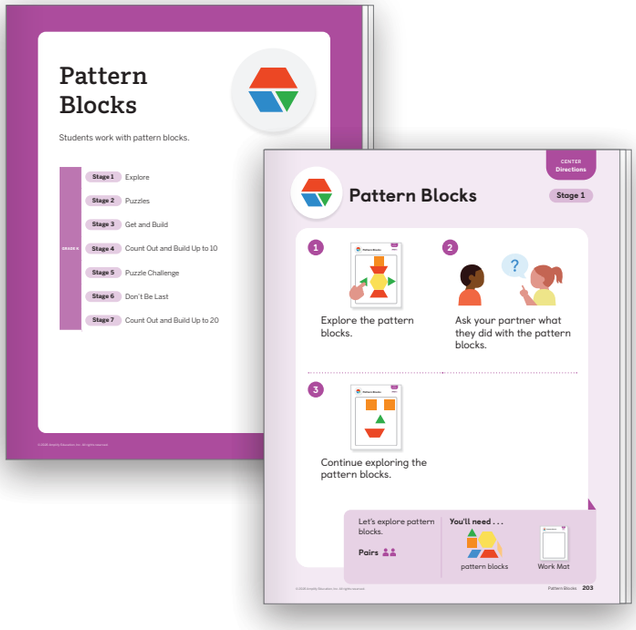
Pairs | 15 min | Building Toward K.6.A

Students explore and use pattern blocks and describe them to their partners.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.



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

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.

Differentiation Use after Lesson 4

Lesson Goal: Explore and use two-color counters and 5-frames.

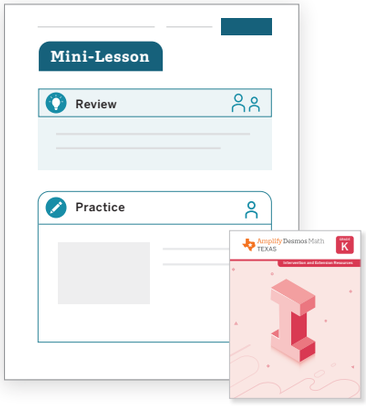
Support

Provide targeted intervention for students by using these resources.

If students notice and wonder about counters and 5-frames:

Respond:

- Students will have more opportunities to work with two-color counters and 5-frames in Sub-Unit 2.



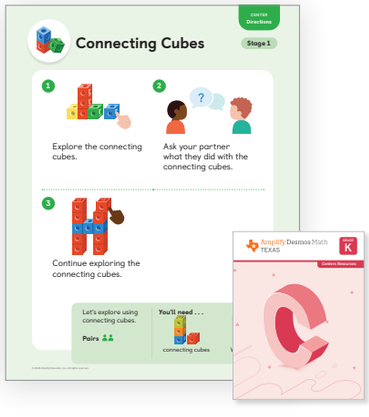
Strengthen

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

If students sort the counters or use 5-frames to organize the counters:

Respond:

- Invite students to play these **Centers**. | 15 min
  Connecting Cubes: Explore
  Pattern Blocks: Explore
- Have students complete **Lesson 4 Practice.** | 15 min



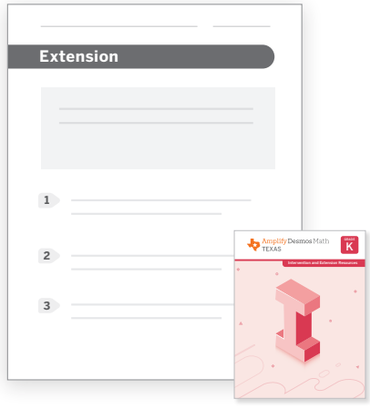
Stretch

Challenge students and extend their learning with these resources.

If students count the counters:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 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
- Vocabulary routines

Professional Learning

Unlike talking, listening is a difficult skill to observe because listening can look different for different students. What does listening look like for your students? What evidence of listening do you see?

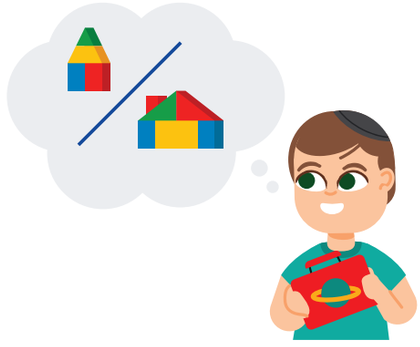
Unit 1
Lesson
5

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

Math Tools

Exploring Math Tools

Let's use math tools to create something new.



Key Concepts

Today's Goals

1. **Goal:** Represent images using connecting cubes.
2. **Goal:** Fill in puzzles using pattern blocks.
3. **Language Goal:** Explain how different math tools are used. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students use math tools to build pictured objects and fill in simple puzzles. This lesson provides an opportunity to highlight different strategies students use when using the same math tool. Some students may match tools with the image or puzzle, while others may count to determine the amount of each tool they need. Students are not required to count to match the image or puzzle, as they will formally explore counting strategies in Sub-Unit 3. Students are also not expected to know the attributes or names of the pattern block shapes, as they will explore and describe shapes in Unit 3. Students choose which pattern blocks and connecting cubes to use in order to build objects and fill in puzzles, which prepares them to select tools to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lessons 1–4, students explored and described math tools.

Future Learning

In Lesson 6, students will subitize, or recognize *how many* in small groups of objects and images without counting.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of the various ways they can use connecting cubes and pattern blocks to represent mathematical situations.

TEKS

Building Toward

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Building Toward: **K.6.A**

Math Process Standards: K.1.C

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

Building Math Identity

We are a math community.

The grown-ups in *The First Day of School* showed they care in different ways. How do you show you care in math class?

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

Lesson at a Glance 60 min

TEKS: K.1.C, Building Toward K.2.C, K.6.A

Warm-Up

Whole Class | 5 min

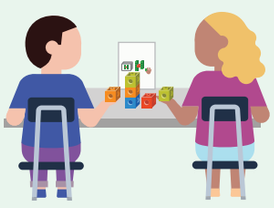
Students use the **Notice and Wonder** routine to share what they notice and wonder about the same object built from pattern blocks, solid shapes, and connecting cubes.

Activity 1

Pairs | 15 min

Students are introduced to the Center, *Connecting Cubes, Build to Match*, in which they use connecting cubes to make objects pictured on cards. In the Connect, they compare the strategies for building pictured objects to highlight the variety of solution pathways.

Manipulative Kit: connecting cubes
Materials: Connecting Cube Cards, Directions, Work Mat
Additional Prep Cut out: Connecting Cube Cards

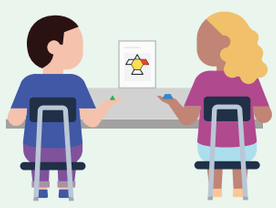


Activity 2

Pairs | 15 min

Students are introduced to the Center, *Pattern Blocks, Puzzles*, in which they use pattern blocks to fill in simple puzzles. In the Connect, they explain their process for filling in the puzzles and highlight the variety of solution pathways.

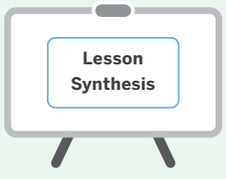
Manipulative Kit: pattern blocks
Materials: Directions, Puzzles (A–J)



Synthesis

Whole Class | 10 min

Students review and reflect on how they can use math tools to help them do math. The *Math Tools* chart is displayed for students to recall the different tools they have used.



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of math tools and learn the structure of Center Choice Time.

- Connecting Cubes
- Pattern Blocks

Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

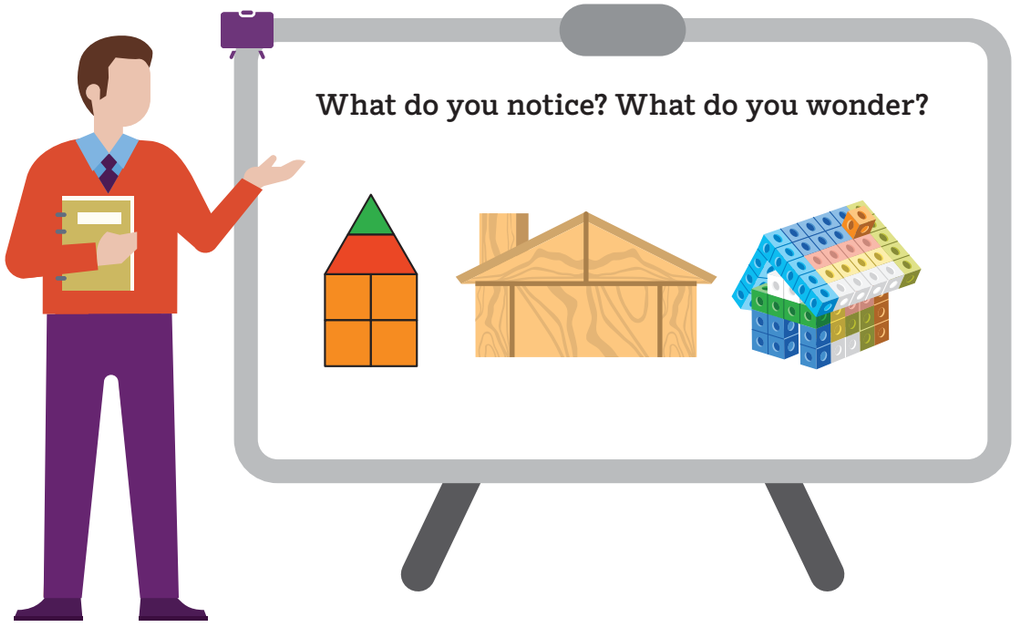
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students develop mathematical curiosity by examining the same object represented with different math tools and sharing what they notice and wonder.



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, "Today, you will use your math tools to represent different things."

Students might say . . . ELPS 2.B

I notice they are all houses.

I notice the houses are made out of our different math tools.

I wonder what else you can make out of the math tools.

I wonder why there are more connecting cubes than solid shapes.

Pairs | 15 min

Activity 1 Let's Play Connecting Cubes, Build to Match

Purpose: Students represent images with connecting cubes and explain their process for building the objects to continue to develop an understanding of the use of connecting cubes.

Presentation Screens

Materials

Manipulative Kit:

- Display connecting cubes and distribute connecting cubes to each pair.

Centers Resources:

- Display the Connecting Cube Cards and Directions.
- Distribute one set of Connecting Cube Cards to each pair and a Work Mat to each student.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Connecting Cubes, Build to Match* by inviting a student to act as a partner. While demonstrating: ELPS 1.C

- **Say**, "You will play *Connecting Cubes* today."
- **Say**, "First, my partner and I each choose a card." Display 2 Connecting Cube Cards.
- **Say**, "Next, my partner and I use connecting cubes to build the object on our cards." Build the object shown on the card.
- **Say**, "Then my partner and I talk about how we built the objects. After we have both shared, my partner and I choose new cards and start again."

A **Accessibility: Memory and attention** Give students a partially built object and have them complete the object.

2 Monitor

Use the D **Differentiation | Teacher Moves** table on the following page.

If students need help getting started . . .

- Ask, "What do you see?"

3 Connect

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

Invite students to share different strategies they used to build the objects. Select and sequence their strategies in the order shown in Rows 2 and 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "What did you notice about how others built their objects?"
- "What was the same?"
- "What was different?"

EB **Emergent Bilinguals** Allow students time to think independently before sharing their responses verbally. Invite them to restate the question in their own words. ELPS 1.E, 2.F

Key Takeaway: Say, "You used connecting cubes to build objects in pictures. Let's explore a new way to use pattern blocks in the next activity."

In this Activity . . .

Students describe to their partner how they used connecting cubes to match the picture on their card.

Oral activity: No writing expected.

Students might say . . .

Sample response:

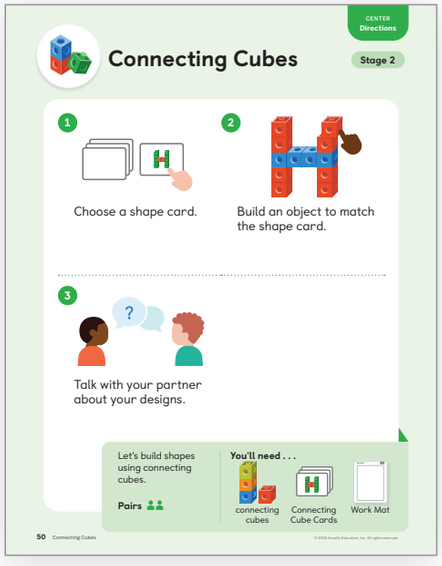
- *First, I looked at the picture to see what cubes I needed.*
- *Then I put a cube on top of every cube in the picture.*

Hands-On

Connecting Cube Cards

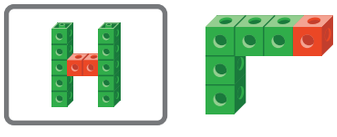
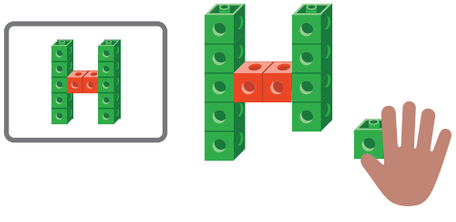
connecting cubes

PDF Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Create their own object.		**Support** Ask, "You built an object. How is it the same as the object in the picture? How is it different?"
Match the connecting cubes with the image.		**Stretch** Say, "This is the letter H. Use the cubes to build a different letter of the alphabet."
Count the number of connecting cubes in the image to create their object.	*There are 5 green cubes on each side and 2 red cubes in the middle. So, I collected 5 green cubes, 5 more green cubes, and 2 red cubes to make the object.*	

Pairs | 15 min

Activity 2 Let's Play Pattern Blocks, Puzzles

Purpose: Students use pattern blocks to fill in puzzles and explain their process to continue to develop an understanding of the use of pattern blocks.

Presentation Screens

Materials

Manipulative Kit:

- Display pattern blocks and distribute pattern blocks to each pair.

Centers Resources:

- Display the Directions and Puzzles (A–J).
- Distribute Puzzles (A–J) to each pair.

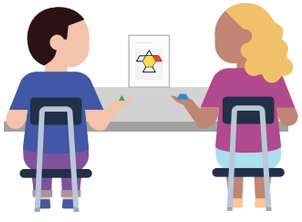
1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Pattern Blocks, Puzzles* by inviting a student to act as a partner. While demonstrating: ELPS 1.C

- **Say**, "You will play *Pattern Blocks* today."
- **Say**, "First, my partner and I each choose a puzzle." Display 2 puzzles, including Puzzle A. Point to Puzzle A.
- **Ask**, "What do you notice? What do you wonder?"
- **Say**, "Next, my partner and I use pattern blocks to fill in the puzzles." Fill in the puzzle.
- **Say**, "Then my partner and I talk about how we filled in the puzzles. After we have both shared, my partner and I choose new puzzles and start again."

2 Monitor



Use the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Ask, "What do you notice about this puzzle?"
- Say, "Find 1 kind of pattern block you need to fill in this puzzle."

3 Connect

Display Puzzle C.

Invite students to share different strategies they used to fill in the puzzle. Select and sequence their strategies in the order shown in Rows 2 and 3 in the *Differentiation* table.

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share their strategies for filling in the puzzle, press for details in their reasoning. For example:

- If a student says, "I used pattern blocks.". . .
- Press for details by asking, "How did you decide which pattern blocks to use? How did you decide where to put them?"

Key Takeaway: Say, "You can use pattern blocks to show objects in a picture."

In this Activity . . .

Students use pattern blocks to fill in puzzles and then explain the strategies they used.

Oral activity: No writing expected.

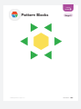
Students might say . . .

Sample response:

- *First, I figured out how many pattern blocks I needed.*
- *Then I used the same pattern blocks to fill the puzzle.*

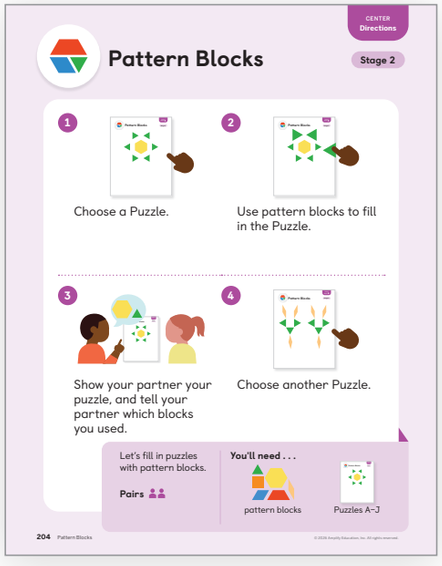
Hands-On

pattern blocks



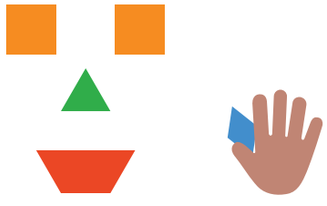
Puzzle A-J

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

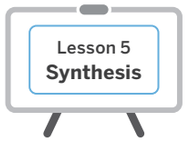
Look for students who . . .	For example . . .	Provide support . . .
Use trial and error to match shapes with the puzzle.		**S Strengthen** Ask, "How are you choosing which pattern blocks to use?"
Match shapes strategically with the puzzle.	*I see a green shape, so I need to find the same pattern block.*	**S Stretch** Say, "Try to find another way to fill in the puzzle."
Count the shapes to determine how to fill in the puzzle.	*I need 2 orange shapes, 1 green shape, and 1 red shape.*	

Whole Class | 10 min

Synthesis

Lesson Takeaway: Connecting cubes and pattern blocks can be used to represent pictures.

Presentation Screen



Ask:

- "What does it mean to do math?"
- "How have you used tools to help you do math?"

Say, "You have learned about tools that can help you do math — connecting cubes, pattern blocks, solid shapes, counters, and 5-frames. You will use these and many other math tools throughout the year."

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

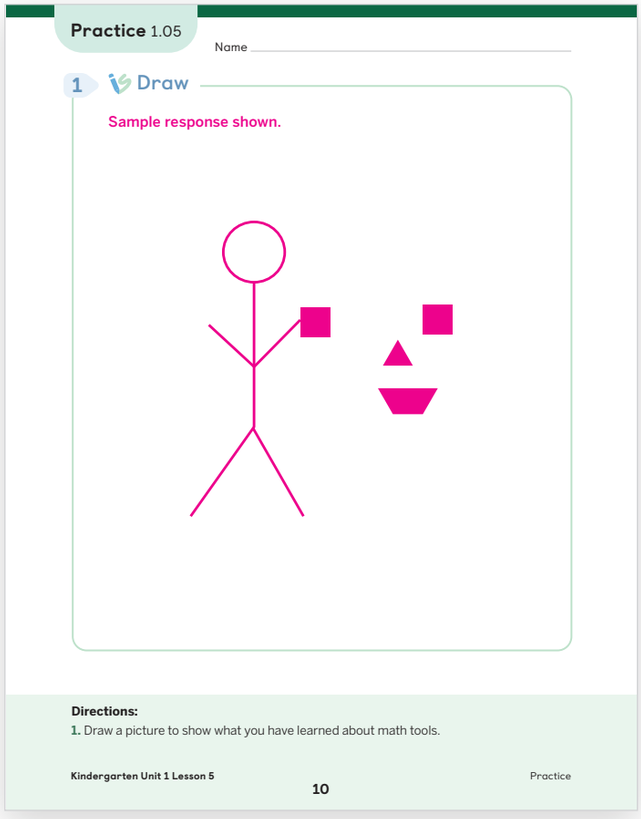
Practice

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.

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.05

Name _____

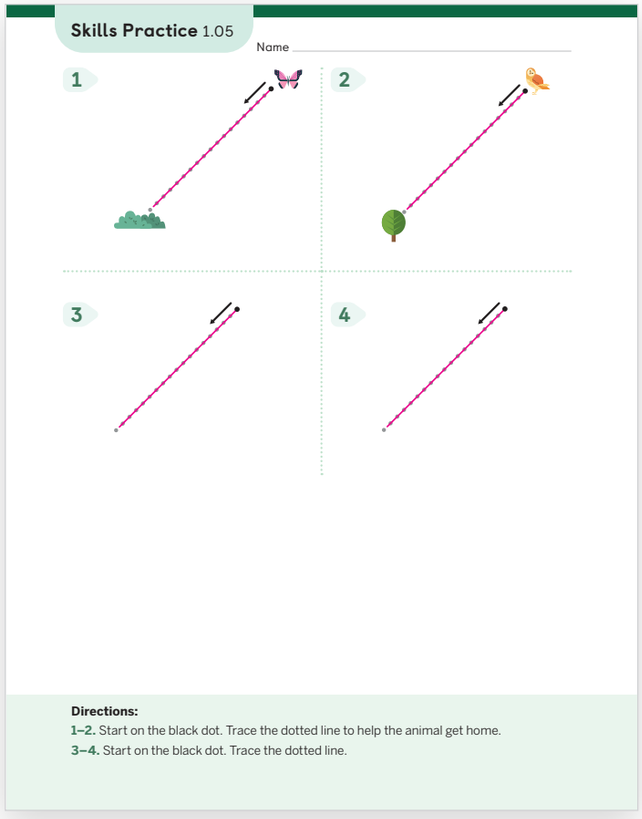
1 Draw

Sample response shown.

Directions:

1. Draw a picture to show what you have learned about math tools.

Kindergarten Unit 1 Lesson 5 10 Practice



Skills Practice 1.05

Name _____

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get home.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.C*

*This problem builds toward the standard shown.

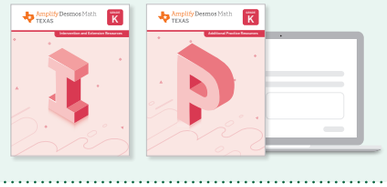
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



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 7

Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Build to Match

Pairs | 15 min | Building Toward K.2.C

Students use connecting cubes to build objects pictured on cards.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Connecting Cube Cards, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Puzzles

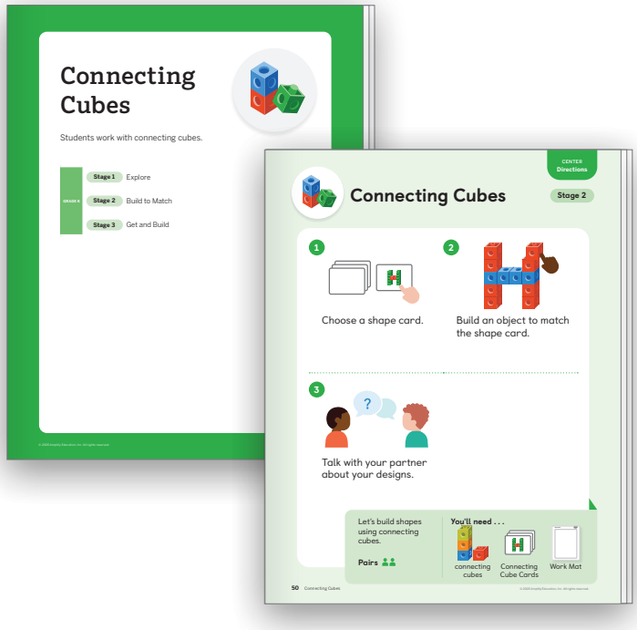
Pairs | 15 min | Building Toward K.6.A

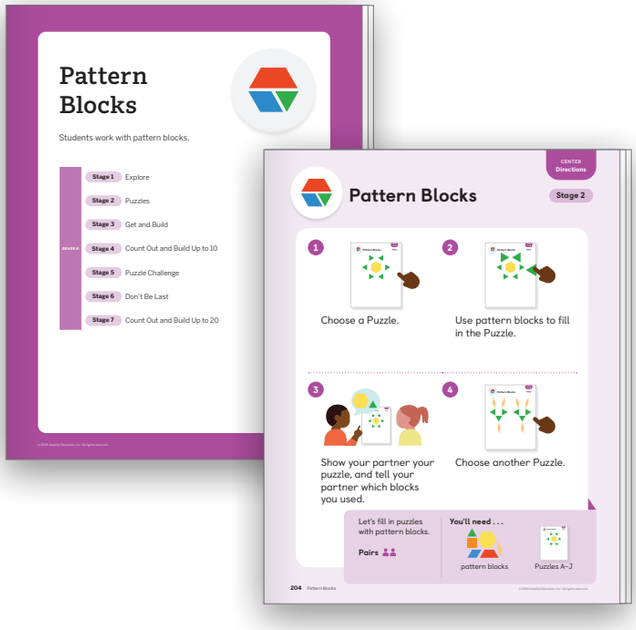
Students use pattern blocks to fill in simple puzzles.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Puzzles (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.





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

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.

Differentiation Use after Lesson 5

Lesson Goal: Represent images using connecting cubes.

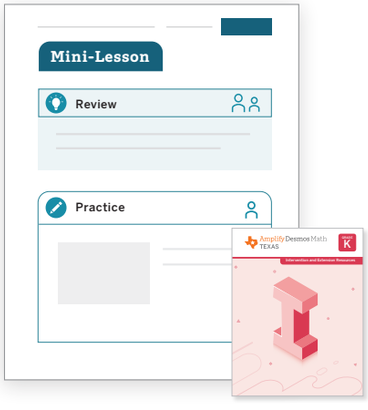
Support

Provide targeted intervention for students by using these resources.

If students create their own object:

Respond:

- Students will have more opportunities to work with math tools in Sub-Unit 2.



Strengthen

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

If students match the connecting cubes to the image:

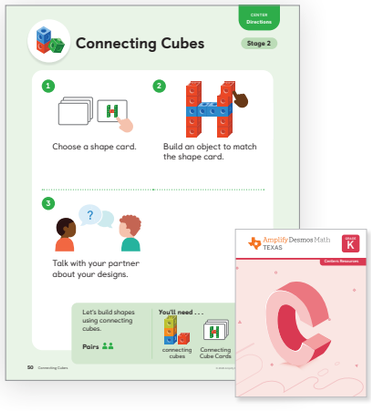
Respond:

- Invite students to play these **Centers**. | 15 min

  Connecting Cubes: Build to Match

  Pattern Blocks: Puzzles

- Have students complete **Lesson 5 Practice.** | 15 min
- **Item Bank**



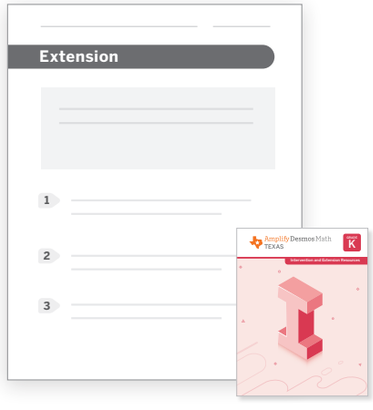
Stretch

Challenge students and extend their learning with these resources.

If students count the number of connecting cubes in the image to create their object:

Respond:

- Invite students to explore the **Sub-Unit 1 Extension Activities.** | 15 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
- Vocabulary routines

Professional Learning

Reflect on how comfortable your students are asking questions of you and of each other. What can you do to encourage students to ask questions?

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. The *Up Next* problems preview targeted concepts and skills addressed in the next sub-unit. Read aloud the problems to students.

Item Analysis

Problem(s)	Concept or skill	DOK	TEKS
1	Describing what it means to do math	1	Building toward K.2.A, K.1.E
Up Next . . . (preparation for Lesson 6)			
2, 3*	Recognizing instantly the quantity of 4 or less objects in organized arrangements	1	K.2.D

* Because these problems address prerequisite concepts for the next sub-unit, the *Up Next* problems are not intended to be part of a student's overall score on this assessment.

Assessment Resources

- Student Print Assessments
- Answer Keys

Differentiation Resources

Intervention and Extension Resources include:

- 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)
- Item Bank

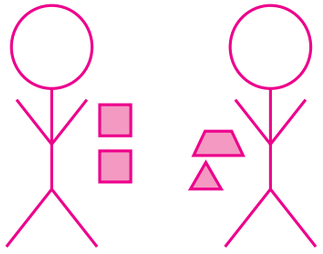
PDF *Assessment Resource PDF*

Name _____ Date _____

Quiz: Sub-Unit 1 Unit K.1

Draw

1 Sample response shown.



Directions

1 Draw a picture to show what you have learned about math.

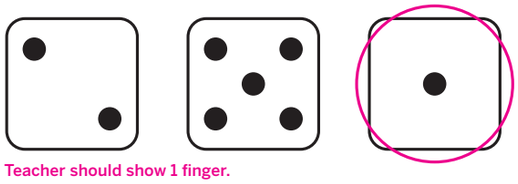
2–3 Circle the group of dots that shows how many fingers your teacher is holding up.

2

Name _____ Date _____

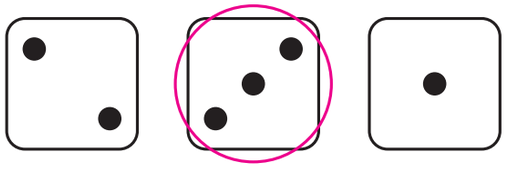
Quiz Sub-Unit 1 (continued) Unit K.1

2



Teacher should show 1 finger.

3



Teacher should show 3 fingers.

3

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(s)	Respond to Student Thinking

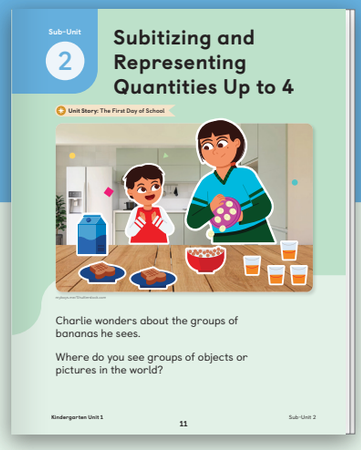
Sub-Unit 1:
• Explore math tools.
• Share mathematical ideas with a partner.
	1	**Support**
		• **Centers:**
		  • *Connecting Cubes, Explore*
		  • *Pattern Blocks, Explore*
		  • *Solid Shapes, Explore*
		• **Teacher Move:** Students will have more opportunities to describe what it means to do math in the next sub-unit.

Up Next . . . (preparation for Lesson 6)		
Sub-Unit 2: • Subitize groups of up to 4 objects and images. • Answer "are there enough?" questions about groups of up to 10 objects.	2, 3	**Support** • **Mini-Lesson:** *Matching Representations of the Same Quantity* (ML 1.07) • **Teacher Move:** Students will have more opportunities to match quantities up to 10 in the next sub-unit.

Notes:

Sub-Unit 2

Subitizing and Representing Quantities Up to 4



Sub-Unit 2 Goals:

- Subitize groups of up to 4 objects and images.
- Answer "are there enough?" questions about groups of up to 10 objects.

Progression of TEKS in Sub-Unit 2

- **Lessons 6–9:** Students explore small groups of objects or images they can subitize, or quantify without counting.
- **Lessons 10–12:** Students match equivalent groups of images, represent equivalent groups using objects and drawings, and notice that the same quantity can be arranged in many different ways.

Sub-Unit 2 Progression	Lesson 6	Lesson 7	Lesson 8	Lesson 9	Lesson 10	Lesson 11	Lesson 12
Number and Operations							
TEKS K.2.B	○	○	○	●	●	○	○
TEKS K.2.D	●	●	●	●	●	●	○
TEKS K.2.E	○	○	○	○	○	●	●

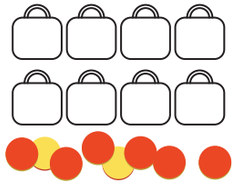
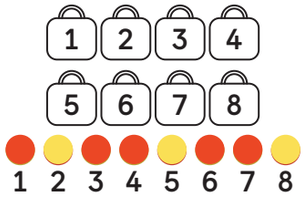
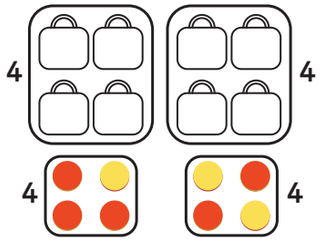
Coming Up Next

- **Sub-Unit 3, Lessons 13–18:**
  - » Number and Operations: **TEKS K.2.A, K.2.B, K.2.C, K.2.E**

Math That Matters Most

Sub-Unit 2: Answer "are there enough?" questions about groups of objects.

Progression of Strategies, Skills, or Language

Progression	For example . . .
Estimating if there are enough.	 I think there are enough.
Matching objects one-to-one.	 I know there are enough because each lunch box has a counter.
Counting the quantities in each group.	 I know there are enough because there are the same number in each group — 8 lunch boxes and 8 counters.
Conceptually subitizing the quantities in each group.	 I know there are enough because the groups match. I see 4 lunch boxes and 4 counters and then I see 4 lunch boxes and 4 counters again.

Unit 1
Lesson
6

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

Skye's Style

Recognizing Small Groups

Let's look for groups of objects.

Key Concepts

Today's Goals

1. **Goal:** Recognize groups of objects in the environment.
2. **Goal:** Subitize groups of up to 4 objects or images.
3. **Language Goal:** Describe groups of objects. **(Listening and Speaking)**
   ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students mathematize their environment by noticing groups of objects in the classroom and in picture books. They use number names to tell how many they see. Students are introduced to the cardinal meaning of numbers, the idea that a number can tell how many. Some students may subitize, or name how many are in a group without counting, while others may count to determine how many. The lessons in this sub-unit focus on subitizing because subitizing is an essential skill that helps build number sense. The work with subitizing in this lesson prepares students to be able to select number sense as a technique to solve problems. **(TEKS K.1.C)**

Prior Learning

In Sub-Unit 1, students explored math tools and used them in mathematical situations. They may have subitized small groups of objects when using connecting cubes, pattern blocks, and solid shapes to represent a picture.

Future Learning

In Lesson 7, students will continue their work with subitizing, focusing on identifying small groups of objects or images with the same quantity.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of subitizing by identifying small groups of objects in the classroom and in a picture book.

TEKS

Addressing

K.2.D

Recognize instantly the quantity of a small group of objects in organized and random arrangements.

Math Process Standards: K.1.C

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

Building Math Identity

I am a doer of math.

Kids in *The First Day of School* see math in their world. Where do you see math in your world?

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

Lesson at a Glance 60 min

TEKS: K.1.C, K.2.D

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about groups of school supplies.

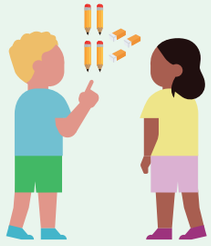
Activity 1

Pairs | 20 min

Students identify groups of objects they see in their classroom environment and share what they notice. In the Connect, students compare small and large groups to begin to notice the differences in quantity.

Materials: small groups of objects

Additional Prep Display: small groups of objects, such as 2 pencils or 3 books, around the classroom before the activity



Activity 2 Fluency

Pairs | 15 min

Students identify subitizable groups in illustrations from the Unit Story. In the Connect, they describe the quantity of objects they found.

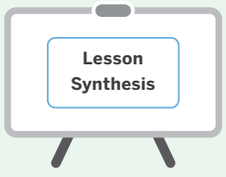
Materials: Activity 2 PDF, *1–5 Finger Images*, Activity 2 PDF, *Looking for Small Groups*, Unit Story, *The First Day of School*

Additional Prep Cut out: *1–5 Finger Images* PDF strip. Consider taping on students' desks to refer to throughout the unit.

Synthesis

Whole Class | 5 min

Students review and reflect on what it means for a group to be small or large as they determine that an object's size does not impact the quantity of objects in the group.

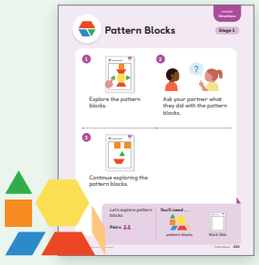


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Pattern Blocks



Math Language Development

EB Emergent Bilinguals

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

- ✓ Cognates
- ✓ Sentence frames and word bank

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

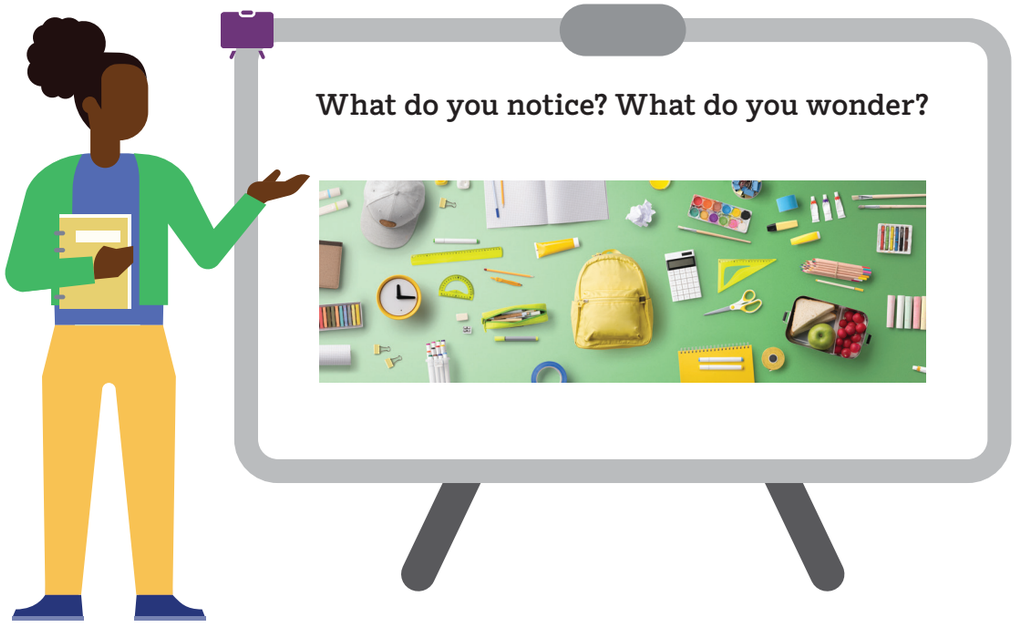
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students tell what they notice and wonder about an image of school supplies to prepare for identifying groups that can be subitized.



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, "Where do you see math in this picture?"

Say, "Some of the objects in this picture are organized into groups. We will look for groups in our classroom in the next activity."

Students might say . . . ELPS 2.B

I notice a lot of objects I use at school.

I notice 3 tubes of paint.

I wonder how many grapes there are.

I wonder what is in the backpack.

Pairs | 20 min

Activity 1 Classroom Scavenger Hunt

Purpose: Students look for groups of objects in the classroom and share what they notice to build a conceptual understanding of groups.

Presentation Screens

Materials

Classroom materials:

- Place small groups of objects around the classroom before the activity.

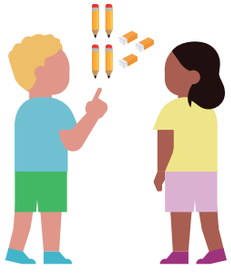
1 Launch

Use the Think-Pair-Share routine. Ask, "Look around the room. Where do you see groups of objects in our classroom?"

Say, "Walk around the room with your partner and take turns finding groups of objects. When you find a group, tell your partner what you notice. Then find a new group."

A **Accessibility: Conceptual processing** Guide processing by using visible timers or audible alerts to help students anticipate and prepare to transition back to their seats.

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 objects do you see in the classroom?"
- Point to a group of objects in the room and ask, "How would you describe this group?"

3 Connect

Say, "You found many groups in our classroom."

Invite 2 pairs to share the groups they found. 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 groups?"

EB **Emergent Bilinguals** As students share their responses to the questions, invite them to restate or paraphrase responses they hear using their own words to demonstrate listening comprehension. **ELPS 1.E, 2.C, 2.D, 2.F**

Key Takeaway: Say, "Groups of objects can be seen all around us. Some groups are small and some groups are large."

In this Activity . . .

Students look for groups of objects in the classroom and share what they found with a partner.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I found 2 crayons.*
- *I found a yellow book.*
- *I counted 3 blocks.*
- *I saw a red crayon and a green crayon.*

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Find groups of objects and describe their characteristics.	 I found a yellow book.	S **Strengthen** Ask, "What else do you notice about this group?"
Find groups of objects that are too large to subitize (more than 5).	 I found a group of paper clips.	S **Strengthen** Ask, "You found a large group. Where do you see a small group in our classroom?"
Find groups of objects that can be subitized (less than 5).	 I found 2 pencils.	S **Strengthen** Ask, "You found a small group. Where do you see other small groups in our classroom?"

Pairs | 15 min

Activity 2 Looking for Small Groups

Fluency

Purpose: Students build an understanding of subitizing as they identify groups in illustrations from the Unit Story and determine quantities.

Presentation Screens

Materials

- Display and read aloud page 4 from the Unit Story, *The First Day of School* during the Launch.

Lesson Resources:

- Distribute the Activity 2 PDF, *Looking for Small Groups* to each pair at the end of the Launch.

1 Launch

Say, "Skye loves fashion and likes to pick out outfits each day. Skye keeps objects organized into groups to make it easier to choose what to wear."

Display and read aloud page 4 from the Unit Story.

Ask, "What do you notice about the groups of objects in Skye's room?"

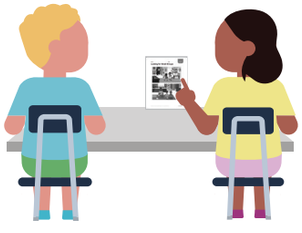
Say:

- "There are many small groups in Skye's room. A small group is a group that you can show how many by using your fingers on 1 hand."
- "Work with your partner to find groups of objects in the pictures. Use your fingers to show your partner how many objects there are in the group you found."

Distribute the Activity 2 PDF, *Looking for Small Groups* to each pair of students.

A **Accessibility: Visual-spatial processing** Guide visualization by encouraging students to refer to the images of fingers as they think about how many are in the group.

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 objects do you notice in this picture?"
- Ask, "What is a small group? Can you find a small group in this picture?"

3 Connect

Say, "You found many small groups of objects in the pictures."

Invite pairs to share the small groups they found and how many were in each group. Choose students who subitized.

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share the groups they found, press for details in their reasoning. For example:

- If a student says, "I found some books." or "I saw chairs." . . .
- Press for details by asking, "How many did you see?"

Key Takeaway: Say, "Sometimes, when a group is small, you can know how many there are without counting."

In this Activity . . .

Students identify groups of objects in a picture and share how many objects are in each group.

Oral activity: No writing expected.

Students might say or show . . .

Sample responses:

- *I see 4 students on the bus (or show).*
- *I counted 2 drawings on the wall.*
- *There are 4 windows.*

PDF Activity PDF


Name _____ Date _____

Lesson 1.06 Activity 2 (p. 1 of 4)

Looking for Small Groups

Find groups of objects in these illustrations. Use your fingers to show your partner how many objects there are in each group.

Lesson Resources

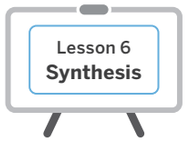
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Describe a quantity of objects that is too large to subitize.	 *I see a lot of stripes on Skye's tie.*	**Strengthen** Ask, "A small group is a group that you can show how many on 1 hand. Can you find a smaller group that you can show how many on 1 hand?"
Describe a different quantity of objects than the small group they find.	 *I see 2 polka dots on Skye's red hat.*	**Strengthen** Ask, "How do you know there are 2 polka dots?"
Describe the same quantity of objects as the small group they find.	*I see 3 polka dots on Skye's red hat.*	**Stretch** Ask, "You found a group of 3. Can you find a group of 4 in the picture?"

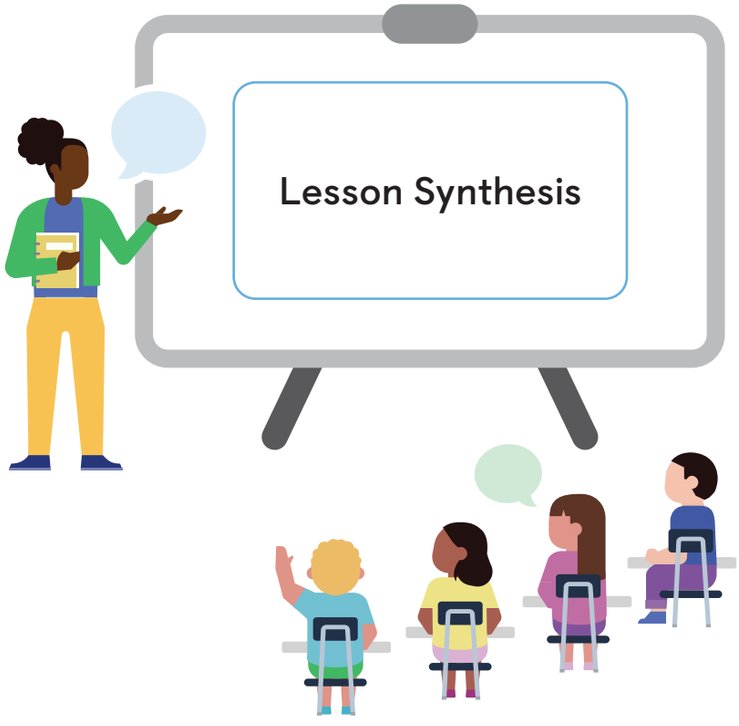
Whole Class | 5 min

Presentation Screen



Synthesis

Lesson Takeaway: Groups in the environment can be described using quantity. Sometimes, it is possible to find how many are in a small group by looking at it.



Say, "Han says that the group of trees in this picture is a large group because the trees are big."

Ask, "Do you agree or disagree with Han? Why?"

Say:

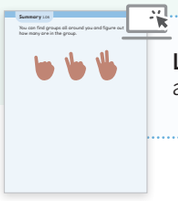
- "Han is thinking about the size of the trees. The group of trees is small because there are only 2 trees in the group."
- "You can see groups of objects and talk about how many objects are in the group."

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

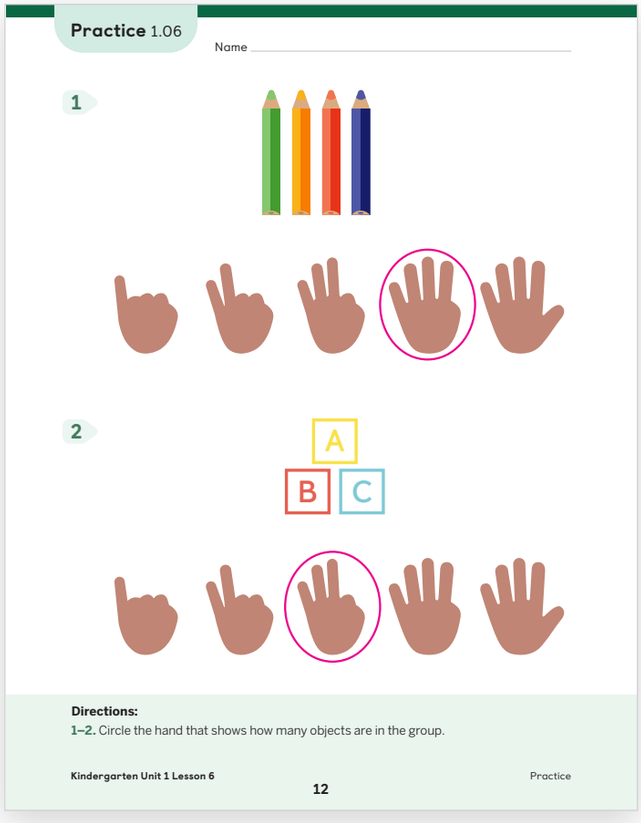
Practice

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.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Practice 1.06

Name _____

1

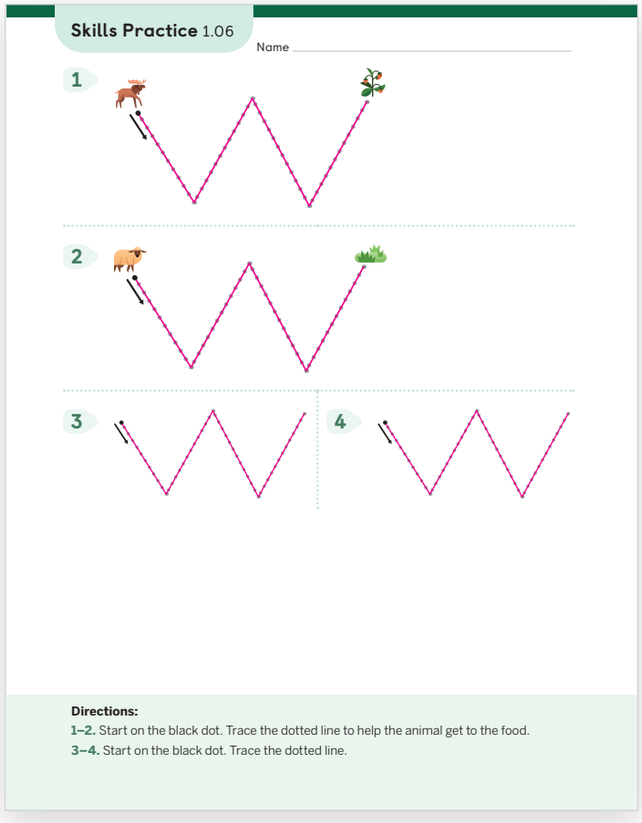
2

A
B C

Directions:
1–2. Circle the hand that shows how many objects are in the group.

Kindergarten Unit 1 Lesson 6 12 Practice

Fine Motal Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Skills Practice 1.06

Name _____

1

2

3

4

Directions:
1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.
3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1, 2	1	K.2.D

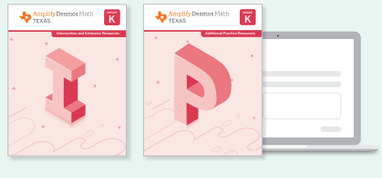
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



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 9

Short on time? Consider omitting the Center Choice Time.

Pattern Blocks

Explore

Pairs | 15 min | Building Toward K.6.A

Students explore and use pattern blocks and describe them to their partners.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Puzzles

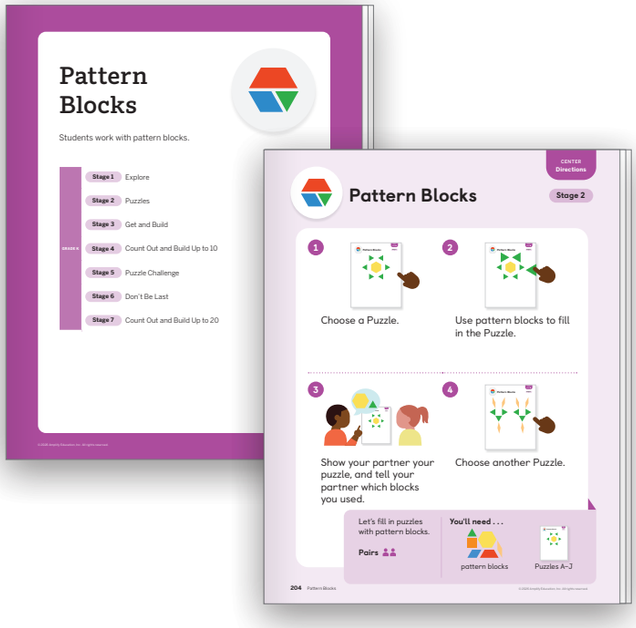
Pairs | 15 min | Building Toward K.6.A

Students use pattern blocks to fill in simple puzzles.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Puzzles (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.



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

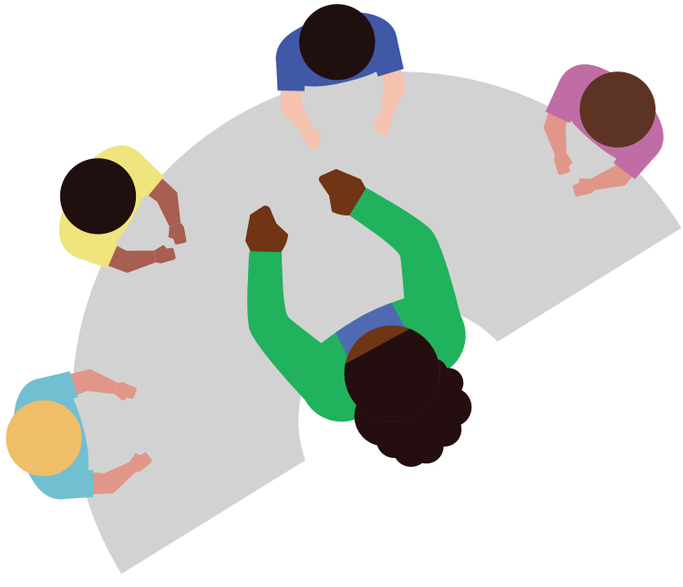
D Differentiation | Teacher Moves

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.



Differentiation Use after Lesson 6

Lesson Goal: Subitize groups of up to 4 objects or images.

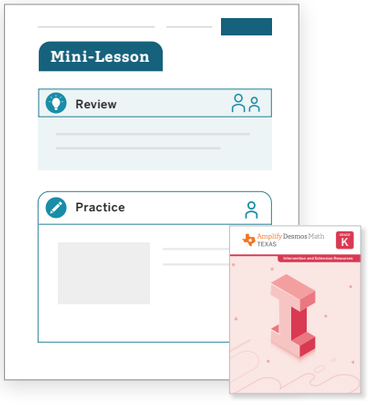
Support

Provide targeted intervention for students by using these resources.

If students name a different quantity than what is shown in the group:

Respond:

- Students will have more opportunities to recognize and subitize groups in Lessons 7–9.



Strengthen

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

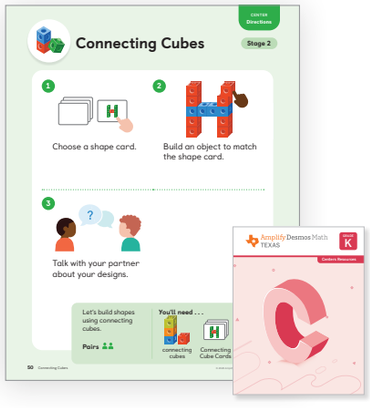
If students subitize a group:

Respond:

- Invite students to play these **Centers**. | 15 min

  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles

- Have students complete **Lesson 6 Practice.** | 15 min
- **Item Bank**



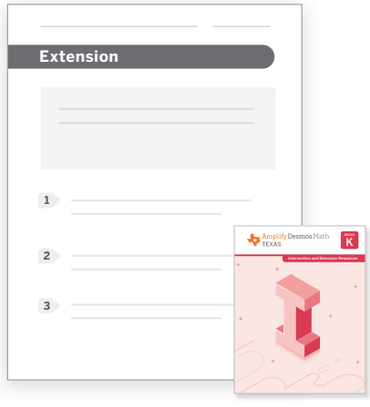
Stretch

Challenge students and extend their learning with these resources.

If students subitize multiple groups:

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
- Vocabulary routines

Professional Learning

Think about students who volunteered to speak in class today. Are the same students always sharing? How can you encourage equitable sharing?

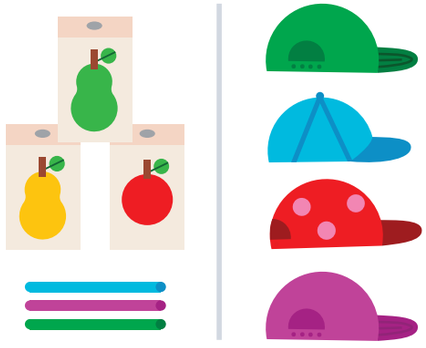
Unit 1
Lesson
7

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

Matching Groups

Subitize to Identify Groups of Objects With the Same Quantity

Let's find groups that have the same number of objects.



Key Concepts

Today's Goals

1. **Goal:** Subitize and identify equivalent groups of up to 4 images.
2. **Language Goal:** Justify why a group of images can have the same quantity but look different. **(Listening and Speaking)** ELPS 1.B, 2.B, 2.E

Connections and Coherence

Students identify equivalent groups of subitizable quantities that are represented in different ways. Seeing the **same** number of images in a variety of arrangements promotes conceptual understanding of cardinality, supports early number recognition, and discourages pattern memorization. Subitizing small groups of objects and identifying equivalent groups builds number sense, which prepares students to be able to select number sense as a tool to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lesson 6, students built an understanding of subitizing and represented an equivalent group using their fingers.

Future Learning

In Lesson 8, students will continue subitizing with a focus on representing equivalent quantities using a math tool of their choice.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of cardinality by identifying equivalent representations of the same quantity.
- Students build their **conceptual understanding** of subitizing by identifying the number of objects shown in small groups.

Vocabulary

New Vocabulary

same

TEKS

Addressing

K.2.D

Recognize instantly the quantity of a small group of objects in organized and random arrangements.

Math Process Standards: K.1.C

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

Building Toward

K.2.G

Building Math Identity

I can be all of me in math class.

What math games do you like to play? How does it feel to play a game with a friend?

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

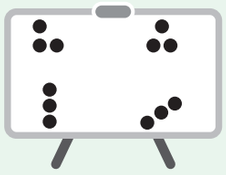
Lesson at a Glance 60 min

TEKS: K.1.C, K.2.D

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about different arrangements of the same number of dots.



Activity 1 Fluency

Pairs | 15 min

Students subitize small groups in images and identify equivalent groups. In the Launch, students are introduced to the term **same**. In the Connect, they compare 2 groups that have the same quantity.

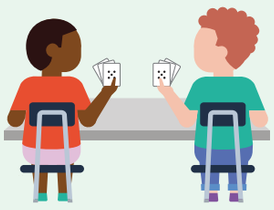
Materials: Unit Story, *The First Day of School*, Activity 1 PDF

Activity 2 Fluency

Pairs | 15 min

Students play a matching game in which they identify equivalent groups. They notice 2 groups can represent the same quantity even if they are arranged differently.

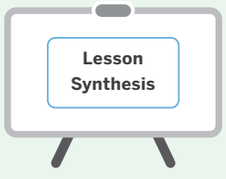
Materials: Activity 2 PDF, straightedges
Additional Prep Cut out: Activity 2 PDF



Synthesis

Whole Class | 10 min

Students review and reflect on the criteria for determining if 2 groups are equivalent.

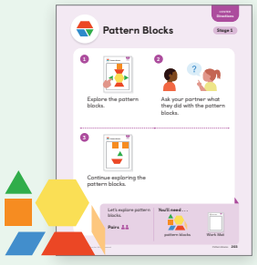


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Pattern Blocks



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

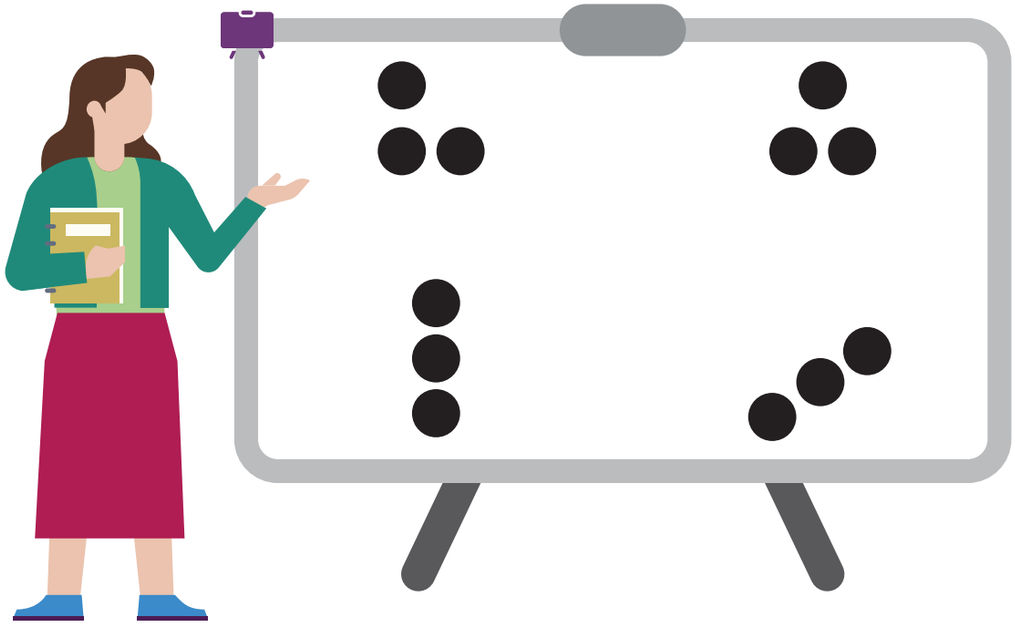
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students examine multiple groups of 3 dots shown in different arrangements to prepare for subitizing and identifying equivalent groups.



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, "What is the same about these groups? What is different about them?"

Say, "You can see the same number of dots in different ways."

Students might say . . . ELPS 2.B

I notice that all of the groups have dots.

I notice that they all show 3 in different ways.

I wonder if these are on dominoes.

I wonder if there are other ways to show 3.

Pairs | 15 min

Activity 1 Different Groups, Same Quantity

Fluency

Purpose: Students build a conceptual understanding of cardinality as they identify equivalent groups and describe their quantity.

Presentation Screens

Materials

- Display page 4 from the Unit Story, *The First Day of School* during the Launch.

1 Launch

Display page 4 from the Unit Story.

Ask, "Skye looks around and notices that some of the groups have the **same** number of objects. Where do you see groups that have the same number of objects in Skye's room?"

Display Problem 1. Point to the first image.

Say, "Show your partner how many you see with your fingers."

Use the Think-Pair-Share routine. Ask, "Which group or groups show the same number? How do you know?"

Say, "There are 2 dots and 2 fingers. They both have the same number of objects, so I will circle the group of 2 fingers."

Display Problems 2–4.

Say, "Circle the groups in each row that show the same number as the first group. Then tell your partner how you know. Sometimes, there might be more than 1 group that matches."

A **Accessibility: Visual-spatial processing** Have students focus on completing 3 of the 4 rows and only complete the last row when they have more processing time. Have students cover the problems they are not working on to prevent the work from becoming visually overwhelming.

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, "How many do you see in the first group?"
- Ask, "Which other groups have the same number?"

3 Connect

MLR This Connect is structured using the *MLR7: Compare and Connect* routine.

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

Display Problem 4.

Use the Think-Pair-Share routine. Ask:

- "What is the same about these groups?"
- "What is different about these groups?"

Say, "All of these groups show the same number. They all have 4."

Key Takeaway: Say, "In the next activity, you will continue looking for groups that show the same number."

In this Activity . . .

Students circle equivalent groups and share how they know.

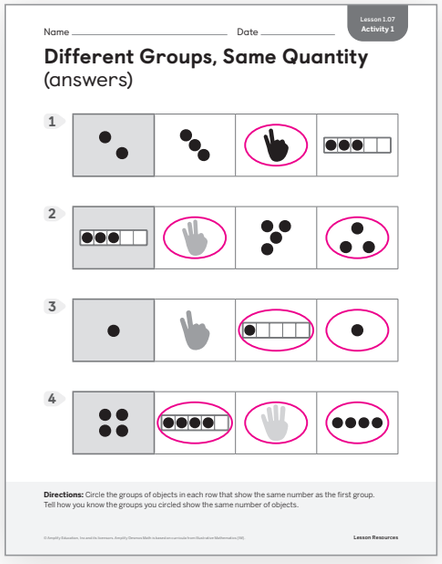
Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *There are 3 dots and 3 fingers. That is the same.*
- *There are 3 dots, but 3 dots and 1 more dot here. So, they are different.*

PDF Activity PDF


Name _____ Date _____

Lesson 1.07 Activity 1

Different Groups, Same Quantity (answers)

1

2

3

4

Directions: Circle the groups of objects in each row that show the same number as the first group. Tell how you know the groups you circled show the same number of objects.

Lesson Resources

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Think that groups do not represent the same number if they are arranged differently.	*None of them match because they look different.*	**Support** Ask, "How do the groups look different? Is there anything that is the same about them?"
Circle some groups that represent the same number.		**Strengthen** Ask, "What is the same? Do you see any other groups with the same number?"
Circle all the groups that represent the same number.		**Stretch** Say, "Make another group that shows the same number. You can use any tool."

Pairs | 15 min

Activity 2 Matching Groups

Fluency

Purpose: Students further their understanding of cardinality as they match equivalent groups of dots organized in different arrangements.

Presentation Screens

Materials

Lesson Resources:

- Distribute two sets of pre-cut cards from the Activity 2 PDF to each pair.

Classroom materials:

- Distribute one straightedge to each pair.

1 Launch

Ask, "Have you ever played a matching game? We will play a game where you find cards that match."

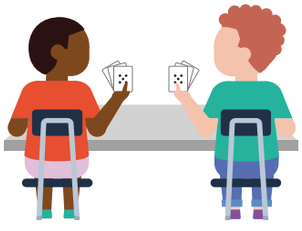
Demonstrate how to play by inviting a student to act as a partner. While demonstrating: ELPS 1.C

- **Say**, "First, I will place the straightedge between my partner and me."
- **Say**, "Then I will place the first set of cards facedown on one side of the straightedge." Place Cards A–H facedown.
- **Say**, "My partner will place the other set of cards facedown on the other side of the straightedge." Have the student partner place Cards I–P on the other side of the straightedge.
- **Say**, "Next, my partner and I each flip over a card and decide if the 2 cards show the same number. If they do, they match, and we can put them together in a pile. If they do not show the same number, we turn the cards facedown and try again." Flip over a card with the student partner.
- **Use the Think-Pair-Share routine.** Ask, "Do these cards have the same number? How do you know?"

Say, "As you play, take turns deciding if the cards match."

A **Accessibility: Conceptual processing** Guide processing by inviting student volunteers to role-play, and highlight various aspects of the rules to support students' understanding.

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, "How many do you see on the card?"
- Ask, "Does this card show the same number?"

3 Connect

Display Cards C and K.

Use the Think-Pair-Share routine. Ask, "Skye says these cards match. Do you agree or disagree? Why?"

Say (if not yet mentioned), "These cards do match because the groups show the same number. They both show 4."

Ask, "What is different about the groups on the cards?"

EB **Emergent Bilinguals** As students share their responses, gesture to the groups to show how the quantity is the same but the arrangement is different. ELPS 1.E, 2.F

Key Takeaway: Say, "2 groups can show the same number but look different."

In this Activity . . .

Students match cards showing equivalent groups of dots and share how they know.

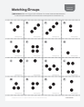
Oral activity: No writing expected.

Students might say or show . . .

Sample responses:

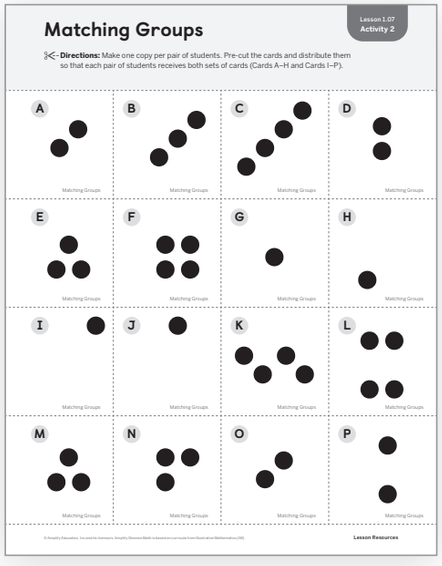
- *These match because they both show 3.*
- *These do not match because this has 1 dot and this has 2 dots.*
- Students might show that the cards match by placing the correct number of left fingers on one card and the correct number of right fingers on the other card.

Hands-On



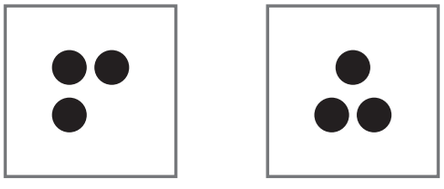
Act 2 PDF Cards

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Count the dots in each group.	1, 2, 3. 1, 2, 3. *Those match.*	S **Strengthen** Ask, "You noticed the cards have the same number of dots. Is there a way to figure out if they match without counting each dot by 1?"
Count 1 group of dots and relate it to the other group.	 *The first one has 1, 2, 3, and the second one looks the same, but this dot was moved. So, they both have 3.*	S **Strengthen** Ask, "Which other cards match these cards? How do you know?"
Subitize both groups of dots.	*I can tell they both have 3, so they match.*	

Whole Class | 10 min

Presentation Screen

Synthesis

Lesson Takeaway: Groups can be arranged differently but represent the same quantity.

Say, "Skye says these groups show the same number because they both show dots that look like an arrow."

Ask, "Do you agree or disagree with Skye? Why?"

Say, "Although both groups show dots in a way that looks the same, the number of dots in each group is different."

Ask, "How can we decide whether 2 groups show the same number?"

Say, "We know groups show the same number when they have the same number of objects."

Refer to the *Math Language Development Resources* for more vocabulary support.

Formalize vocabulary: same

(optional) **Consider using the Word Connections routine** with the word **same** by inviting students to identify ways you can talk about things being the **same** besides referring to quantities in a group.

Refer to the *Math Language Development Resources* for more vocabulary support.

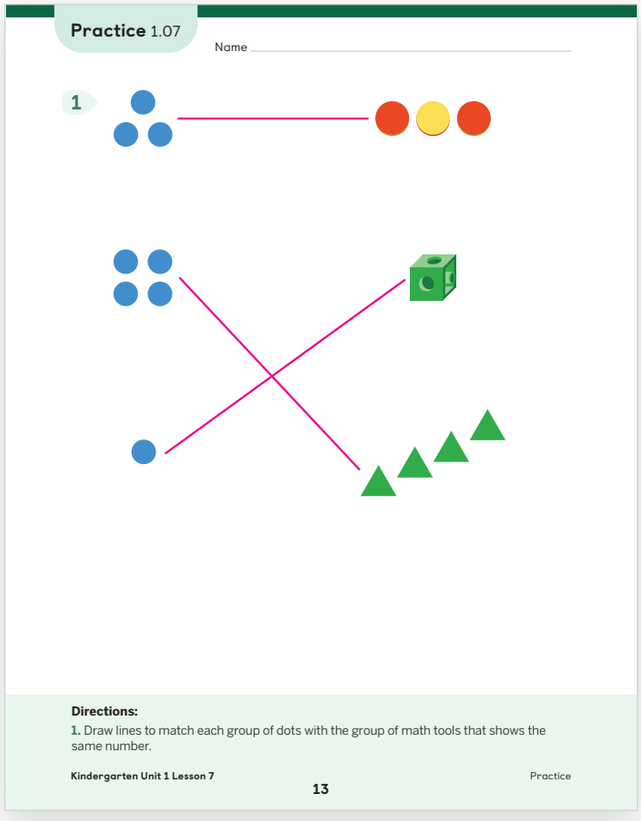
Invite students to refer to the **Summary** during Practice or anytime during the year.

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.

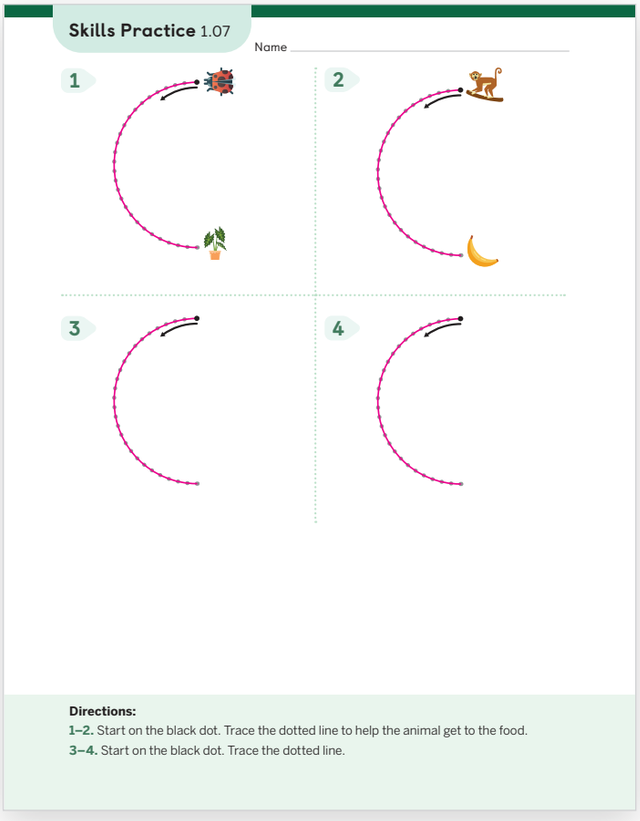
Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.D

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



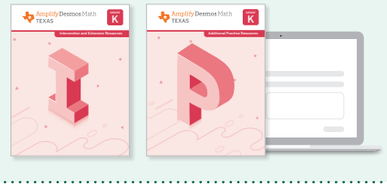
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

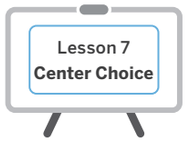
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 9



Short on time? Consider omitting the Center Choice Time.

Pattern Blocks

Explore

Pairs | 15 min | Building Toward K.6.A

Students explore and use pattern blocks and describe them to their partners.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Puzzles

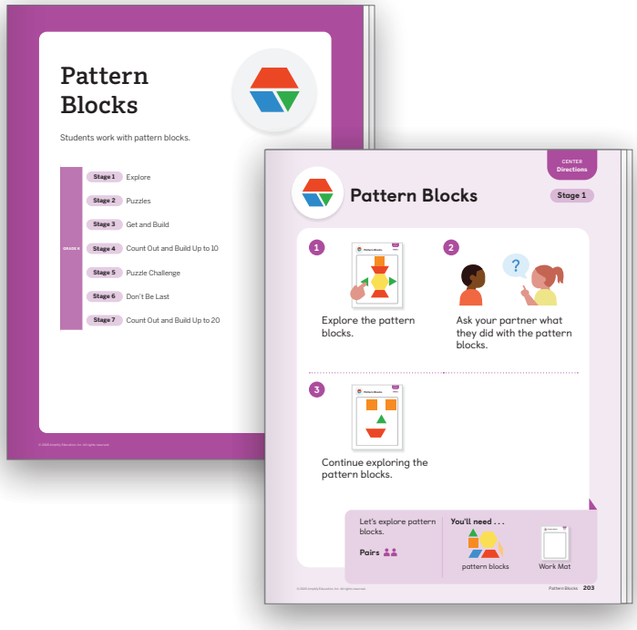
Pairs | 15 min | Building Toward K.6.A

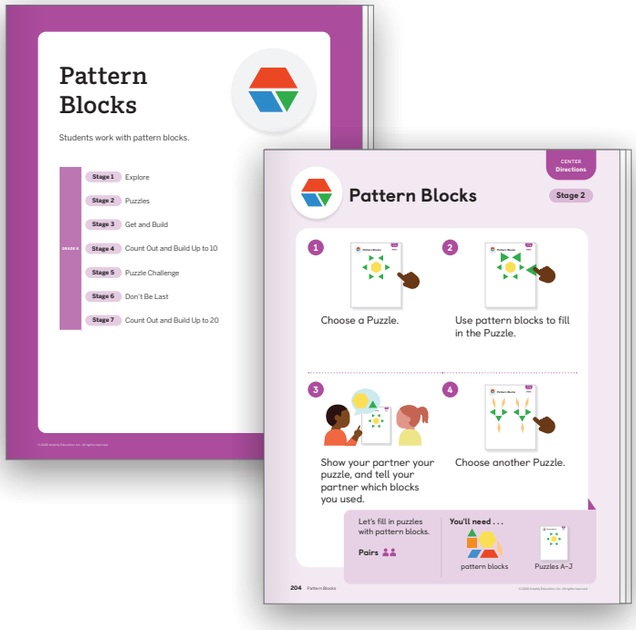
Students use pattern blocks to fill in simple puzzles.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Puzzles (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.





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

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.

Differentiation Use after Lesson 7

Lesson Goal: Subitize and identify equivalent groups of up to 4 images.

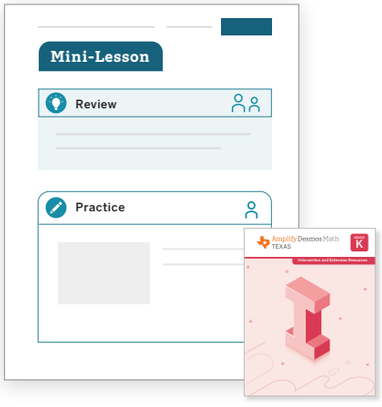
Support

Provide targeted intervention for students by using these resources.

If students think that groups do not represent the same number if they are arranged differently:

Respond:

- Assign the *Matching Representations of the Same Quantity* Mini-Lesson. | 15 min



Strengthen

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

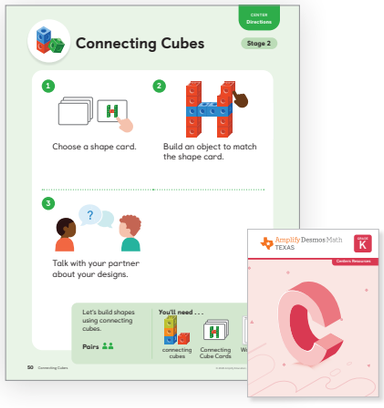
If students identify 1 group that represents the same number as a given group:

Respond:

- Invite students to play these **Centers**. | 15 min

  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles

- Have students complete **Lesson 7 Practice.** | 15 min
- **Item Bank**



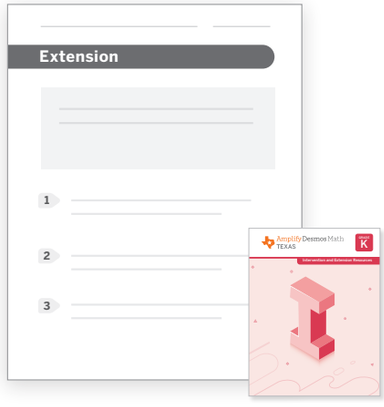
Stretch

Challenge students and extend their learning with these resources.

If students identify some or all groups that represent the same number as a given group:

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
- Vocabulary routines

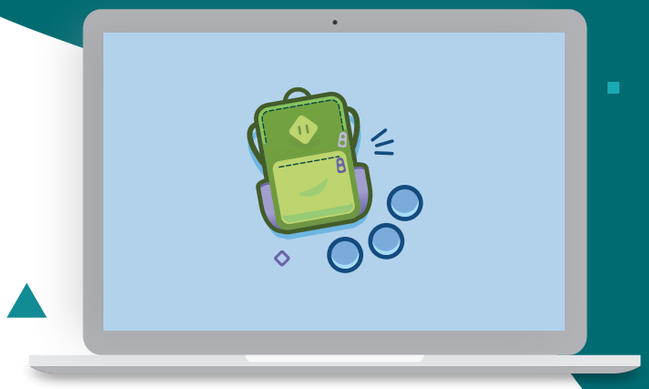
Professional Learning

When do your students feel successful in math? How do you know?

Unit 1
Lesson
8

Student devices recommended

We recommend students use devices for this lesson. Student Edition pages are also available.



Packing Up School Supplies

Subitizing Small Groups

Let's figure out how many are in a small group.

Key Concepts

Today's Goals

1. **Goal:** Subitize and identify equivalent groups of up to 4 images.
2. **Language Goal:** Describe and interpret digital feedback. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F
3. **Language Goal:** Explain mental strategies for subitizing. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students subitize groups of up to 4 dots. Although some students may count to determine how many, the groups are shown for a limited time (2–4 seconds) so students can build fluency in subitizing, a skill that develops through repeated experience. Students then identify the equivalent group of dots shown in a different arrangement. As students subitize and identify equivalent groups in various arrangements, they deepen their understanding of the relationship between numbers and quantities and develop their number sense, which prepares them to be able to select number sense as a tool to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lesson 7, students identified equal groups of subitizable quantities that were represented in different ways.

Future Learning

In Lesson 9, students will subitize groups of up to 4 dots and represent the quantity with a math tool of their choice.

Depth and Rigor of Student Thinking

- Students **apply** their understanding of cardinality by identifying equivalent representations of the same quantity.
- Students build toward **fluency** in subitizing quantities up to 4.

Vocabulary

Review Vocabulary

same

TEKS

Addressing

K.2.D

Recognize instantly the quantity of a small group of objects in organized and random arrangements.

Math Process Standards: K.1.C

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

Building Math Identity

I am a doer of math.

Where do you see small groups of objects at school or at home?

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

Lesson at a Glance

60 min

TEKS: K.1.C, K.2.D

Why digital?

Students subitize quantities up to 4 that are shown for a short period of time and receive responsive feedback when identifying an equivalent group.

Student pages for students using print can be accessed in the digital program.

Warm-Up

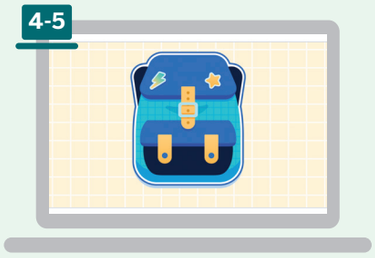
Whole Class | 10 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about interacting with a digital screen.

Activity 1 Fluency

Pairs | 25 min

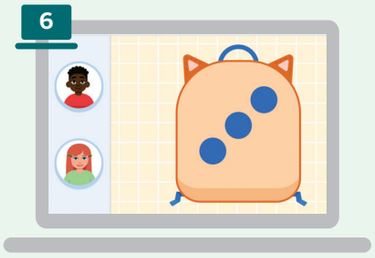
Students subitize groups that are shown for 2–4 seconds and identify an equivalent group. They interpret feedback as the dots in the selected group match one-to-one with those in the given group. Students then consider what the feedback reveals about the relationship between the quantities.



Synthesis

Whole Class | 10 min

Students review and reflect on different ways to look for and make use of structure when subitizing as they compare how 2 students saw a group of dots.

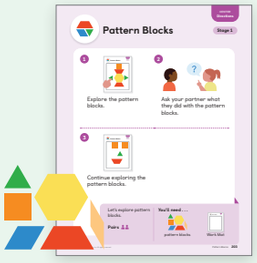


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Pattern Blocks



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

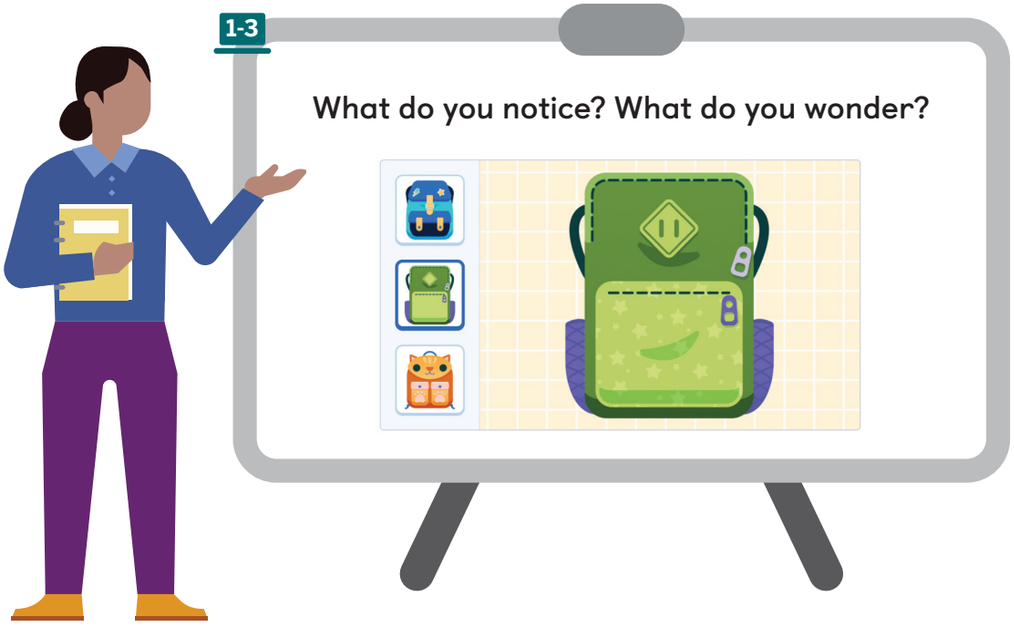
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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: Screens 1-3

Warm-Up Notice and Wonder

Purpose: Students notice and wonder about a digital interaction in which a small group is revealed when the backpack is clicked to prepare for similar digital interactions in the activity.

Students using print



1 Launch

1. **Play** the animation. ELPS 1.F
2. **Display** the backpacks.

   Say, "Choose a backpack."

   Students using print: Have students decide collectively which backpack to choose for the class display.
3. **Display** the backpack.

   Use the Notice and Wonder routine. Say, "Explore the screen. Then tell your partner what you notice and wonder."

   Students using print: Have students share their ideas for exploring the screen as a class.

2 Connect

3. **Invite a few students to share** what they notice and wonder with the whole class. Record students' responses.

   Ask (if not yet mentioned during discussion), "What happened when you clicked the backpack?"

   Say, "Inside the backpack is 1 supply we need for the first day of Kindergarten. Let's gather more school supplies."

Students might say . . . ELPS 2.B

I notice the backpack opens when I click it.

I notice there is something inside the backpack.

I wonder if I need all of these supplies for school.

I wonder what will happen if I click the supply that matches.

Pairs | 25 min | Suggested Pacing: Screen 4, Screen 5

Activity 1 Flash and Find Fluency

Purpose: Students build fluency with subitizing by determining a quantity of dots that is shown for a short period of time and then identifying the equivalent group of dots organized in a different arrangement.

Students using print

1 Launch

4 **Display** the backpack.

Say, "We need to gather school supplies for the first day of Kindergarten. Look inside the backpack. Then choose the group with the same number of dots."

Students using print: For each problem, click the backpack to reveal the quantity inside and have students circle the equivalent group. Have students share which group they think has the same number and then click the group they choose. Choose a group with a different number of dots for at least 1 problem to give students an opportunity to interpret digital feedback. If students complete all the problems and time permits, continue clicking the backpack and have students show the same quantity on their fingers.

A **Accessibility: Executive functioning** Check for understanding by inviting students to rephrase the directions in their own words.

2 Monitor

While students complete **Screen 4**, refer to the D **Differentiation | Teacher Moves** table on the following page.

4 **If students need help getting started . . .**

- Ask, "What did you notice on Screen 3? What can you do to open the backpack?"
- Ask, "How many dots are in the backpack? Which group has the same number of dots?"

3 Connect

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

Display the backpack and groups of dots.

Demonstrate selecting each group in the following order: 4 dots, 1 dot, and 3 dots.

Use the Think-Pair-Share routine. Ask:

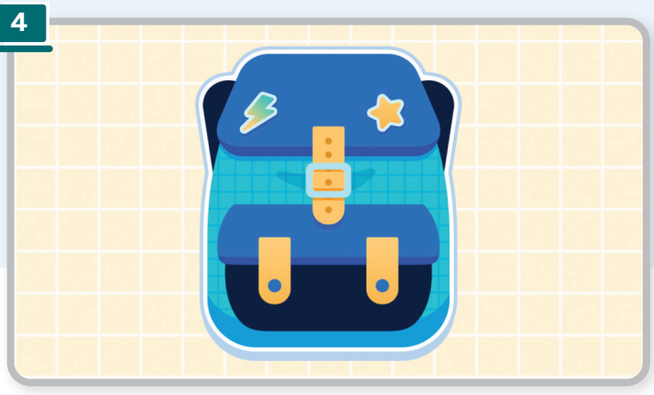
- "What did you notice?"
- "How did you know when a group had the same number?"
- "How did you know when a group did not have the same number?"

EB **Emergent Bilinguals** Demonstrate selecting a group again and gesture to the dots that students describe. ELPS 1.C

Key Takeaway: Say, "Let's continue to think about different ways we can figure out which group shows the same number."

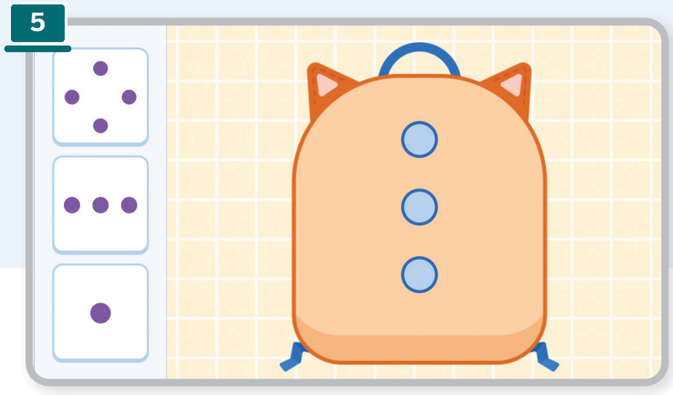
Students using digital

4



Students select the group with the same number of dots as the group inside the backpack.

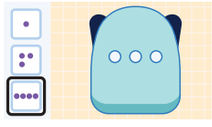
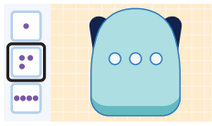
5



Students select the group with 3 dots.

Students using print **will arrive at similar answers.**

D Differentiation | Teacher Moves

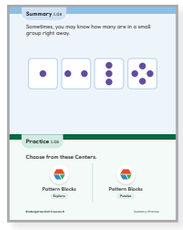
Look for students who . . .	For example . . .	Provide support . . .
Almost there Select a group with a different quantity.	 I found the group with the dots in a line.	**Support** Ask, "What happened when you clicked on that group? What does that make you think about the number of dots in the backpack?"
Select a group with a different quantity and then use digital feedback to select the group with the same quantity.	 I knew 2 wasn't right because there is 1 extra dot in the backpack. I tried 3 because it is 1 more than 2.	**Strengthen** Ask, "What could you do next time to help you choose the group with the same number on the first try?"
Subitize and select the group with the same quantity.	 I saw 3 dots, so I clicked on 3 dots.	**Strengthen** Ask, "How did you know which group to choose?"

Whole Class | 10 min | Suggested Pacing: Screen 6

Synthesis

Lesson Takeaway: There are different ways to look for and make use of the structure of small quantities to subitize.

Students using print



6 **Display** the students and groups.

Say, "Shawn and Priya were asked, 'How many do you see? How do you see them?' Both students saw 3 dots. Let's look at how Shawn and Priya saw the group."

Play the first animation. **ELPS 1.F**

Ask, "What do you notice about how Shawn saw the group of dots?"

Play the second animation.

Ask, "What do you notice about how Priya saw the group of dots?"

Play each animation again.

Ask, "What is different about how Shawn and Priya saw the group of dots?"

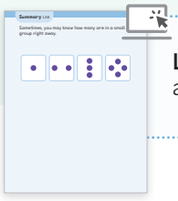
Say, "There are different ways to see the objects in a small group and know how many objects there are."

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

Practice

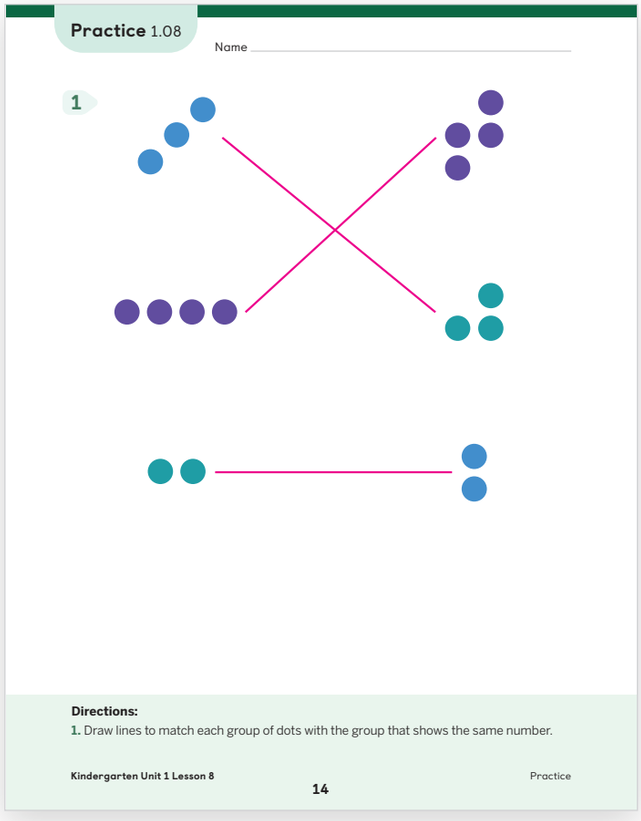
Independent

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



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.08

Name _____

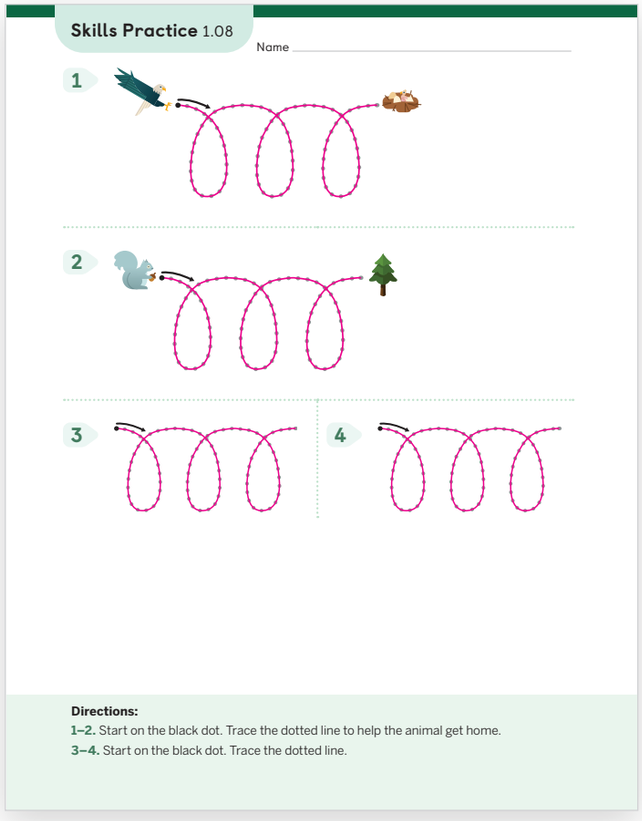
1

Directions:

1. Draw lines to match each group of dots with the group that shows the same number.

Kindergarten Unit 1 Lesson 8 Practice

14



Skills Practice 1.08

Name _____

1

2

3

4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get home.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.D

Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*These problems build toward the standard shown.

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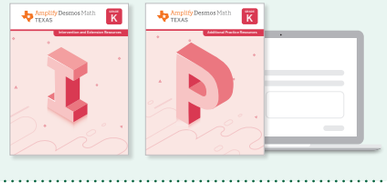

Center Choice Time

Presentation Screen 7

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.

Pattern Blocks

Explore

Pairs | 15 min | Building Toward K.6.A

Students explore and use pattern blocks and describe them to their partners.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Puzzles

Pairs | 15 min | Building Toward K.6.A

Students use pattern blocks to fill in simple puzzles.

Materials

- pattern blocks **(Manipulative Kit)**
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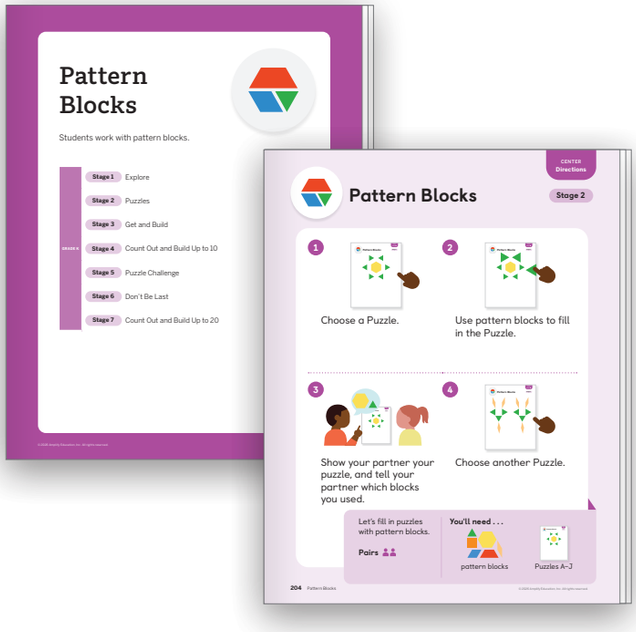


Use Centers as games to offer fun and engaging ways for students to practice math skills.

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.

Differentiation Use after Lesson 8

Lesson Goal: Subitize and identify equivalent groups of up to 4 images.

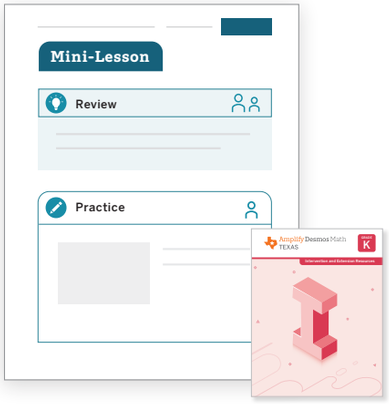
Support

Provide targeted intervention for students by using these resources.

If students select a group with a different quantity:

Respond:

- Assign the *Identifying Equal Groups* Mini-Lesson. | 15 min



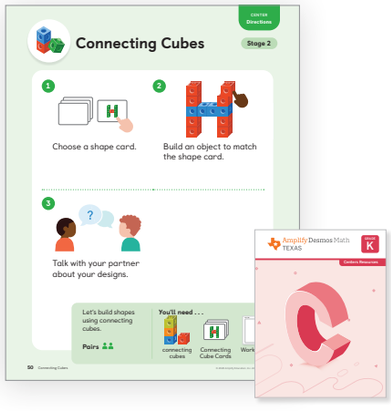
Strengthen

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

If students select a group with an equivalent quantity:

Respond:

- Invite students to play these **Centers. |** 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles
- Have students complete **Lesson 8 Practice. |** 15 min
- **Item Bank**



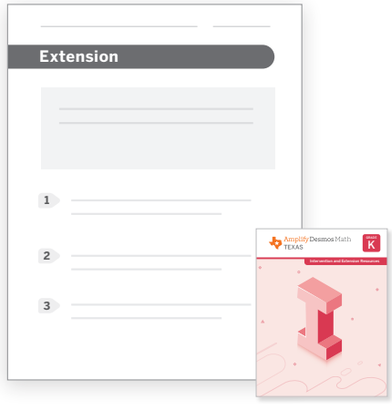
Stretch

Challenge students and extend their learning with these resources.

If students select a group with an equivalent quantity and explain their strategy:

Respond:

- Invite students to explore the **Sub-Unit 2 Extension Activities. |** 15 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
- Vocabulary routines

Professional Learning

Even when an incorrect answer is selected, students have the opportunity to apply their math learning to interpret digital feedback. What did you notice about how students interpreted digital feedback? What does that tell you about how students have internalized and are applying previously learned concepts?

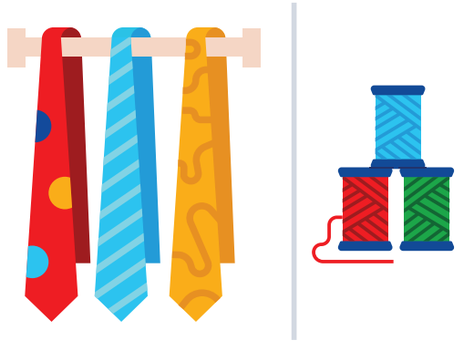
Unit 1
Lesson
9

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

Skye Goes Shopping

Subitizing and Representing Small Groups

Let's figure out how many are in a small group and then show how many.



Key Concepts

Today's Goals

1. **Goal:** Subitize groups of up to 4 images.
2. **Goal:** Use fingers and objects to represent a quantity.
3. **Language Goal:** Explain how to represent a quantity shown in an image using an equivalent group of objects. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students subitize groups of up to 4 dots and represent the quantity using a math tool of their choice. Although some students may count to determine how many, the focus of this lesson is on subitizing, a skill that develops through repeated experience. As students subitize groups in images and represent those quantities using different objects, they deepen their understanding of the relationship between numbers and quantities and develop their number sense, which prepares them to be able to select number sense as a tool to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lesson 7, students subitized to identify groups of up to 4 objects or images with the same quantity.

Future Learning

In Lesson 10, students will continue subitizing and representing quantities up to 4 as they strengthen their understanding that groups can have the same quantity but be represented and arranged in different ways.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of cardinality as they represent the same quantity as a given group.
- Students build toward **fluency** with subitizing quantities up to 4.

Vocabulary

Review Vocabulary

same

TEKS

Addressing

K.2.D

Recognize instantly the quantity of a small group of objects in organized and random arrangements.

Also Addressing: **K.2.B**

Math Process Standards: K.1.C, K.1.D, K.1.E

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

Building Toward

K.2.C

Building Math Identity

I can be all of me in math class.
Uncle Mo helps the siblings by packing their lunches. Who helps you at home or in math class?

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

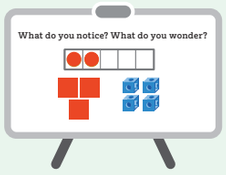
Lesson at a Glance 60 min

TEKS: K.1.C, K.1.D, K.1.E, K.2.B, K.2.D

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about small groups of math tools — 2 counters in a 5-frame, 3 pattern blocks, and 4 connecting cubes.



Activity 1 Fluency

Whole Class | 10 min

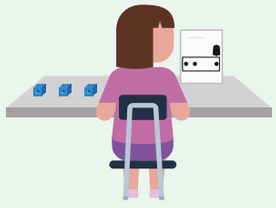
Students are introduced to the **How Many Do You See?** routine, in which they develop fluency by looking at and describing groups of dots. For the first time, the small groups of dots are shown for a limited time (5–10 seconds) so students can build fluency in subitizing. **(TEKS K.1.D)**

Activity 2 Fluency

Pairs | 20 min

Students look at groups of dots to determine the quantity. They are given access to math tools to represent the same quantity. In the Connect, students are introduced to the **Gallery Tour** routine, in which they look at each other's work to analyze similarities and differences. **(TEKS K.1.E)**

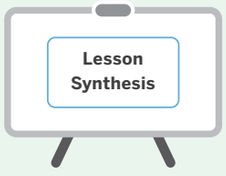
Manipulative Kit: 5-frames (optional), connecting cubes (optional), pattern blocks (optional), two-color counters (optional)



Synthesis

Whole Class | 10 min

Students review and reflect on how to represent how many are in a small group.

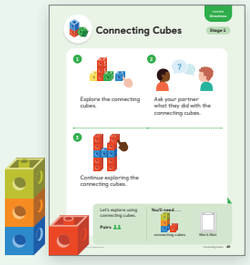


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Connecting Cubes



Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

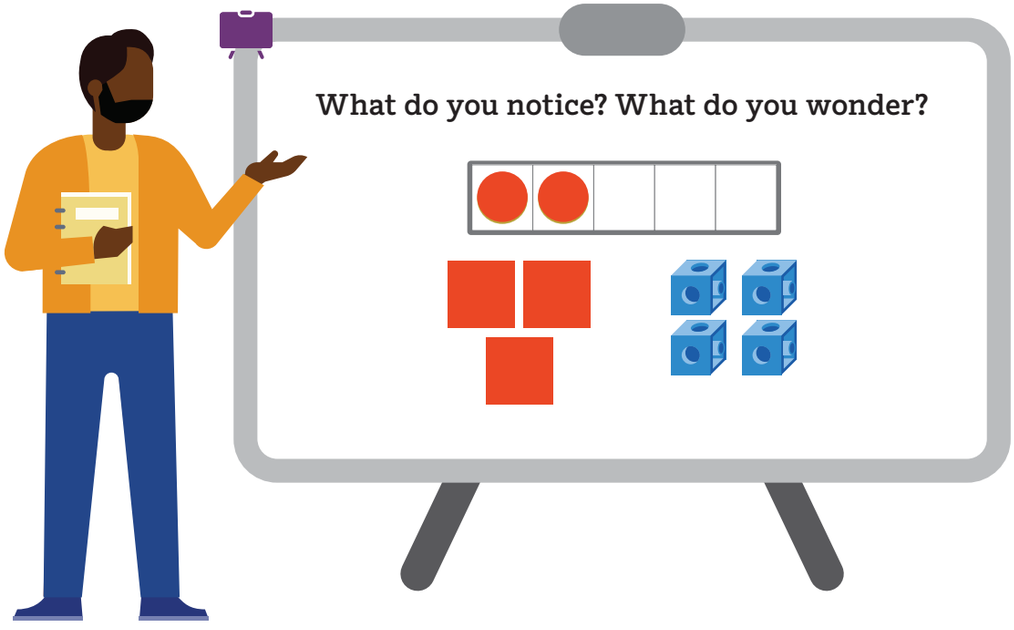
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students examine an image of math tools to notice how different objects can be organized into small groups.



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, "We will look at more small groups of objects today."

Students might say . . . ELPS 2.B

I notice they are all math tools.

I notice 2 counters, 3 orange shapes, and 4 connecting cubes.

I wonder why there are only 2 counters on the frame.

I wonder why they have different numbers.

Whole Class | 10 min

Activity 1 How Many Do You See? Fluency

Presentation Screens

Purpose: Students build fluency with subitizing by quickly determining a quantity of dots and then representing an equivalent group using their fingers.

1 Launch

Flash the first image for 5–10 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 for discussion.

Use the Think-Pair-Share routine. Say, "Use your fingers to show your partner how many dots you see. Tell your partner how many dots you see and how you see them." Repeat with Images B and C.

A **Accessibility: Conceptual processing** Guide processing by inviting pairs of students to restate what they hear back to their partner. This will ensure students are communicating clearly and comprehending what is being shared.
ELPS 1.E, 2.F

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, "How many do you see?"
- Say, "Show how many you see with your fingers."

3 Connect

Ask, "How many do you see? How do you see them?"

Invite students to share their responses. Select and sequence their responses in the order shown in the *Differentiation* table.

Record students' responses by highlighting and annotating the image.

Say, "You all saw the same number of dots, but you saw them differently."

Key Takeaway: Say, "There are different ways to describe how many you see."

In this Activity . . .

Students represent an equivalent group using their fingers and tell their partner how many they see.

Oral activity: No writing expected.

Students might say or show . . .

Sample responses:

- There are 4 (or show ).
- I see 2 and 2.
- I see 3 and 1 (or show ).

D Differentiation | Teacher Moves

 Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Name the quantity.	There are 4. I just know it is 4.	S **Strengthen** Ask, "Yes, sometimes, groups are small enough that you look and know how many. What do you notice about what the dots look like?"
Notice the arrangement is similar to a recognizable object.	There are 4. I see it looks like the dots on a domino.	S **Strengthen** Ask, "What is another way to show 4?"
Decompose the quantity into parts.	I see 2 on the top and 2 on the bottom. That makes 4. or I see 2 on this side and 2 on that side. That makes 4.	

Pairs | 20 min

Activity 2 Getting the Number Fluency

Purpose: Students build fluency with subitizing by representing equivalent groups using a math tool of their choice.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames, connecting cubes, pattern blocks, and two-color counters. (optional)

1 Launch

Say, "Skye loves fashion and wants to start making clothes. Skye makes a list to take to the store usingdots to show how many of each item is needed."

Display the image that represents Skye's thread.

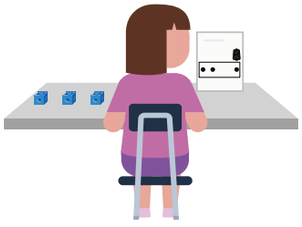
Say, "Give me a signal when you know how many."

Use the Think-Pair-Share routine. Ask, "How many do you see? How do you see them?"

Say, "Use any math tool to make a group that shows the same number. Then tell your partner how you made a group that shows the same number." Repeat for the remaining images.

Provide access to 5-frames, connecting cubes, pattern blocks, and two-color counters.

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 . . .

- Say, "Show how many you see with your fingers."
- Ask, "Which tool could help you show how many?"

3 Connect

Say, "We are going to use a routine called the Gallery Tour routine. A gallery is a room that has different work displayed. In this routine, you will take a tour around our classroom to look at your classmates' work and have a discussion with your partner."

Use the Gallery Tour routine. Say, "As you look at your classmates' groups, notice what is the same and different about how they showed how many." ELPS 1.C

MLR **MLR7: Compare and Connect** ELPS 1.B, 1.E, 2.B, 2.D, 2.E

Invite 2 students who used different tools to share their representations of the same quantity and explain how their representation relates to the image, as shown in Row 4 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "What is the same about how they showed how many?"
- "What is different about how they showed how many?"

EB **Emergent Bilinguals** Give students time to formulate and rehearse a response with a partner before sharing with the class. ELPS 1.E, 2.F

Ask, "What have you learned about showing how many you see?"

Key Takeaway: Say, "You can use different tools to show how many you see."

In this Activity . . .

Students share how they made their groups with a partner.

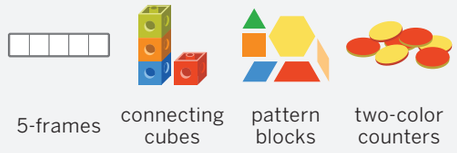
Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I showed the number 3 using counters.*
- *I made 4 with connecting cubes.*
- *I showed 2 on the 5-frame.*
- *I have 2 pattern blocks in my group.*

Hands-On



D Differentiation | Teacher Moves

Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Almost there Name the tool they used.	*I used counters.*	**Support** Ask, "What did you do with the counters? Why?"
Describe how they see the dots.	*I see 1 dot and 1 dot and 1 dot.*	**Strengthen** Ask, "How many are there? How could you show how many using tools?"
Explain how they used the tool.	*I put 2 cubes together and then 1 more cube.*	**Strengthen** Ask, "Why did you do that?"
Explain how their representation relates to the image.	*I saw 3 dots, so I used 3 cubes to show that.*	**Stretch** Ask, "In what other ways could you show 3?"

Whole Class | 10 min

Synthesis

Lesson Takeaway: There are different ways to determine a quantity. Tools, such as fingers or objects, can be used to represent a quantity.

Presentation Screens

Ask, "Which tool did you prefer using today? Why?"

Say, "Math tools can be used in many ways. As we continue to show how many, let's think about which tools work best for showing how many."

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

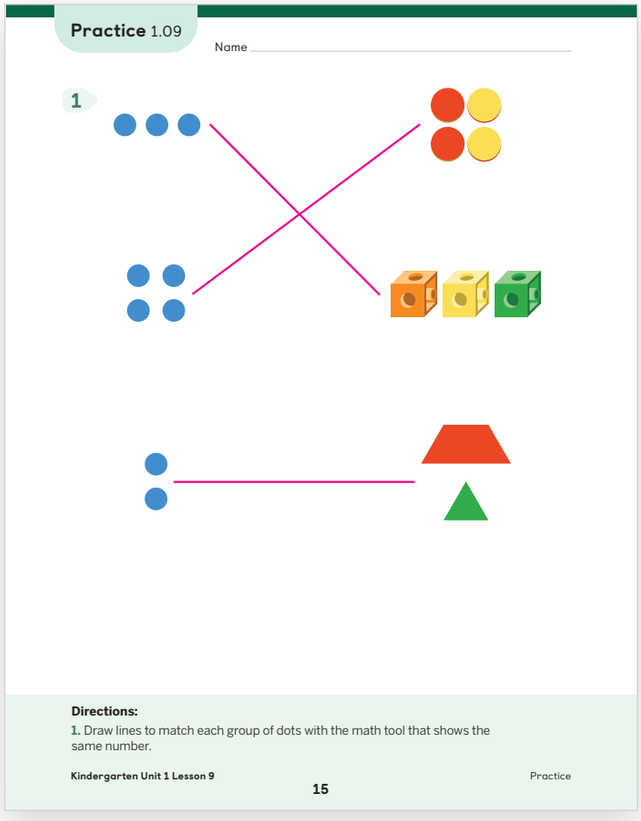
Practice

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.

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.09

Name

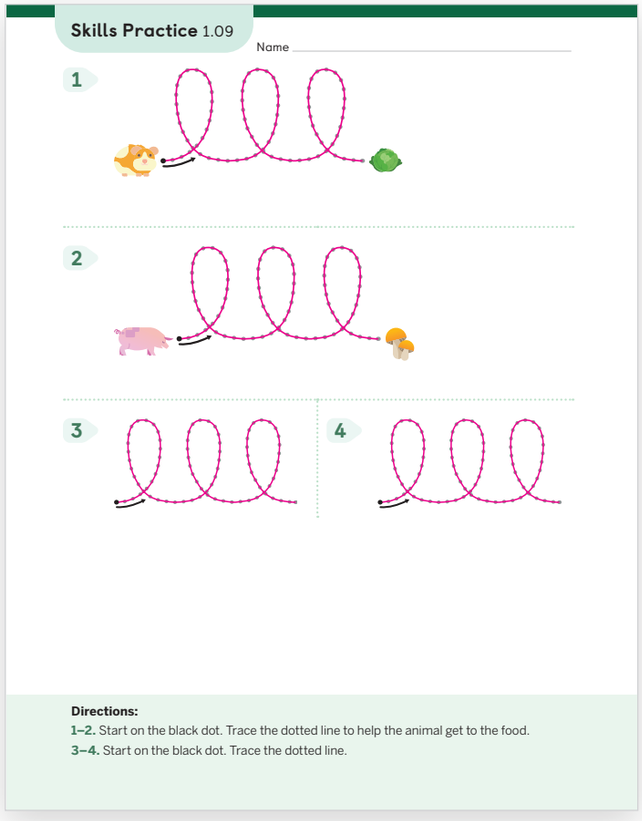
1

Directions:

1. Draw lines to match each group of dots with the math tool that shows the same number.

Kindergarten Unit 1 Lesson 9 Practice

15



Skills Practice 1.09

Name

1

2

3

4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.D

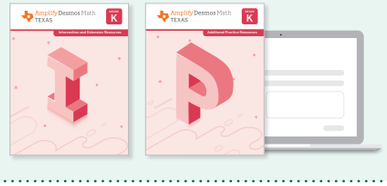
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
Fluency	**1–4**	1	K.2.B*

*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).



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 8

Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Explore

Pairs | 15 min | Building Toward K.2.C

Students explore and use connecting cubes and describe them to their partners.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Connecting Cubes

Build to Match

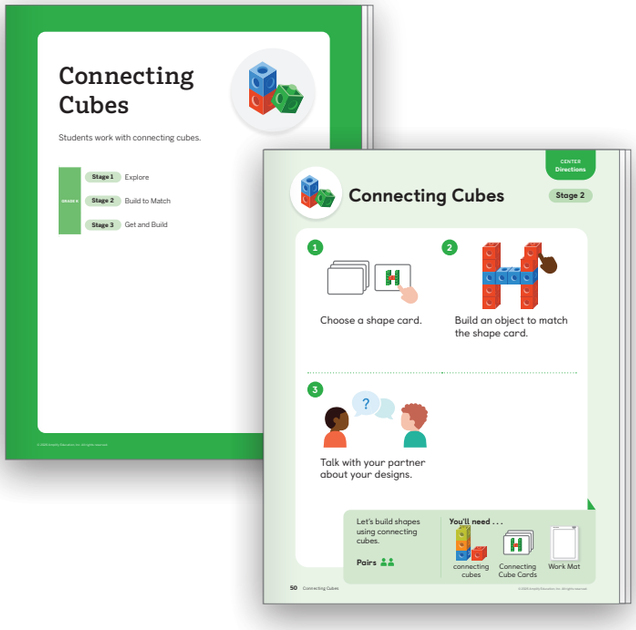
Pairs | 15 min | Building Toward K.2.C

Students use connecting cubes to build objects pictured on cards.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Connecting Cubes Cards, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.



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

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.

Differentiation Use after Lesson 9

Lesson Goal: Use fingers and objects to represent a quantity.

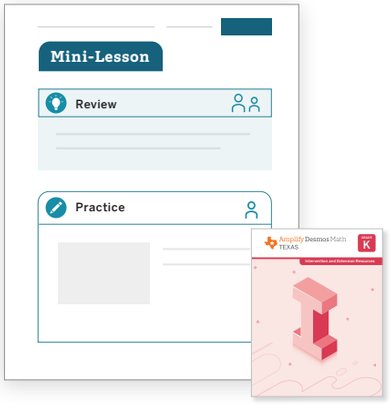
Support

Provide targeted intervention for students by using these resources.

If students name and represent a different quantity:

Respond:

- Assign the *Showing the Same Number in Different Ways* Mini-Lesson. | 15 min



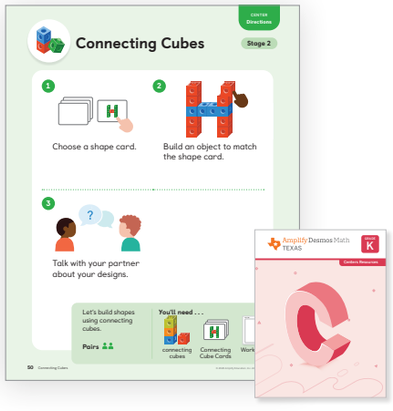
Strengthen

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

If students name and represent the same quantity:

Respond:

- Invite students to play these **Centers. |** 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles
- Have students complete **Lesson 9 Practice. |** 15 min
- **Item Bank**



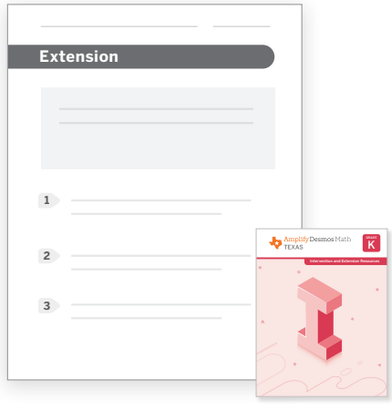
Stretch

Challenge students and extend their learning with these resources.

If students name and represent the same quantity in multiple ways:

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
- Vocabulary routines

Professional Learning

What routines or structures helped students work independently during Center time today? What routines will help you circulate and talk with students as they work?

Unit 1
Lesson
10

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

Designing Shoes With Skye

Representing Groups With the Same Quantity

Let's find and make groups with the same number of objects.

Key Concepts

Today's Goals

1. **Goal:** Subitize groups of up to 4 images.
2. **Goal:** Use objects and drawings to represent a quantity.
3. **Language Goal:** Explain how a group of objects can have the same quantity but look different. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students continue subitizing groups of up to 4 images. They continue to represent the quantities using objects and, for the first time, using drawings. They compare groups to notice that groups can have the same quantity regardless of the type of object or image, or their arrangement. As they identify and create groups with the same quantity, students further their understanding of equivalence and the relationship between numbers and quantities and develop their number sense, which prepares them to be able to select number sense as a tool to solve problems. **(TEKS K.1.C)**

Prior Learning

In Lesson 9, students subitized objects or images in groups of up to 4 and represented the quantity using math tools and fingers.

Future Learning

In Lesson 11, students will create matching groups using sounds, movements, and tools. In Lesson 12, they will create matching groups for quantities up to 10. In both lessons, students will engage with real-world scenarios asking, "Are there enough?"

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of equivalence, that the same quantity can be arranged and represented in different ways.
- Students build toward **fluency** with subitizing quantities up to 4.

Vocabulary

Review Vocabulary

same

TEKS

Addressing

K.2.B

Read, write, and **represent whole numbers** from 0 to at least 20 **with** and without **objects or pictures.**

Also Addressing: **K.2.D**

Math Process Standards: K.1.C, K.1.D, K.1.E

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

Building Toward

K.2.G

Building Math Identity

I can be all of me in math class.
How have you used math tools in a different way than your classmates?

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

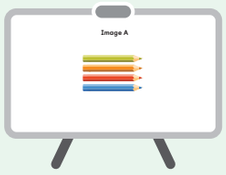
Lesson at a Glance 60 min

TEKS: K.1.C, K.1.D, K.1.E, K.2.B, K.2.D

Warm-Up Fluency

Whole Class | 5 min

Students use the **How Many Do You See?** routine, in which they develop fluency by looking at pairs of images that represent the same quantity. **(TEKS K.1.D)**



Activity 1 Fluency

Pairs | 10 min

Students design matching polka dot shoes for Skye by subitizing a quantity and representing the same number using counters. In the Connect, students compare groups to consider how they can have the same quantity and be arranged differently.

Manipulative Kit: two-color counters
Materials: Activity 1 PDF

Activity 2 Fluency

Pairs | 20 min

Students identify 2 groups of objects that have the same quantity in an illustration from the Unit Story. They draw groups to represent each quantity. In the Connect, students compare groups to consider how they can have the same quantity but different types of objects or images. **(TEKS K.1.E)**

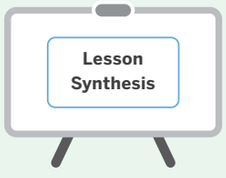
Materials: Activity 2 PDF, Unit Story, *The First Day of School*

Synthesis

Whole Class | 10 min

Students review and reflect on groups with the same quantity and different ways to represent small quantities.

Additional Prep: Cut out: Image F of pencil and paper from *Math Tools Images* PDF (from prior lessons)

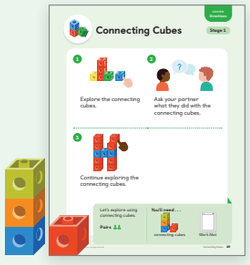


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Connecting Cubes



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.

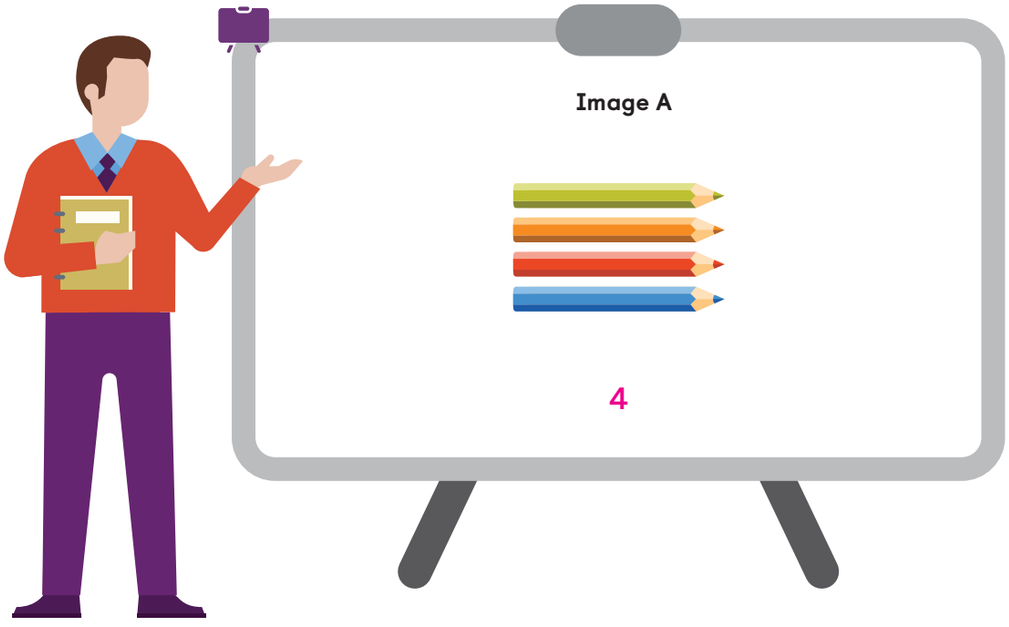
Whole Class | 5 min

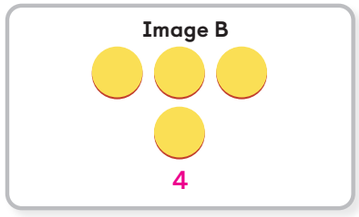
Presentation Screens

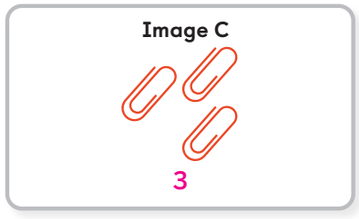
Warm-Up How Many Do You See?

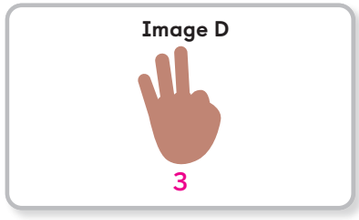
Fluency

Purpose: Students tell how many small groups of objects they see to consider different representations of the same quantity.









Why these images? These images lend themselves to recognizing different representations of the same quantity in pairs of images.

1 Launch

Use the How Many Do You See? routine.

Flash Image A for 5–10 seconds and ask, "How many do you see?"

Say, "Use your fingers to show your partner how many you see."

Display the image again, leaving it displayed for discussion.

2 Connect

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

Repeat for each image.

Ask, "How are the last 2 groups alike? How are they different?"

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

A: *I see 4. I just know it is 4.*

B: *I see 4. I see 3 on top and another at the bottom.*

C: *I counted 1, 2, 3.*

D: *It is still 3, like the last one.*

Pairs | 10 min

Activity 1 Skye's Polka Dot Shoes

Fluency

Purpose: Students apply their understanding of cardinality by creating a group of counters with the same quantity as a given group and comparing how the groups are the same and different.

Presentation Screen

Materials

Lesson Resources:

- Display the Activity 1 PDF during the Launch and distribute one copy to each student.

Manipulative Kit:

- Distribute two-color counters to each student.

1 Launch

Display Skye's shoe.

Say:

- "Skye loves polka dot clothes so much that Skye wants to design a pair of shoes with polka dots. Skye wonders how to make sure each shoe shows the same number of polka dots."
- "I am going to quickly show you a shoe with polka dots. You will have to think about how many dots you see so that you can put the same number of dots on your shoe."

Display 2 counters on Skye's shoe in a linear arrangement for 5 seconds before covering them or hiding them from students' view.

Say, "Make your shoe have the same number of polka dots."

Use the Think-Pair-Share routine. Ask, "Do our shoes have the same number of polka dots? Tell your partner how you know." Repeat with a group of 3 counters in a triangular arrangement and then 4 counters in an array.

EB **Emergent Bilinguals** Allow students to nonverbally explain by pointing to their shoes and using gestures, such as a thumbs up or thumbs down, to show whether the shoes are the same or different. Then invite students to communicate orally. ELPS 3.D, 3.F

2 Monitor

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

If students need help getting started . . .

- Ask, "How many polka dots did you see?"
- Ask, "How many counters will you use?"

3 Connect

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

Display 2 different student-created arrangements of 3 counters.

Use the Think-Pair-Share routine. Ask:

- "What is the same about the dots on their shoes?"
- "What is different about the dots on their shoes?"

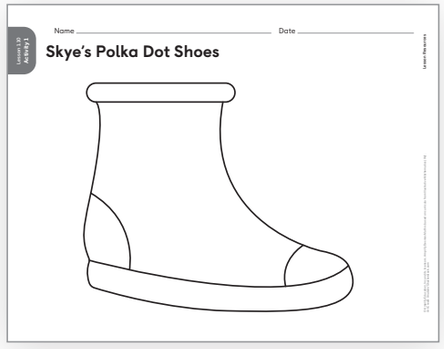
Key Takeaway: Say, "Let's continue to think about how groups can be alike and different."

In this Activity . . .

Students create a group using counters with the same quantity as a given group shown and compare how different groups are arranged.

Oral activity: No writing expected.

PDF Activity PDF



Students might say . . .

Sample responses:

- My group is the same because it also has 3.
- My group is different because I put one on top of the other.
- My group is different because I put 2.
- My group is the same because it also puts them in a line.

Hands-On

two-color counters

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Represent a different quantity than the quantity shown.		**Support** Display the counters again and ask, "How many did you see? How many did you show?"
Represent the same quantity in the same arrangement.		**Stretch** Ask, "You saw 3 and you showed 3. Can you show 3 in a different way?"
Represent the same quantity in a different arrangement.		

Pairs | 20 min

Activity 2 Finding and Making a Match

Fluency

Purpose: Students identify small groups of objects in an image that have the same quantity and represent them with a drawing.

Presentation Screens

Materials

- Display page 4 from the Unit Story, *The First Day of School* during the Launch.

Lesson Resources:

- Display the Activity 2 PDF during the Launch and distribute the Activity 2 PDF to each pair.

1 Launch

Display page 4 from the Unit Story.

Say, "You will work with a partner to find 2 groups in the picture that have the same number of objects and then draw a group with the same number."

Demonstrate by inviting a student to act as a partner. While demonstrating: ELPS 1.C

- **Say**, "Let's find a group of 1. I will find a group of 1 first, and my partner will find a different group of 1 next." Circle the belt and then have the student circle a group of 1.
- **Say**, "I found 1 belt." Have the student share the other group of 1.
- **Say**, "Then, we each will draw a group that shows the same number."

Display and distribute the Activity 2 PDF, *Groups in Skye's Room*.

Say, "First, you and your partner each need to find a group of 2 objects. Discuss how you found the groups and how you know they show the same quantity. Then, you each need to draw a group with the same number." Repeat for groups of 3 and 4.

A **Accessibility: Memory and attention** Chunk this task into smaller, more manageable parts by providing students with feedback on the 2 groups they find before having them draw a group with the same number.

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 . . .

- Say, "Tell me about a group of objects you see in our classroom."
- Ask, "Can you find a group of 2 at your table?"

3 Connect

Ask, "What groups of 2 did you and your partner see in the picture?"

Record students' responses as they share by highlighting and annotating the image.

Say, "These are all groups of 2 we saw in the picture."

Invite students to share their representations of 2. Select and sequence their representations using Rows 2 and 3 in the *Differentiation* table.

Display more groups of 2.

Ask, "How are all of these groups alike? How are they different?"

Key Takeaway: Say, "Groups can show the same number in many ways and with different objects."

In this Activity . . .

Students identify small groups of objects in an image that have the same quantity and discuss how they know the groups show the same quantity. Students then represent the quantity with a drawing.

Oral activity, no writing expected.

Students might say . . .

Sample responses:

- *I found 2 drawings. You found 2 shoes. Both the drawings and the shoes showed 1 and 1 more.*
- *I see 3 ties. My partner sees 3 spools of yarn. Both show 3.*
- *The hats and trophies are different but both show 4.*

Activity PDF


Name _____ Date _____

Groups in Skye's Room

Differentiation | Teacher Moves

Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Almost there Draw a group with a different number.		**Support** Ask, "How many were in each group you found? Does your group have the same number? How do you know?"
Draw a group with the same number using detailed images.		**Stretch** Ask, "How many were in the groups you found? How did you show the same number? Do you see a group with the same number of objects in our classroom?"
Draw a group with the same number using simple images to represent the detailed illustration.		

Whole Class | 10 min

Presentation Screen

Synthesis

Lesson Takeaway: Groups can be made up of different objects and represent the same quantity. The quantity of a group can be represented in multiple ways.

Ask:

- "What have you learned about groups that show the same number?"
- "How can you show how many objects you see in a group?"

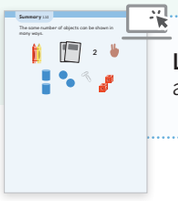
Say, "Groups can have different objects but the same number. You can show how many are in a group with math tools or drawings." Add the image of a pencil and paper from the Visual Display PDF, *Math Tools Images* to the *Math Tools* chart.

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

Practice

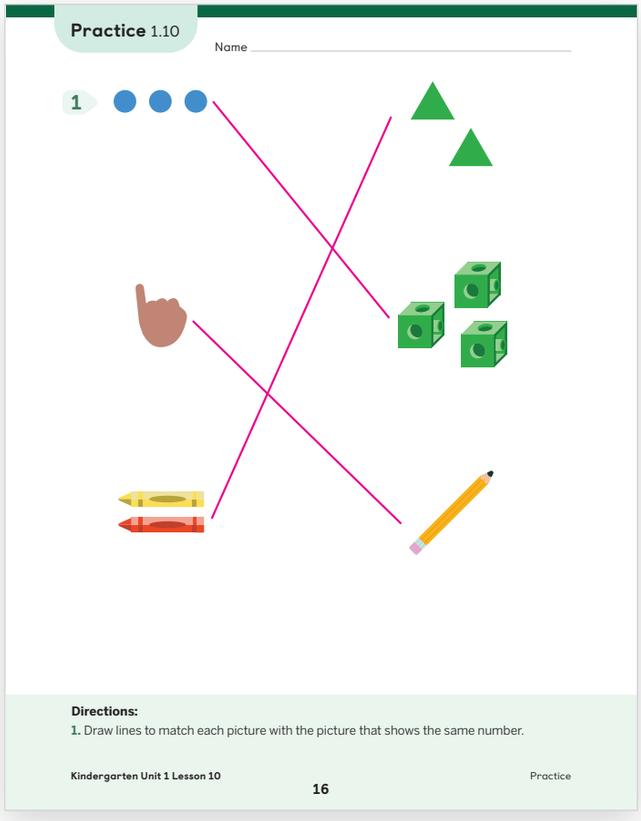
Independent

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



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.10

Name

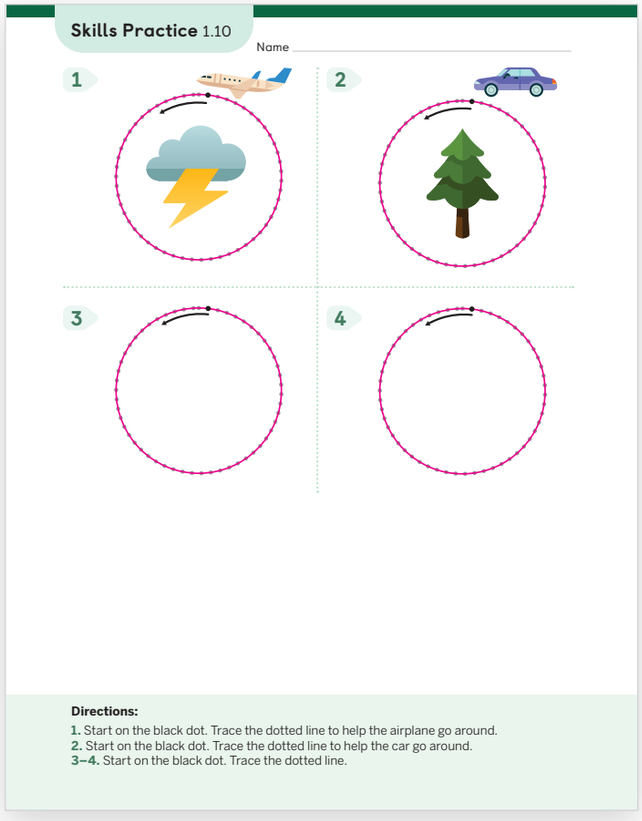
1

Directions:

1. Draw lines to match each picture with the picture that shows the same number.

Kindergarten Unit 1 Lesson 10 Practice

16



Skills Practice 1.10

Name

1 2 3 4

Directions:

1. Start on the black dot. Trace the dotted line to help the airplane go around.
2. Start on the black dot. Trace the dotted line to help the car go around.
3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.D

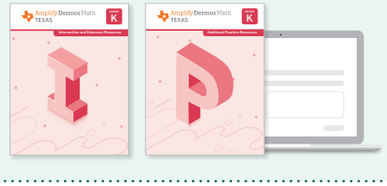
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



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 10

Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Explore

Pairs | 15 min | Building Toward K.2.C

Students explore and use connecting cubes and describe them to their partners.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Connecting Cubes

Build to Match

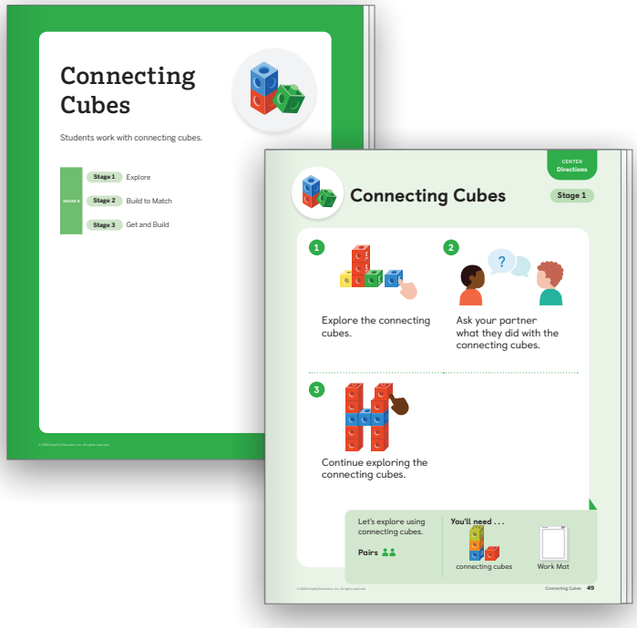
Pairs | 15 min | Building Toward K.2.C

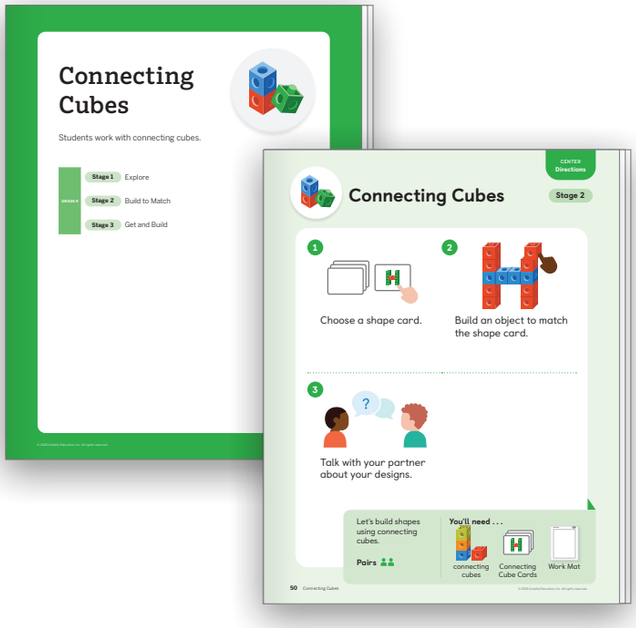
Students use connecting cubes to build objects pictured on cards.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Connecting Cubes Cards, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.





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

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.

Differentiation Use after Lesson 10

Lesson Goal: Use objects and drawings to represent a quantity.

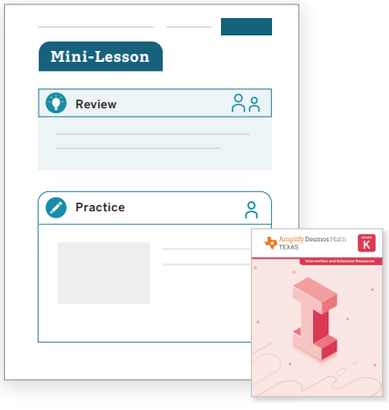
Support

Provide targeted intervention for students by using these resources.

If students represent a different quantity than the one shown:

Respond:

- Assign the *Using Fingers or Drawings to Show a Number* Mini-Lesson. | 15 min



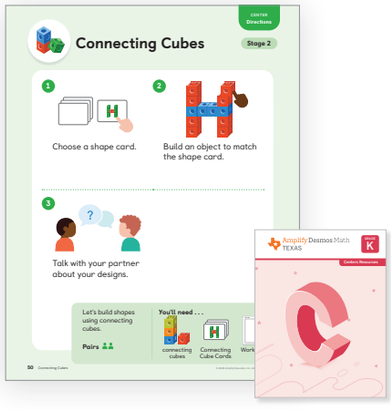
Strengthen

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

If students represent the same quantity in the same arrangement:

Respond:

- Invite students to play these **Centers. |** 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles
- Have students complete **Lesson 10 Practice. |** 15 min
- **Item Bank**



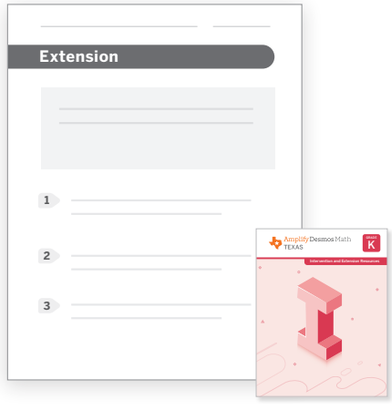
Stretch

Challenge students and extend their learning with these resources.

If students represent the same quantity in a different arrangement:

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. | 15 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
- Vocabulary routines

Professional Learning

How did matching groups with the same number of objects or images prepare students for the work in this lesson?

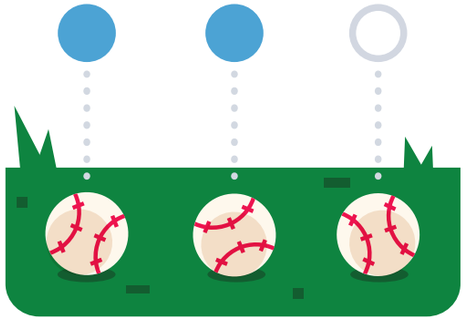
Unit 1
Lesson
11

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

Are There Enough?

Using One-to-One Matching to Determine if Groups Have the Same Quantity

Let's decide if there are enough.



Key Concepts

Today's Goals

1. **Goal:** Create equivalent groups using movements or sounds.
2. **Goal:** Answer "are there enough?" questions about groups of up to 4.
3. **Language Goal:** Explain how to determine if groups are equivalent. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students apply what they have learned about equivalent groups as they answer the question "Are there enough?" in a real-world scenario and create groups with the same quantity using sounds or movements. Students continue working with quantities that can be subitized. They examine the relationship between 2 groups using the context of "Are there enough?" which prepares students for comparing quantities in Unit 2 when they justify whether a group shows fewer, more, or the same number as another group. **(TEKS K.1.A)**

Prior Learning

In earlier lessons, students subitized groups of up to 4 objects. In Lesson 10, students identified and represented groups with the same quantity using objects and drawings.

Future Learning

In Lesson 12, students will answer "are there enough?" questions about groups of up to 10 objects.

Integrating Rigor in Student Thinking

- Students **apply** their understanding of equivalence to real-world scenarios.
- Students build toward **fluency** with subitizing quantities up to 4.

Vocabulary

Review Vocabulary

same

TEKS

Addressing

K.2.D

Recognize instantly the quantity of a small group of objects in organized and random **arrangements.**

Also Addressing: **K.2.E**

Math Process Standards: K.1.A, K.1.D

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

Building On

K.2.F

K.2.G

Building Math Identity

We are a math community.
What makes you feel included in math class? How do you make others feel included in math class?

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

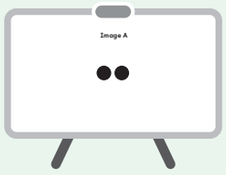
Lesson at a Glance 60 min

TEKS: K.1.A, K.1.D, K.2.D, K.2.E

Warm-Up Fluency

Whole Class | 10 min

Students use the **How Many Do You See?** routine, in which they develop fluency by describing the ways they see different arrangements of dots or fingers. In this version of the routine, students also signal if a group of dots or fingers represents a specific quantity. **(TEKS K.1.D)**

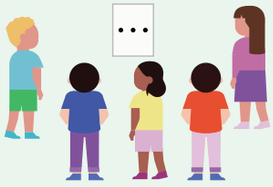


Activity 1 Fluency

Whole Class | 10 min

Students play a game in which they subitize a group of dots or count a set of movements and then represent the same quantity with their own movements. In the Connect, students share what they notice when there are not enough movements to match a given group.

Materials: Unit Story, *The First Day of School*

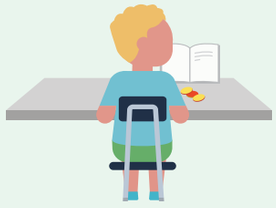


Activity 2

Independent | 15 min

Students determine if there are enough pieces of fruit, represented by counters, for each pictured lunch box to have 1 piece. In the Connect, they discuss what it means to have enough and share the strategies they used to determine if there was enough.

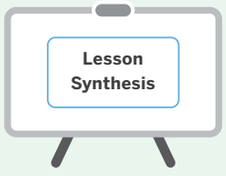
Manipulative Kit: connecting cubes, counters
Materials: Activity 2 PDF, paper bags
Additional Prep Assemble: 1 bag of 3 counters per student



Synthesis

Whole Class | 10 min

Students review and reflect on the relationship between having enough and making equivalent groups.



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Solid Shapes

Math Language Development

Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

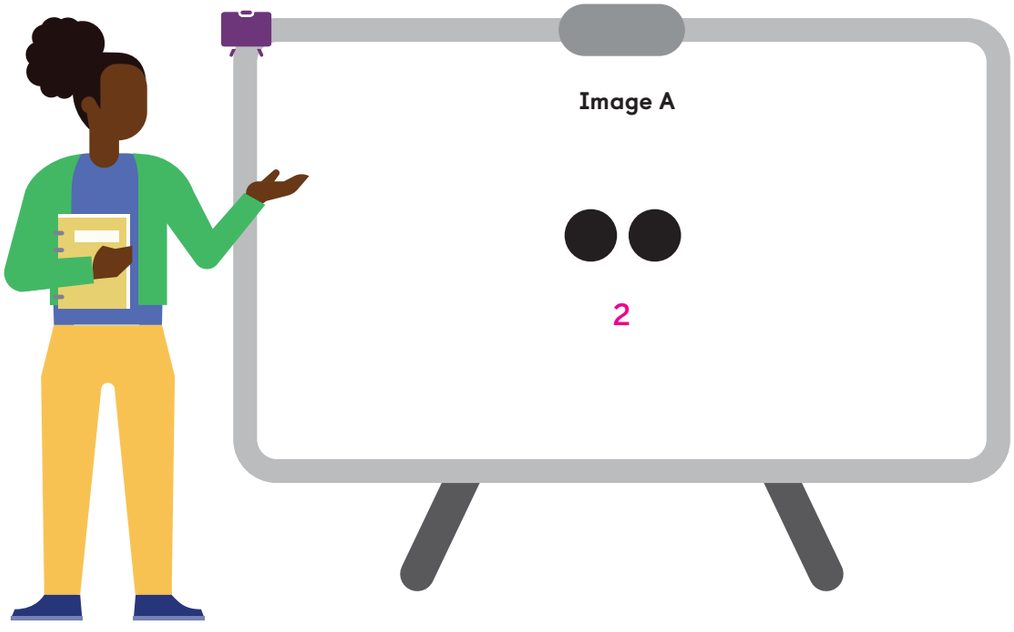
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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.

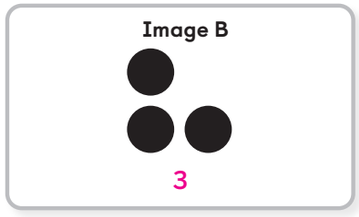
Whole Class | 10 min

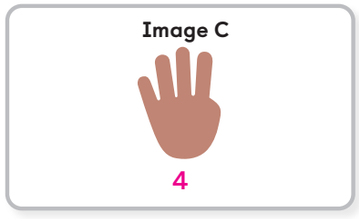
Presentation Screen

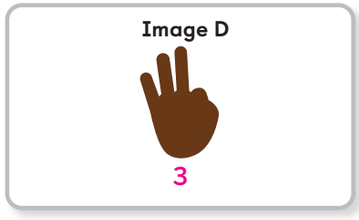
Warm-Up How Many Do You See? Fluency

Purpose: Students build fluency with subitizing as they quickly determine if a quantity of dots or fingers is equivalent to 3.









Why these images? These images lend themselves to subitizing to recognize if a group has a specific quantity.

1 Launch

Use the How Many Do You See? routine.

Say, "I am going to quickly show you a group of dots. If the group shows 3, give a thumbs up. If it does not show 3, give a thumbs down."

Flash Image A for 5–10 seconds and ask, "Do you see 3?"

Display the image again, leaving it displayed to discuss.

Ask, "How many do you see?"

2 Connect

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

Repeat for each image.

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

A: *I see 2. It looks like the dots on the dice.*

B: *I see 3. I see 1 on top and 2 on the bottom.*

C: *I counted 1, 2, 3, 4.*

D: *I see 3. I just know it's 3.*

Whole Class | 10 min

Activity 1 Dancing Dots

Fluency

Purpose: Students explore equivalence as they represent the same quantity of movements, sounds, or images using movements or sounds.

Presentation Screens

Materials

- Display page 5 from the Unit Story, *The First Day of School* during the Launch.

1 Launch

Display and read aloud page 5 from the Unit Story.

Say:

- "Uncle Mo misses Dez and Lizzy when they leave for school. To make himself feel better, he puts on his favorite song and has a dance party."
- "Let's have a dance party like Uncle Mo. Show me your favorite dance move."

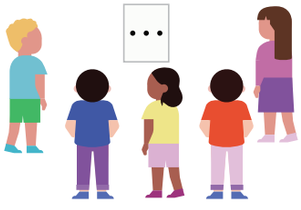
EB **Emergent Bilinguals** Students may be unfamiliar with the term *dance move*. Collect ideas for different dance moves as students share their favorite dance moves. ELPS 1.D

Display Dot Image A.

Say, "Watch my moves and then use your body to show the same number using your own moves. You can use the dot card that shows the same number if you need a reminder."

Repeat Dot Images B to D with the corresponding number of claps, jumps, stomps, shoulder taps, toe touches, or a student's favorite dance move.

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, "How many moves did you see?"
- Ask, "How many dots are on the card?"

3 Connect

Say, "Look at the dots on the card. Show the same number of moves."

Invite a student to share the same number of movements as the dots.

Say, "Now I will show the same number of moves."

Demonstrate a fewer number of movements than the dots.

Ask:

- "What did you notice?"
- "Did I do enough moves? How do you know?"

Key Takeaway: Say, "Let's continue to think about how we know if there are enough."

In this Activity . . .

Students discuss if the representations they observe are equivalent to an image.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *You did not do enough moves. I pointed to the dots when you did each stomp, and there were more dots left when you finished.*
- *You did not do enough moves. I know this because you clapped 2 times, but there are 4 dots.*

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Make fewer or more movements than the quantity shown.	 I am stomping like you. I stomped 2 times.	**Support** Ask, "How many stomps did I make? Show me the same number with your stomps."
Match each movement with the image of dots and make the same number of movements.	I looked at each dot as I stomped.	
Count the movements and make the same number of movements.	I heard you stomp 1, 2, 3, so I stomped 3 times.	**Stretch** Say, "Show me the same number with a different move."
Subitize the dots and make the same number of movements.	I saw 3 dots, so I stomped 3 times.	

Independent | 15 min

Activity 2 Are There Enough? (Part 1)

Purpose: Students identify small groups of objects in images that have the same quantity and represent them with a tool of their choice.

Presentation Screens

Materials

Manipulative Kit:

- Prepare one bag **(Classroom materials)** of three two-color counters for each student. Distribute the bags.
- Display four connecting cubes during the Connect.

Lesson Resources:

- Distribute the Activity 2 PDF to each pair.

1 Launch

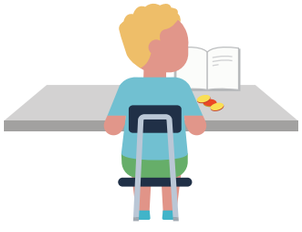
Say, "After his dance party, Uncle Mo starts to prepare the twins' lunch boxes for the rest of the week. He needs to make sure that each lunch box has enough food for the twins."

Distribute a bag of 3 two-color counters to each student.

Say, "The counters in your bag show the number of pieces of fruit that Uncle Mo has. Use your counters to figure out if there are enough pieces of fruit for each lunch box to have 1 piece."

A **Accessibility: Memory and attention** Chunk this task into smaller, more manageable parts by first having students try to match the counters one-to-one with the lunch boxes. Next, invite students to tell if they have enough.

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 lunch boxes and the fruit?"
- Ask, "How many pieces of fruit do you think should go in the first lunch box?"

3 Connect

Display the 4 connecting cubes and the image from the Activity 2 PDF.

Say, "These cubes show the number of pieces of fruit Uncle Mo has now."

Use the Think-Pair-Share routine. Ask, "How can we figure out if he has enough to fill each lunch box?"

Demonstrate strategies as students share. Select students who discussed matching strategies and who subitized.

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E
As students share how they determined the number of connecting cubes, press for details in their reasoning. For example:

- If a student says, "I matched." . . .
- Press for details by asking, "Can you show us how you used matching? How did you know if there were enough?"

Say, "There were enough because the number of cubes was the *same* as the number of lunch boxes."

Key Takeaway: Say, "We can figure out if there are enough by matching or thinking about how many there are."

In this Activity . . .

Students build a conceptual understanding of equivalence as they use manipulatives to determine if there are enough and share their strategies.

Oral activity: No writing expected.

Students might say . . .

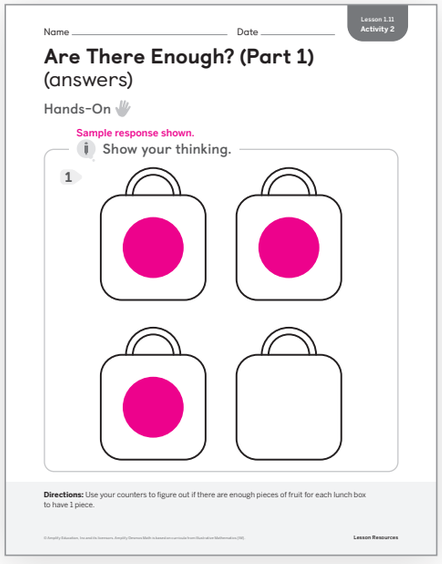
Sample responses:

- *I can put 1 cube in each lunch box. Every lunch box has 1 cube, so there are enough.*
- *I see 4 lunch boxes and 4 cubes, so they are the same. There are enough.*

Hands-On

two-color counters

Activity PDF



Name _____ Date _____

Lesson 1.11 Activity 2

Are There Enough? (Part 1) (answers)

Hands-On

Sample response shown.

Show your thinking.

1

Directions: Use your counters to figure out if there are enough pieces of fruit for each lunch box to have 1 piece.

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Lesson Resources

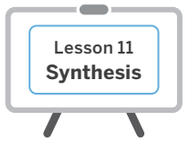
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Say there are enough.	 *I think there are enough.*	**Support** Ask, "What does it mean to have enough? What can you do with the counters to figure out if there are enough?"
Place 1 counter on each lunch box and say there are not enough.	 *There are 4 lunch boxes and 3 counters. I put a counter on each lunch box, but there are not enough.*	**Stretch** Ask, "What would need to change for there to be enough fruit?"
Subitize each group and say there are not enough.	 *There are 4 lunch boxes and 3 counters. There are not enough.*	

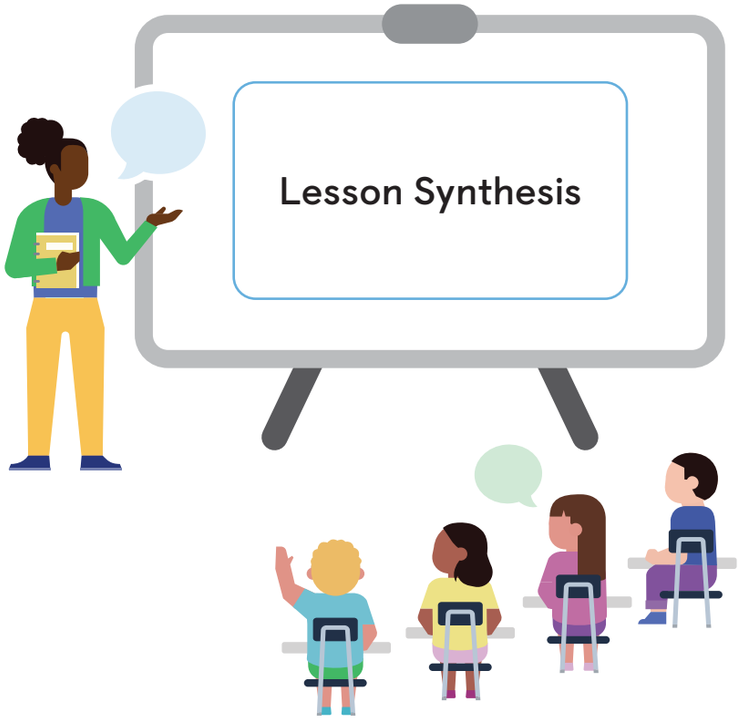
Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: Matching objects one-to-one or subitizing to find the quantity are 2 strategies for determining if groups are equivalent.



Use the Notice and Wonder routine.

Ask, "Are there enough crayons for all the kids? How do you know?"

Say:

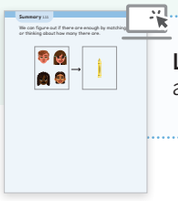
- "Sometimes, you can look at 2 groups and know if there are enough right away."
- "In the next lesson, you will figure out whether there are enough when the groups are larger."

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

Practice

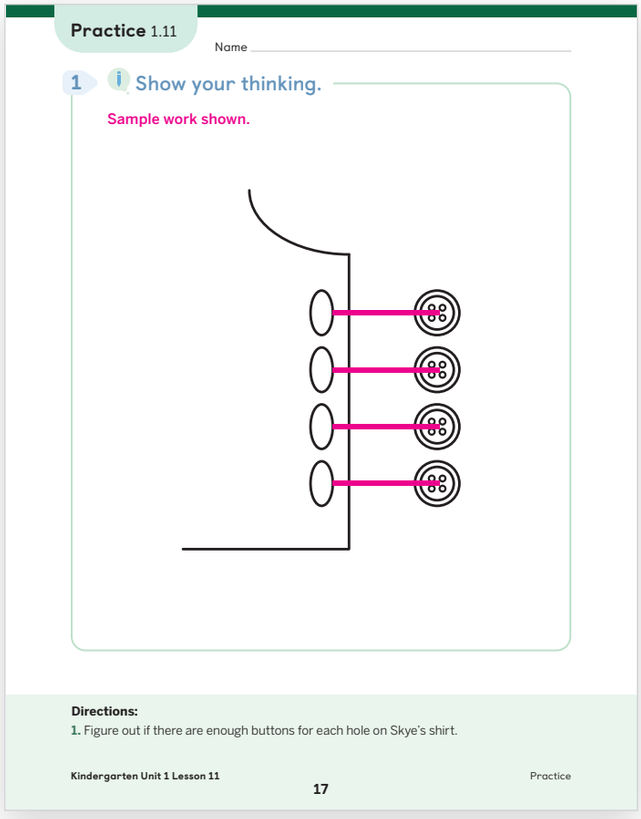
Independent

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



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.11

Name

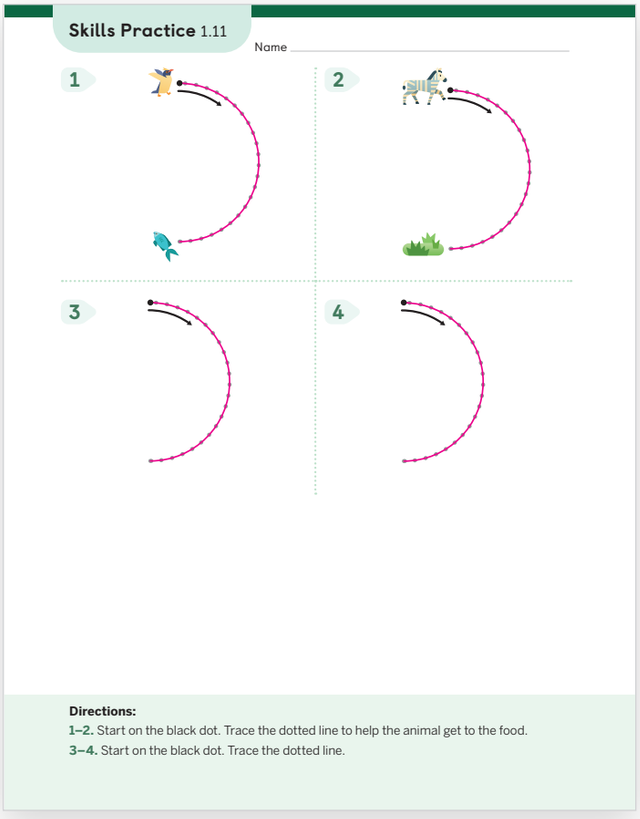
1 Show your thinking.

Sample work shown.

Directions:

1. Figure out if there are enough buttons for each hole on Skye's shirt.

Kindergarten Unit 1 Lesson 11 17 Practice



Skills Practice 1.11

Name

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.G*

*This problem builds toward the standard shown.

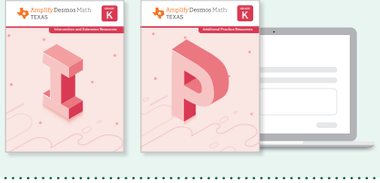
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

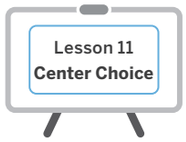
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 9



Short on time? Consider omitting the Center Choice Time.

Solid Shapes

Explore

Pairs | 15 min | Building Toward K.6.B

Students use solid shapes to build objects of their choice.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Solid Shapes

Build to Match

Pairs | 15 min | Building Toward K.6.B

Students work together to build pictures using solid shapes.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Pictures (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

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

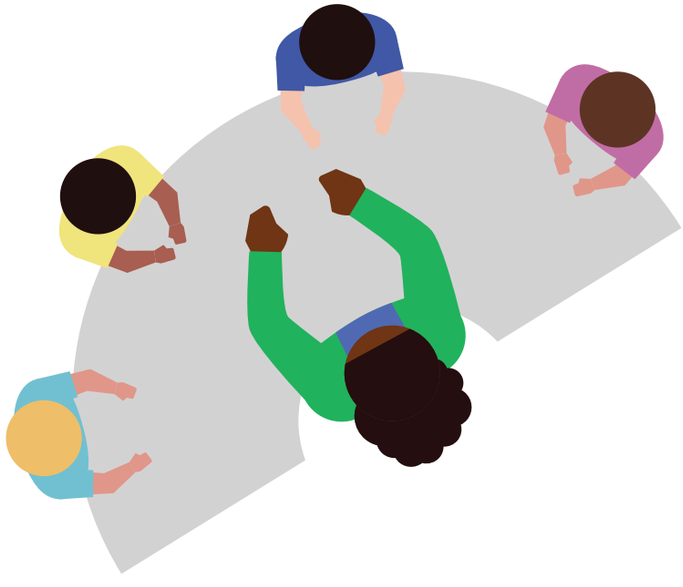
D Differentiation | Teacher Moves

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.



Differentiation Use after Lesson 11

Lesson Goal: Answer "are there enough?" questions about groups of up to 4.

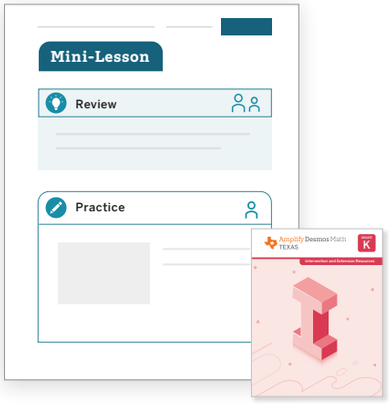
Support

Provide targeted intervention for students by using these resources.

If students make guesses about if there are enough:

Respond:

- Assign the *Answering the Question "Are There Enough?"* Mini-Lesson. | 15 min



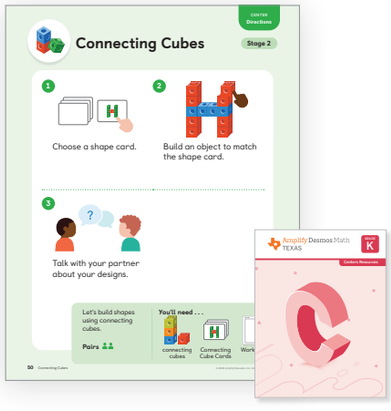
Strengthen

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

If students use a matching strategy to determine if there are enough:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles
- Have students complete **Lesson 11 Practice.** | 15 min
- **Item Bank**



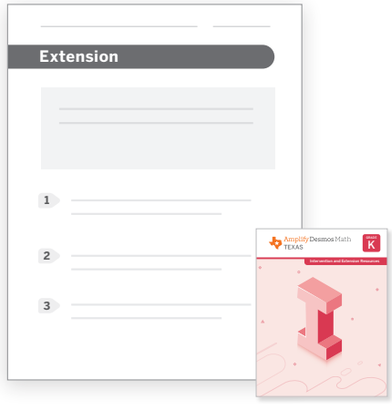
Stretch

Challenge students and extend their learning with these resources.

If students subitize to determine if there are enough:

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. | 15 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
- Vocabulary routines

Professional Learning

How can you reinforce the work done in today's lesson outside of math class? When can you ask students questions about enough? How could you use snack time, transitions, or time when passing out materials?

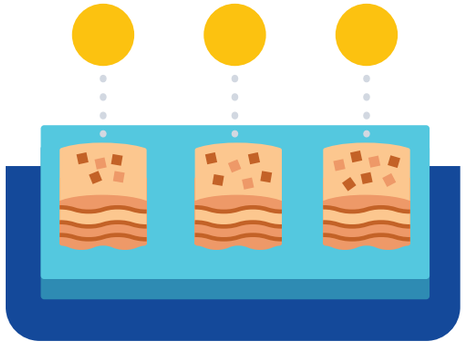
Unit 1
Lesson
12

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

Getting Enough

Using One-to-One Matching to Create Groups With Enough Objects

Let's make sure there are enough for everyone.



Key Concepts

Today's Goals

1. **Goal:** Answer "are there enough?" questions about groups of up to 10.
2. **Goal:** Create equivalent groups using objects and drawings.
3. **Language Goal:** Justify whether there are enough. **(Listening and Speaking)**
   ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students work with quantities greater than 4 for the first time as they revisit the question "Are there enough?" in a real-world scenario and create matching groups using objects or drawings. They consider if there are enough when the number of objects in 1 group is greater than the number of objects in another group. While discussion in this lesson focuses on one-to-one matching, students may use a range of strategies to determine if there are enough, such as matching, counting, or conceptually subitizing — identifying a quantity by subitizing and then composing smaller quantities. **(TEKS K.1.A)**

Prior Learning

In Lesson 11, students created equivalent groups and determined if there were enough in situations where the quantities could be subitized.

Future Learning

In Sub-Unit 3, students will count collections of objects with a focus on one-to-one correspondence. In Unit 2, students will compare quantities.

Integrating Rigor in Student Thinking

- Students extend their **conceptual understanding** of creating equivalent groups as they answer "are there enough?" questions and use strategies to match objects one-to-one.

TEKS

Addressing

K.2.E

Generate a set using concrete and pictorial models that represents a number that is more than, less than, and **equal to a given number up to 20.**

Math Process Standards: K.1.A

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

Building On

K.2.F

K.2.G

Building Math Identity

We are a math community.
What do you enjoy about being part of a math community?

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

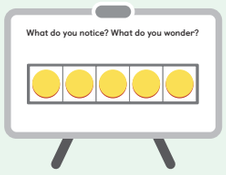
Lesson at a Glance 60 min

TEKS: K.1.A, K.2.E

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about matching counters to a 5-frame. This is an opportunity for students to notice and discuss the idea of one-to-one correspondence with a familiar math tool.



Activity 1

Pairs | 15 min

Students are provided with 6 counters to determine if there are enough for 5 people to each get one. They discuss how to answer the question "Are there enough?" when there are more than enough.

Manipulative Kit: two-color counters
Materials: Activity 1 PDF, paper bags
Additional Prep Assemble: 1 bag of 6 counters per student

Activity 2

Pairs | 15 min

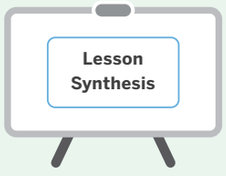
Students get enough pattern blocks for a group of students to each have 1 block. They discuss strategies for gathering enough objects and how to know when to stop gathering objects.

Manipulative Kit: pattern blocks
Materials: Activity 2 PDF

Synthesis

Whole Class | 10 min

Students review and reflect on strategies for creating equivalent groups.



Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of math tools and learn the structure of Center Choice Time.

- Solid Shapes

Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

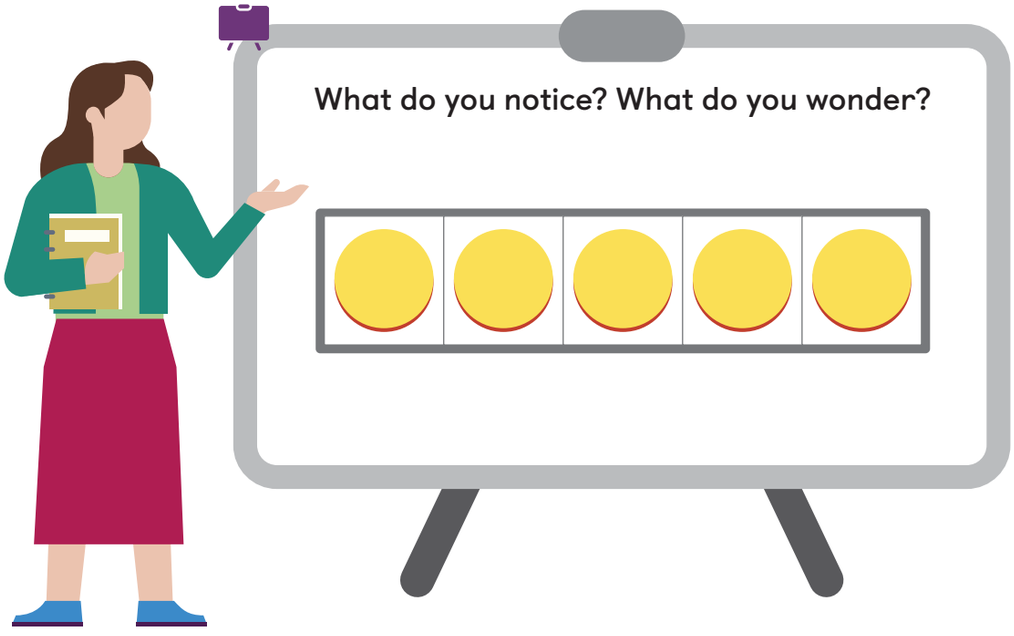
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students examine 5 counters on a 5-frame to prepare for matching quantities one-to-one.



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 many do you see? How do you see them?"

Say:

- "5 counters are enough to fill a 5-frame."
- "Let's continue thinking about what it means to have enough."

Students might say . . . ELPS 2.B

I notice there is a counter for each box.

I notice there are 5 counters.

I wonder where we could put the next counter.

I wonder if we could use more than 5 counters on the 5-frame.

Pairs | 15 min

Activity 1 Are There Enough? (Part 2)

Purpose: Students strengthen their conceptual understanding of equivalence as they apply strategies for determining whether 2 groups are equal.

Presentation Screens

Materials

Manipulative Kit:

- Prepare one bag **(Classroom materials)** of six two-color counters for each student. Distribute the bags.

Lesson Resources:

- Distribute the Activity 1 PDF to each student.

1 Launch

Display the image from the Activity 1 PDF.

Say, "Uncle Mo is preparing breakfast for the family.
Dez and Lizzy want to help by setting the table.
Dez grabs some plates. Uncle Mo wonders if there are enough plates."

Use the Think-Pair-Share routine. Say, "Share your ideas for how you can figure out if there are enough plates."

Say, "Now, use your counters to figure out if there are enough plates for each person to get 1 plate."

A **Accessibility: Visual-spatial processing** Guide visualization by inviting students to role-play the situation. Have some students assume the roles of the 5 family members, and have another student distribute the plates or counters to them.

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 . . .

- Point to the image and ask, "What do you notice about the people at the table?"
- Hold up a counter and ask, "What could you do with these plates?"

3 Connect

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

Invite 2 students to share different strategies for determining whether there were enough. Select and sequence their strategies using Rows 2 and 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "How did they figure out if there were enough plates?"
- "What is different about how they figured out if there were enough plates?"
- "Are there enough plates for every person in the family? How do you know?"

Say, "There are enough plates because each person has 1 plate. There was also an extra plate."

Key Takeaway: Say, "Even when groups are large, we can still figure out if there are enough by matching or thinking about how many there are."

In this Activity . . .

Students use counters to figure out if there are enough plates and then share their strategies.

Oral activity: No writing expected.

Students might say . . .

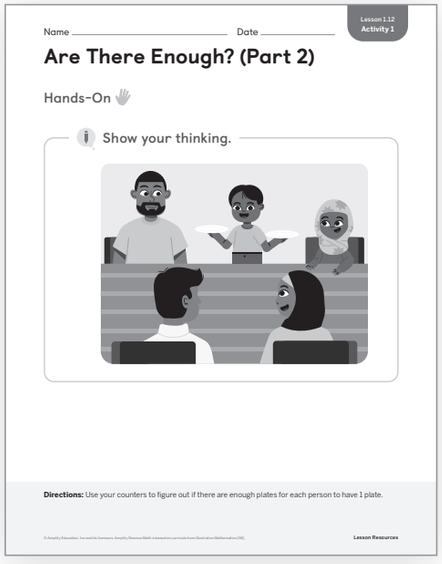
Sample responses:

- *I figured out there were enough plates by putting a counter on every person.*
- *There are enough because I counted 5 people, and I have 6 plates.*

Hands-On

two-color counters

Activity PDF



Name _____ Date _____

Lesson 1.12 Activity 1

Are There Enough? (Part 2)

Hands-On

Show your thinking.

Directions: Use your counters to figure out if there are enough plates for each person to have 1 plate.

Lesson Resources

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Determine that there are not enough because there are more counters than people.	*There are not enough because there are too many. There is an extra plate.*	**Support** Ask, "What does it mean to have enough?"
Determine that there are enough by matching each counter with a person.	*I gave each person a plate, and I even had one left over. There are enough because every person has 1.*	**Stretch** Ask, "What would happen if Uncle Mo invited a friend over for breakfast? Would there still be enough plates?"
Determine that there are enough by comparing the number of people in the group to the number of counters.	*I figured out that I had 6 plates. Because there were 5 people, I knew I had enough because there was an extra plate.*	

Pairs | 15 min

Activity 2 Getting Enough

Purpose: Students apply their understanding of equivalence by creating a group of objects or drawings with the same quantity as a given group.

Presentation Screens

Materials

Manipulative Kit:

- Distribute pattern blocks to each pair.

Lesson Resources:

- Distribute the Activity 2 PDF to each student.

1 Launch

Say, "I could use your help solving another problem. I am planning an activity, and I would like to make sure there are enough math tools for everyone. Can you help me get enough tools?"

Display the image from the Activity 2 PDF.

Say, "Work with your partner to get enough pattern blocks so that each person has 1 pattern block. You can use your pattern blocks or draw pictures to show your thinking."

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 could you try first?"
- Ask, "Imagine you are part of this group. What would you do to make sure you got enough so that each person has 1?"

3 Connect

Display the image from the Activity 2 PDF.

Invite a pair to share their strategy as shown in Row 2 in the *Differentiation* table. As students share, model their thinking using the pattern blocks.

Ask, "Are there enough? How do you know?"

Say, "There are enough for each person to have 1. There are also some extras."

Invite a pair to share their strategy as shown in Row 3 in the *Differentiation* table. As students share, model their thinking using the pattern blocks.

Ask, "Are there enough? How do you know?"

Use the Think-Pair-Share routine. Ask, "How did they know when to stop getting pattern blocks?"

EB **Emergent Bilinguals** Give students time to rehearse what they will say with a partner before they share their reasoning with the class. ELPS 1.E, 2.F

Key Takeaway: Say, "When making a group with enough, you know to stop getting objects when the objects in each group have a match."

In this Activity . . .

Students create a group of objects or drawings with the same quantity as a given group and share how they know when to stop counting.

Oral activity: No writing expected.

Students might say . . .

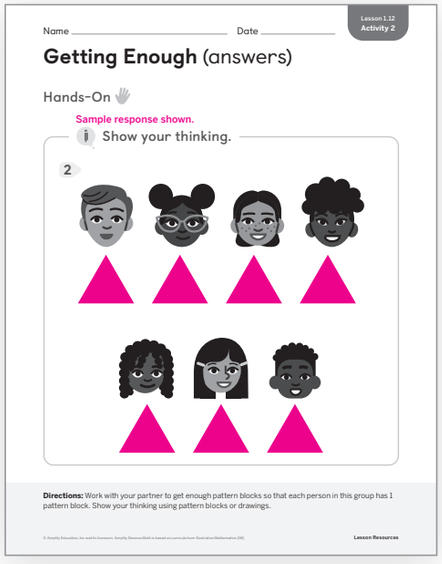
Sample responses:

- We put a pattern block on top of each person in the picture and stopped when we ran out of people.
- My partner pointed to each person, and I put out a pattern block, I stopped when my partner said stop.

Hands-On

pattern blocks

Activity PDF



Name _____ Date _____

Lesson 1.12 Activity 2

Getting Enough (answers)

Hands-On

Sample response shown.

Show your thinking.

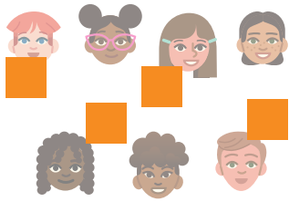
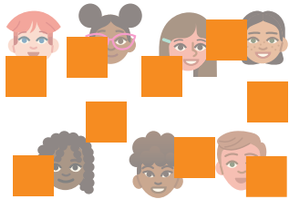
2

Directions: Work with your partner to get enough pattern blocks so that each person in this group has 1 pattern block. Show your thinking using pattern blocks or drawings.

Lesson Resources

Presentation Screens

D Differentiation | Teacher Moves

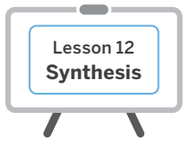
Look for students who . . .	For example . . .	Provide support . . .
Almost there Create a group with less than enough.		**Support** Ask, "You gave out some shapes. What could you do to make sure each person has 1 shape?"
Create a group with more than enough.		**Strengthen** Ask, "You gave out some shapes. What could you do to make sure each person has 1 shape?"
Create a group with enough.	*I gave each person a shape.*	**Stretch** Ask, "How many more blocks would you need if there were 2 more people?"

Whole Class | 10 min

Synthesis

Lesson Takeaway: 2 groups are equivalent when each object in both groups has a match.

Presentation Screen



Ask, "Are there enough clipboards so that each teacher can have 1 clipboard? How do you know?"

Use the Think-Pair-Share routine. Ask, "What could you do to get enough?"

Say, "You have worked with groups of objects to see if there are enough. In the next few lessons, you will learn more about counting groups of objects."

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

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.

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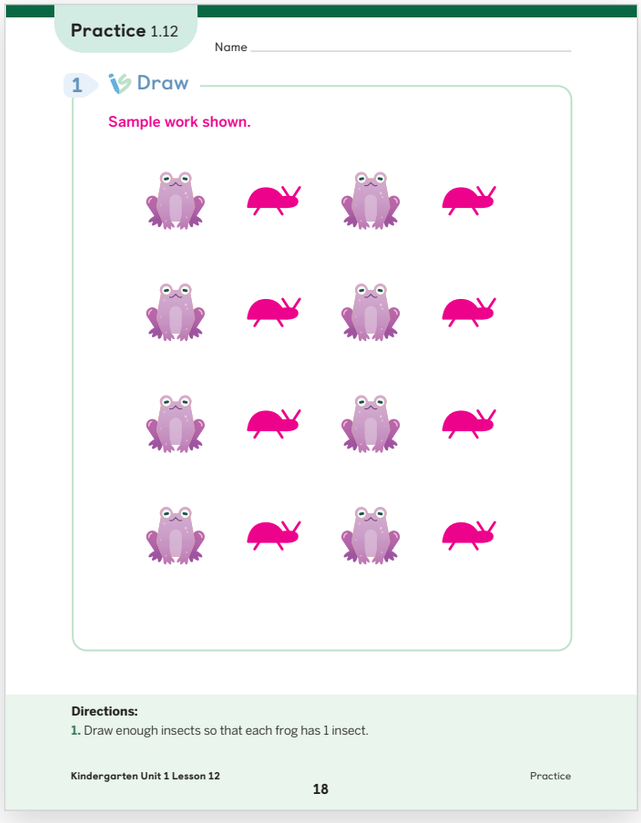


Practice 1.12

Name _____

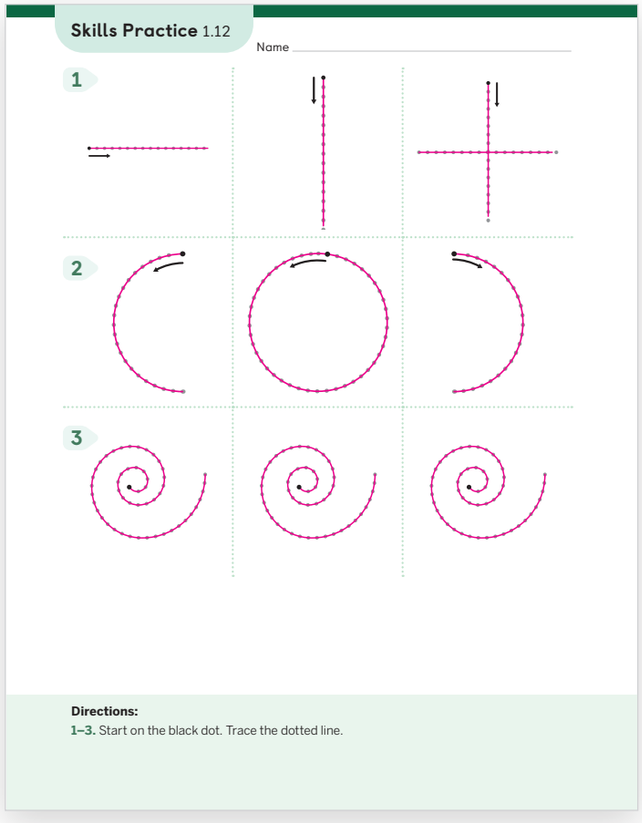
1 Draw

Sample work shown.

Directions:

1. Draw enough insects so that each frog has 1 insect.

Kindergarten Unit 1 Lesson 12 18 Practice



Skills Practice 1.12

Name _____

1

2

3

Directions:

1–3. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	2	K.2.E

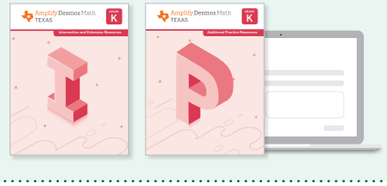
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

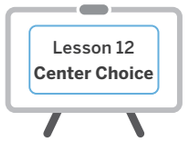
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 7



Short on time? Consider omitting the Center Choice Time.

Solid Shapes

Explore

Pairs | 15 min | Building Toward K.6.B

Students use solid shapes to build objects of their choice.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Solid Shapes

Build to Match

Pairs | 15 min | Building Toward K.6.B

Students work together to build pictures using solid shapes.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Pictures (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

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

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.

Differentiation Use after Lesson 12

Lesson Goal: Create equivalent groups using objects and drawings.

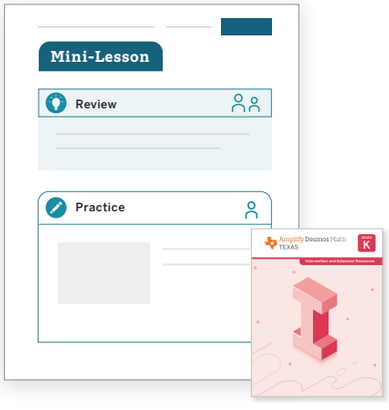
Support

Provide targeted intervention for students by using these resources.

If students create a group with less than enough:

Respond:

- Assign the *Matching to Create Groups With Enough Objects* Mini-Lesson. | 15 min



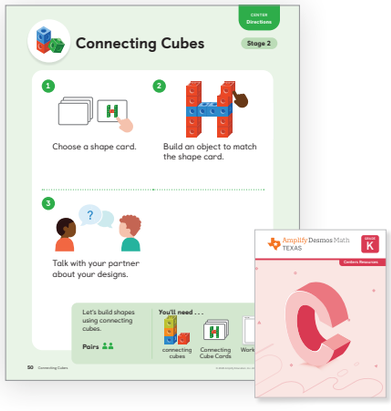
Strengthen

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

If students create a group with more than enough:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Puzzles
- Have students complete **Lesson 12 Practice.** | 15 min
- **Item Bank**



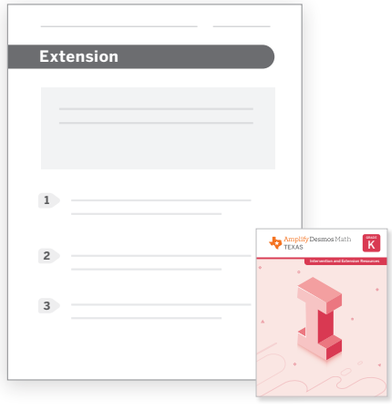
Stretch

Challenge students and extend their learning with these resources.

If students create a group with enough:

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
- Vocabulary routines

Professional Learning

In a future unit, students will compare groups of objects and images. What did you notice about their work in today's lesson that you might leverage 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 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. The *Up Next* problem previews targeted concepts and skills addressed in the next sub-unit. Read aloud the problems to students.

Classroom Materials

- For each student, a bag containing between 5 to 10 counters or connecting cubes or other small objects.

Item Analysis

Problem	Concept or skill	DOK	TEKS
1	Using one-to-one matching to create even groups that represent an equal number	1	K.2.B, K.2.E
Up Next . . . (preparation for Lesson 13)			
2*	Counting a set of objects and generating a model that represents that number	1	K.2.C, K.1.E

* Because this problem addresses prerequisite concepts for the next sub-unit, the *Up Next* problem is not intended to be part of a student's overall score on this assessment.

Assessment Resources

- Student Print Assessments
- Answer Keys

Differentiation Resources

Intervention and Extension Resources include:

- 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)
- Item Bank

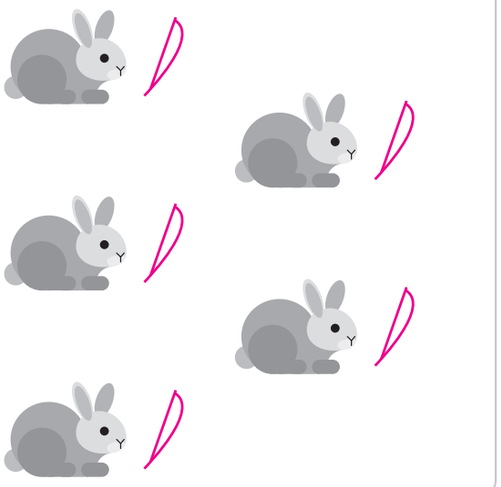
Assessment Resource PDF

Name _____ Date _____

Quiz: Sub-Unit 2 Unit K.1

Show your thinking.
Sample response shown.

1



Directions

1 Use a math tool or drawing to show enough carrots so that each bunny has 1 carrot.
2 Figure out how many are in your bag. Then show how many using a drawing.

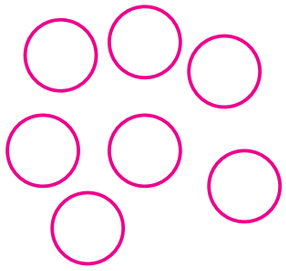
6

Name _____ Date _____

Quiz Sub-Unit 2 (continued) Unit K.1

Draw
Sample response shown.

2



7

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	Problem	Respond to Student Thinking
Sub-Unit 2: • Subitize groups of up to 4 objects and images. • Answer "are there enough?" questions about groups of up to 10 objects.	1	**Support** • **Mini-Lesson:** *Matching Representations of the Same Quantity* (ML 1.07) • **Teacher Move:** Provide students with additional opportunities to match representations of the same quantity.
Up Next . . . (preparation for Lesson 13)		

Sub-Unit 3:
• Determine the quantity of a group of up to 10 objects.
• Represent the quantity of a group of up to 10 objects.
	2	**Support**
		• **Mini-Lessons:**
		  • *Counting to Determine the Quantity of a Group* (ML 1.13)
		  • *Representing Quantities Using Drawings* (ML 1.17)
		• **Centers:**
		  • *Connecting Cubes, Get and Build*
		  • *Pattern Blocks, Get and Build*
		• **Teacher Move:** Students will have more opportunities to determine and represent the quantity of a group of up to 10 objects in the next sub-unit.

Notes:

Sub-Unit 3

Counting Groups of Objects Up to 10

Sub-Unit 3 Goals:

- Determine the quantity of a group of up to 10 objects.
- Represent the quantity of a group of up to 10 objects.

Progression of TEKS in Sub-Unit 3

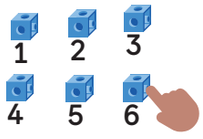
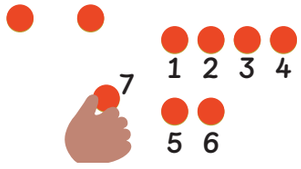
- **Lessons 13–14:** Students use one-to-one correspondence to determine a quantity and develop an understanding of cardinality and conversion.
- **Lessons 15–18:** Students use strategies and math tools to keep track of their counting, explore different ways to represent quantity, and answer "how many?" questions.

Sub-Unit 3 Progression	Lesson 13	Lesson 14	Lesson 15	Lesson 16	Lesson 17	Lesson 18
Number and Operations						
TEKS K.2.A	●	●	●	●	●	●
TEKS K.2.B	●	●	○	○	●	○
TEKS K.2.C	●	●	●	●	○	●
TEKS K.2.D	○	○	○	○	●	○
TEKS K.2.E	●	●	○	○	○	○

Math That Matters Most

Sub-Unit 3: Determining how many in groups of up to 10 objects.

Progression of Strategies, Skills, or Language

Progression	For example . . .
Using one-to-one correspondence.	
Keeping track of objects while counting them.	
Answering "How many?" without recounting.	*I know there are 6 because when I counted I stopped at 6.*
Knowing that the quantity does not change when the objects are rearranged.	*There are still 6 because I just moved them and didn't put more or take any away.*

Unit 1
Lesson
13

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

Sara Helps Out

Using One-to-One Correspondence to Determine a Quantity

Let's figure out how many are in a group.

Key Concepts

Today's Goals

1. **Goal:** Use one-to-one correspondence to determine the quantity of a group of up to 10 objects.
2. **Language Goal:** Explain how to determine a quantity. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students answer the question "How many?" with groups of up to 10 objects for the first time to develop an understanding of one-to-one correspondence. They may use a range of strategies to determine the quantity, such as counting or conceptually subitizing. Students collect a given number of pattern blocks and build an object of their choice. Although they are shown written numerals alongside groups of images that show how many, they are not expected to identify or write numerals. They then count various groups of objects in the context of helping the teacher figure out how many school supplies there are. This real-world use for counting allows students to apply mathematics to solve problems arising in everyday life. **(TEKS K.1.A)**

Prior Learning

In Lessons 11 and 12, students used one-to-one correspondence to analyze or create groups that had enough.

Future Learning

In Lesson 14, students will extend their understanding of cardinality and develop their understanding of conservation of number.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of one-to-one correspondence as they determine the quantity of a group of up to 10 objects.

TEKS

Addressing

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Addressing: **K.2.A, K.2.B, K.2.E**

Math Process Standards: K.1.A

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

Building Math Identity

We are a math community.
When do you see people count objects at home or at school?

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

Lesson at a Glance 60 min

TEKS: K.1.A, K.2.A, K.2.B, K.2.C, K.2.E

Warm-Up

Whole Class | 5 min

Students are introduced to the **What Do You Know About ___?** routine, which provides an opportunity to hear what they already know about counting and allows all students to contribute to the discussion.

Activity 1

Pairs | 15 min

Students are introduced to the Center, *Pattern Blocks*, *Get and Build*, in which they use a specified number of pattern blocks to build a creation of their choice. In the Connect, students discuss counting as a strategy for determining the quantity of a group.

Manipulative Kit: pattern blocks
Materials: Directions, Cards (A–J), Work Mats, *6–10 Finger Images* PDF
Additional Prep Cut out: *6–10 Finger Images* PDF, one strip for each student. Consider taping on students' desks to refer to throughout the unit.

Activity 2

Independent | 15 min

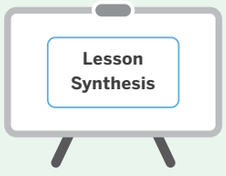
Students discuss how using one-to-one correspondence helps them determine the quantity of a group of objects. Formative data from previous lessons can inform the quantity to place in each student's bag.

Manipulative Kit: 5-frames (optional)
Materials: assorted objects, chart paper, *Figuring Out How Many* chart (teacher made), markers, paper bags, Work Mats (optional)
Additional Prep Assemble: bags of 5–10 objects of the same type, such as cubes, counters, pattern blocks, or buttons; Prepare: *Figuring Out How Many* chart

Synthesis

Whole Class | 10 min

Students review and reflect on what they know about counting with one-to-one correspondence as they count a set of dots as a class.

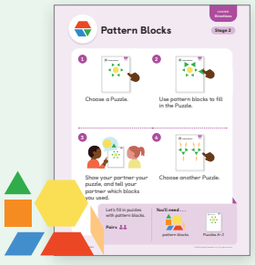


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit this Center to build understanding of spatial reasoning and learn the structure of Center Choice Time.

- Pattern Blocks



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

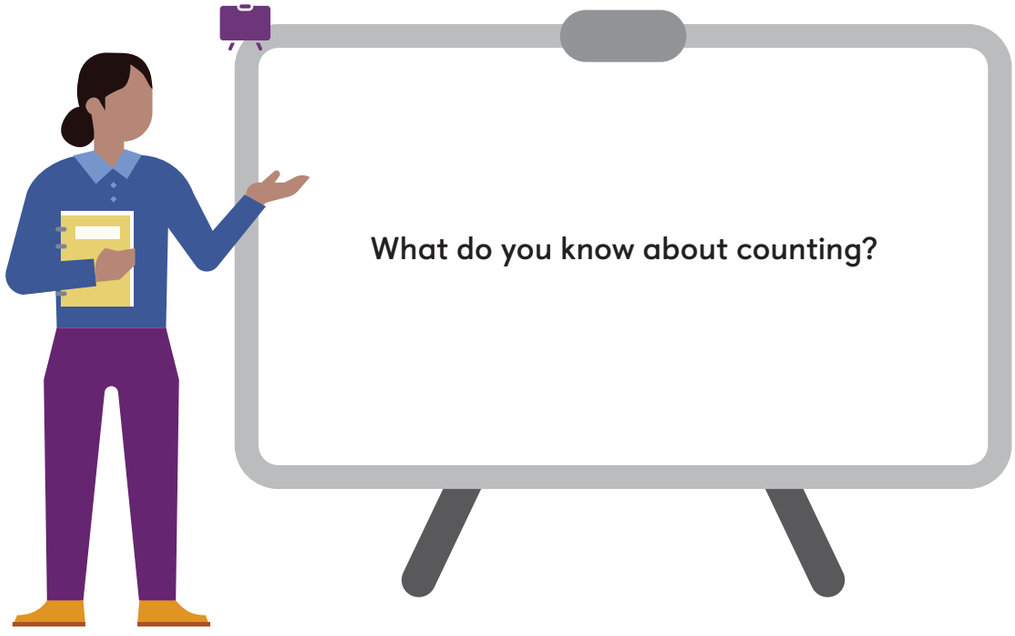
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up What Do You Know About ___?

Purpose: Students share ideas about counting to prepare for learning more about determining the quantities of objects in a group.



1 Launch

Display the question.

Use the What Do You Know About ___? routine.

Ask, "What do you know about counting?"

Invite students to share their responses.

2 Connect

Record students' responses as they share.

Say, "Let's use what we know about counting as we figure out how many are in a group."

Students might say . . . ELPS 1.E, 2.C, 2.D, 2.F

I can count to 10: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.

I can use my fingers to count.

Counting is saying the number of things you see.

Pairs | 15 min

Let's Play
Pattern Blocks, Get and Build

Purpose: Students use a specified number of pattern blocks to build a creation of their choice and explain how counting can be used to determine the quantity of objects in a group.

Presentation Screens

Materials

Manipulative Kit:

- Display pattern blocks and distribute pattern blocks to each pair.

Centers Resources:

- Display Cards (A–J) and the Directions.
- Distribute Cards (A–J) and a Work Mat to each pair.

Short on time? Consider reducing the time for this Center as students will practice counting with pattern blocks during Center Choice Time.

1 Launch

Display the Center materials and Directions.

Demonstrate how to play *Pattern Blocks*, *Get and Build*. While demonstrating: ELPS 1.C

- **Say**, "You will play *Pattern Blocks* today."
- **Say**, "First, my partner and I choose a card." Display Card A.
- **Say**, "Next, we take out the pattern blocks we need."
- **Use the Think-Pair-Share routine.** Ask, "How could we figure out which pattern blocks we need?" Gather the given number of pattern blocks.
- **Say**, "Then, my partner and I use the pattern blocks to build or create something together. We could make a robot or a design or something else."
- **Say**, "After you and your partner have built or created something, choose a new card and play again."

A **Accessibility: Conceptual processing** Guide processing by having students brainstorm with a peer what they are going to build and how they plan on building it.

2 Monitor

Use the D Differentiation | Teacher Moves table on the following page.

If students need help getting started . . .

- Say, "Tell me in your own words what you need to figure out."
- Ask, "How could you figure out how many pattern blocks you need?"

3 Connect

Display Card B.

Invite a student to share a strategy for determining the quantity of objects in the group as shown in Row 3 in the *Differentiation* table.

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share how they determined the number of pattern blocks, press for details in their reasoning. For example:

- If a student says, "I counted.". . .
- Press for details by asking, "Can you show us how you counted? How did you know you counted all of them? How did you know when to stop counting?"

Use the Think-Pair-Share routine. Ask, "How did they figure out how many pattern blocks they needed?"

Key Takeaway: Say, "Let's continue to think about counting as a way to figure out how many objects are in a group."

In this Activity . . .

Students build a creation of their choice and explain how counting can be used to determine the quantity of objects in a group.

Oral activity: No writing expected.

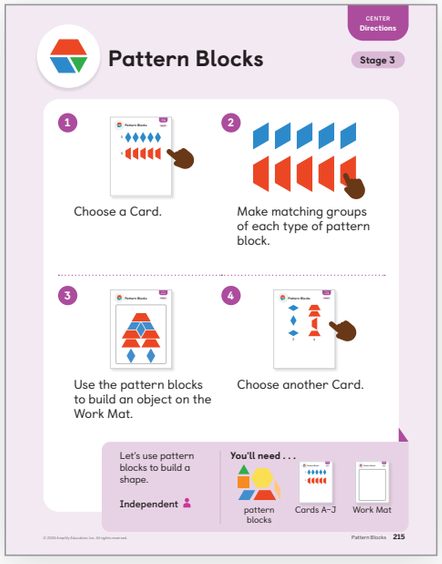
Students might say . . .

Sample responses:

- I have 7 pattern blocks.
- I counted 5 blue pattern blocks.
- I counted 4 orange squares.

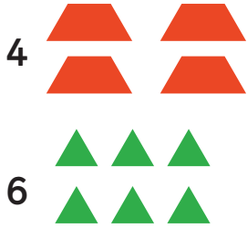
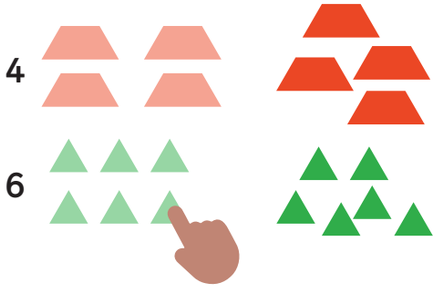
Hands-On

Activity PDF



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Subitize some groups.	I know there are 4 in the first group, but I do not know how many are in the other group.	**Support** Ask, "How could you figure out how many pattern blocks are in the other group?"
Match a pattern block with each pattern block in the image.		**Strengthen** Ask, "How did you figure out how many you needed?"
Count the pattern blocks in the image and then count out the same quantity of pattern blocks.		

Independent | 15 min

Activity 2 How Many Are There?

Purpose: Students build their conceptual understanding of one-to-one correspondence as they determine the quantity of objects in a group and say 1 number name for each object.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Prepare one bag of 5–10 objects for each student. Distribute the bags.
- Use chart paper and markers to prepare the *Figuring Out How Many* chart. Display the chart during the Connect.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Play the animation. ELPS 1.F

Say, "Sara gets to school early and helps her teacher look through the bags of supplies that students gave to the class. She needs our help to figure out how many crayons are in each bag."

Provide access to 5-frames and Work Mats.

Say, "The objects in your bag show the number of crayons in each bag of supplies. Figure out how many are in your bag. Use the tools if they are helpful. Then trade bags with a partner."

A **Accessibility: Conceptual processing** Optimize access to tools by drawing connections between the tool and the real-life object that it represents. For example, display a counter next to a crayon and show how the counter is a representation of the crayon.

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 are you trying to figure out?"
- Ask, "What could you try first?"

3 Connect

Invite a student to share a strategy for determining the quantity of objects in the group as shown in Row 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "What did you notice about how they figured out how many?"

EB **Emergent Bilinguals** Support students in understanding the descriptive language "how many" in this activity by using the context and gestures to demonstrate the strategies they noticed. ELPS 3.D, 3.F

Display the *Figuring Out How Many* chart and add the strategy the student used by drawing and annotating images. Remind students to continue to refer to and use the display during class discussions.

Key Takeaway: Say, "To figure out how many, say 1 number for each object that you count."

In this Activity . . .

Students determine the quantity of objects in their bag and share their strategies.

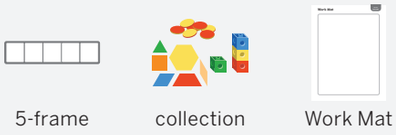
Oral activity: No writing expected.

Students might say . . .

Sample responses:

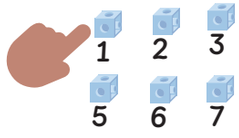
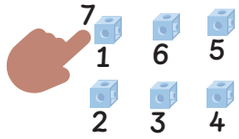
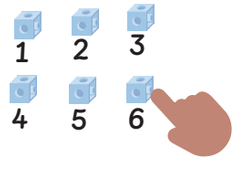
- *I have 6 crayons. I know because I counted each cube in my bag.*
- *I have 4 crayons. I know because I counted each cube only 1 time.*
- *I have 5 crayons. I know because I put 1 object in each box of the 5-frame.*

Hands-On



Presentation Screens

D Differentiation | Teacher Moves

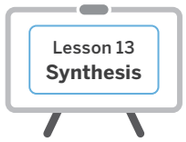
Look for students who . . .	For example . . .	Provide support . . .
Almost there Skip numbers when counting.		**Support** Say, "Let's count to 10 together. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Now figure out how many crayons Sara has."
Almost there Count the objects by touching an object more than once or skipping objects.		**Support** Ask, "How could you make sure you count each object only once? Now figure out how many crayons Sara has."
Count the objects by touching 1 object for each number.		**Stretch** Give the student 1 more object and ask, "How many crayons does Sara have now?"

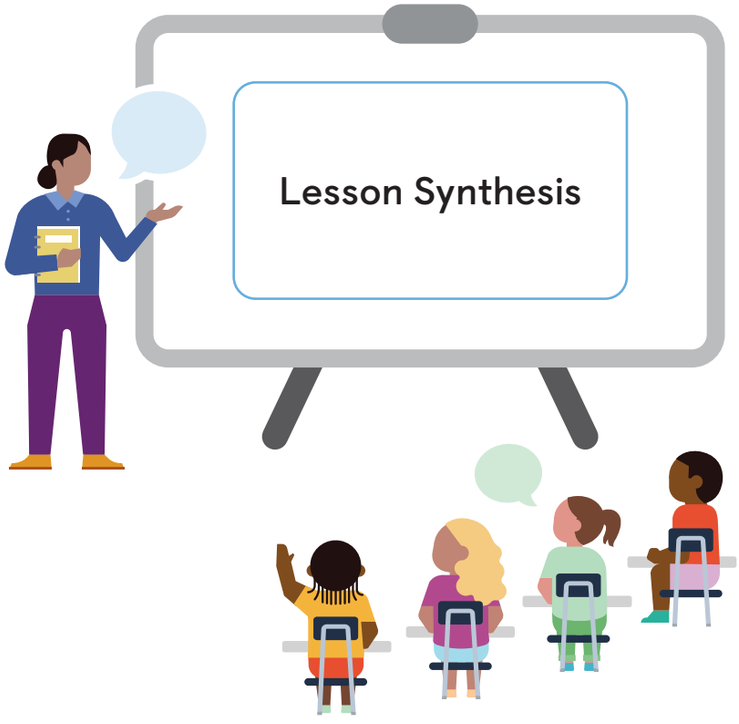
Whole Class | 10 min

Synthesis

Lesson Takeaway: Counting can be used to determine the quantity of objects in a group. When counting, say 1 number for each object.

Presentation Screen





Say, "Let's count the dots. Clap your hands when you say each number." Point to each dot as students count.

Record each number as students count so the recorded numbers are displayed as shown on the screen.

Say, "Let's count the dots again. This time, put up 1 finger when we say each number."

Repeat the count, pointing to each dot as students say each number.

Ask, "What did you notice about counting the dots?"

Say:

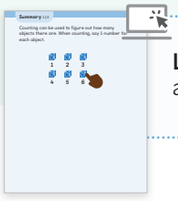
- "We said 1 number as I pointed to each dot."
- "In the next lesson, you will continue to figure out how many are in a group."

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

Practice

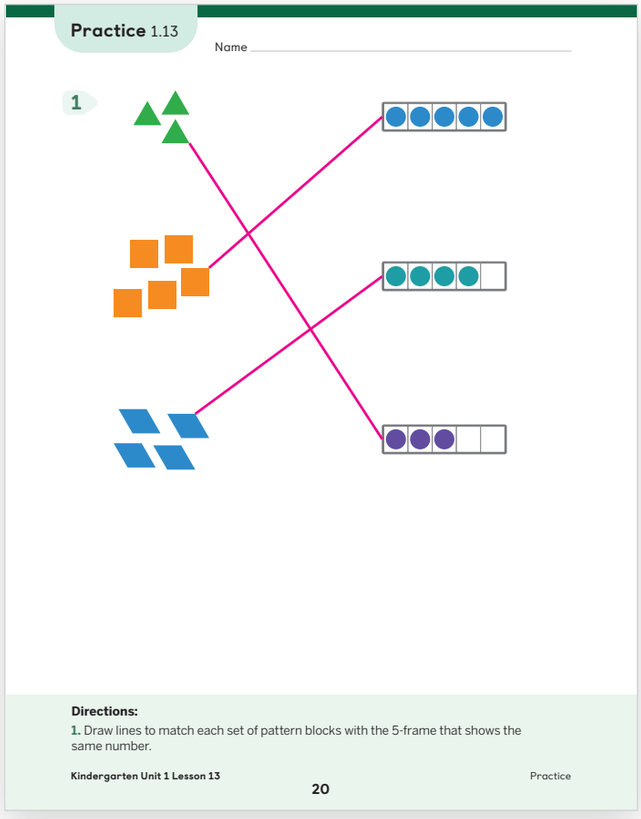
Independent

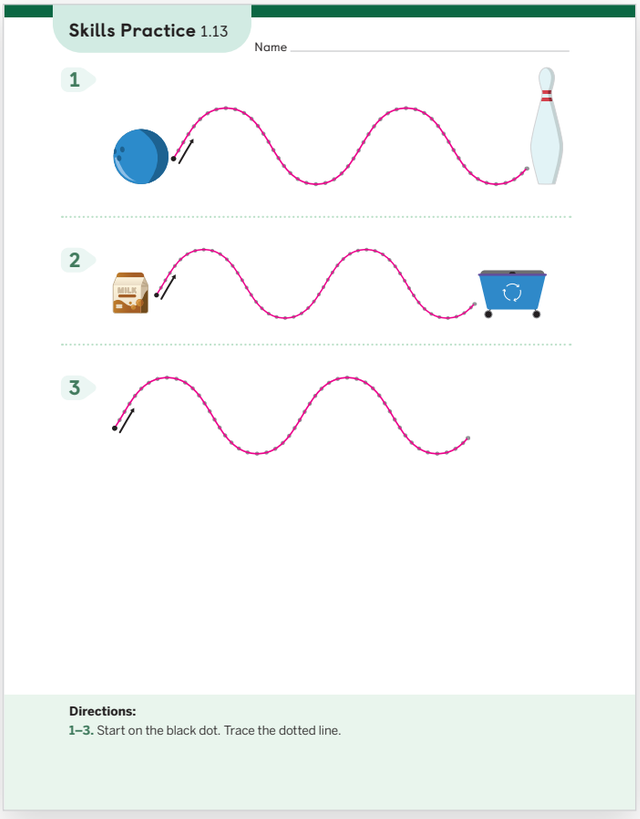
Provide students with sufficient practice to build and reinforce their conceptual understanding, fluency, and application of mathematical topics, assessment practice, and ongoing spiral review.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.





Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	1	K.2.E

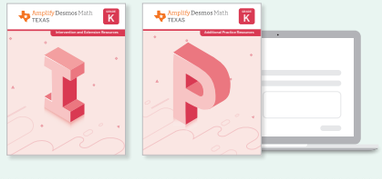
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

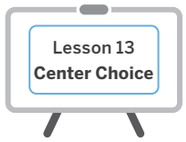
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 8



Pattern Blocks

Puzzles

Pairs | 15 min | Building Toward K.6.A

Students use pattern blocks to fill in simple puzzles.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Puzzles (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.

Pattern Blocks

Get and Build

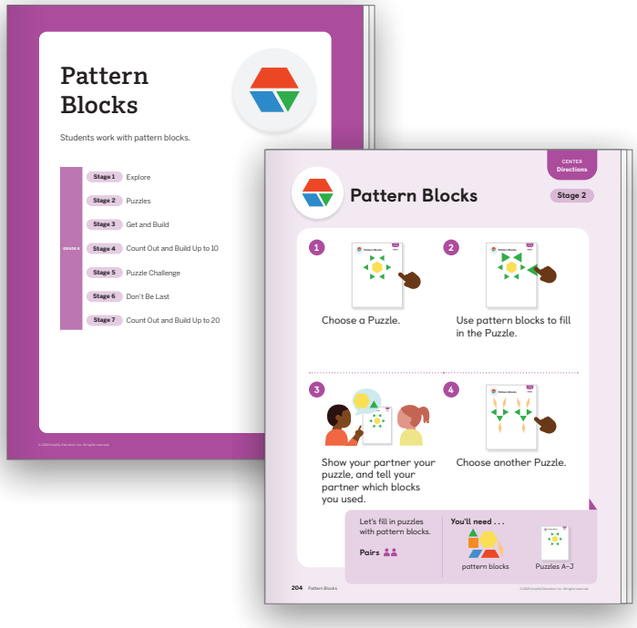
Pairs | 15 min | K.2.B, K.2.E

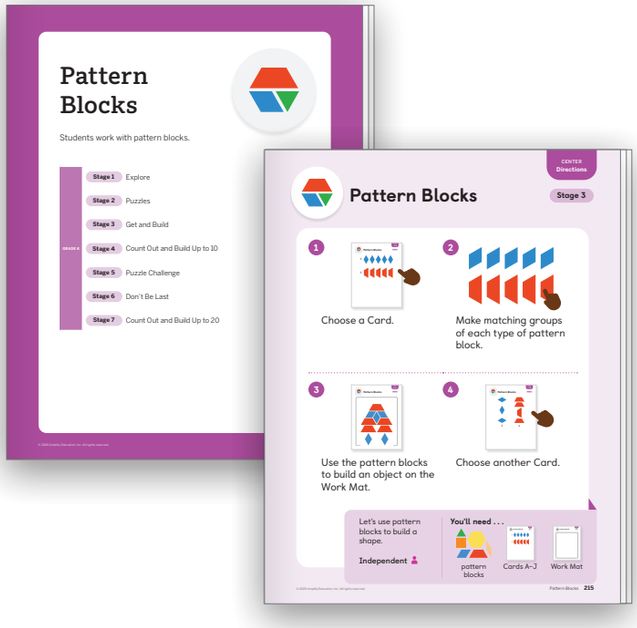
Students use a specified number of pattern blocks to build a creation of their choice.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Cards (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.





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

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.

Differentiation Use after Lesson 13

Lesson Goal: Use one-to-one correspondence to determine the quantity of a group of up to 10 objects.

Support

Provide targeted intervention for students by using these resources.

If students count the objects by touching an object more than once or skipping objects:

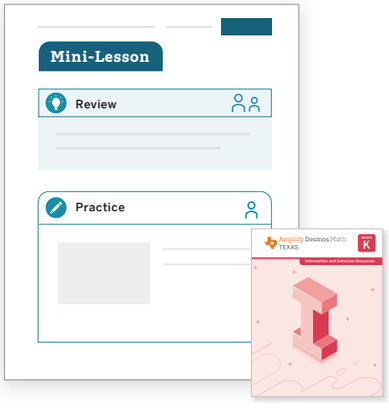
Respond:

- Assign the *Counting to Determine the Quantity of a Group* Mini-Lesson. | 15 min

If students skip numbers when counting:

Respond:

- Students will have more opportunities to chorally count in Lessons 13 and 14, as well as in future units.



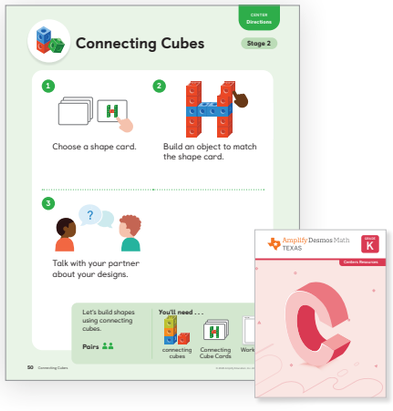
Strengthen

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

If students count the objects by touching 1 object for each number:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Build to Match
  Pattern Blocks: Get and Build
- Have students complete **Lesson 13 Practice.** | 15 min
- **Item Bank**



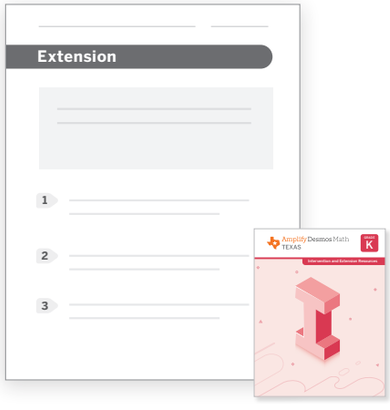
Stretch

Challenge students and extend their learning with these resources.

If students fluently count the objects by touching 1 object for each number:

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
- Vocabulary routines

Professional Learning

Each lesson in this sub-unit supports students' development of counting concepts. What have you observed that indicates whether students are benefiting from this practice?

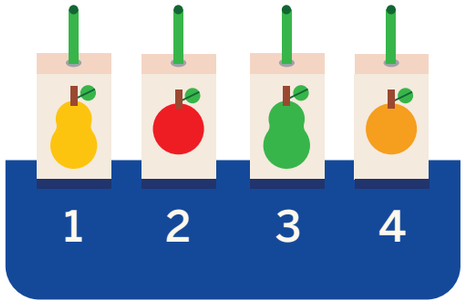
Unit 1
Lesson
14

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

Counting in the Cafeteria

Developing an Understanding of Cardinality and Conservation

Let's think about how many are in a group.



Key Concepts

Today's Goals

1. **Goal:** Determine the quantity of a group of up to 10 objects.
2. **Goal:** Know that the last number said tells the quantity of objects counted.
3. **Language Goal:** Justify that a quantity does not change even if the objects are rearranged or hidden. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students extend their understanding of cardinality as they determine the quantity of groups of up to 10 objects. Initially, when asked, "How many?," students may recount the collection of objects. As students develop an understanding of cardinality — that the last number said tells the number of objects counted — they no longer have to recount and can instead answer "How many?" by restating the last number. Students also build an understanding of conservation of number by justifying that a quantity does not change even if the objects are rearranged or hidden. **(TEKS K.1.F)**

Prior Learning

In Lesson 13, students determined the quantity of groups of up to 10 objects and focused on using one-to-one correspondence.

Future Learning

In Lessons 15 and 16, students will continue determining the quantity of groups of objects with a focus on strategies for keeping track of which objects have been counted.

Integrating Rigor in Student Thinking

- Students further their **conceptual understanding** of cardinality as they determine the quantity of a group of objects.
- Students develop their **conceptual understanding** of conservation of number as they determine the quantity of objects in a group that has been rearranged or hidden without recounting.

TEKS

Addressing

K.2.C

Count a set of objects up to at least 20 **and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.**

Also Addressing: **K.2.A, K.2.B, K.2.E**

Math Process Standards: K.1.C, K.1.F

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

Building Math Identity

I can be all of me in math class.

Charlie knows that a healthy meal helps him do his best. What helps you do your best in math?

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

Lesson at a Glance 60 min

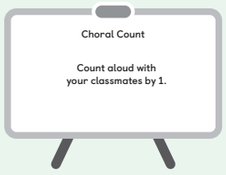
TEKS: K.1.C, K.1.F, K.2.A, K.2.B, K.2.C, K.2.E

Warm-Up Fluency

Whole Class | 5 min

Students use the **Choral Count** routine, in which they count as a class by 1. As students count, they say 1 number for each connecting cube placed in a cup.

Additional Prep Prepare: 10 connecting cubes and 1 large cup



Activity 1

Independent | 15 min

Students determine the quantity of a group of objects. In the Connect, students count a group of objects and discuss how they know the quantity even when the group is no longer visible. **(TEKS K.1.C)**

Manipulative Kit: 5-frames (optional)
Materials: assorted objects, *Figuring Out How Many* chart (from Lesson 13), paper bags, Work Mats (optional)
Additional Prep Assemble: bags of 5–10 objects of the same type, such as cubes, counters, pattern blocks, or buttons

Activity 2

Pairs | 15 min

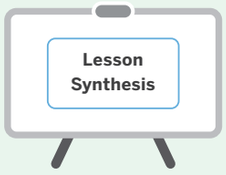
Students count groups of up to 10 connecting cubes and take turns building objects with them. In the Connect, students build 2 different objects with the same group of connecting cubes and discuss how they know the quantity without recounting.

Manipulative Kit: 5-frames (optional), connecting cubes
Materials: *Figuring Out How Many* chart (from Lesson 13), paper bags, Work Mats (optional)
Additional Prep Assemble: 1 bag of 5–10 connecting cubes for each pair

Synthesis

Whole Class | 10 min

Students review and reflect on ideas of cardinality and conservation of number.

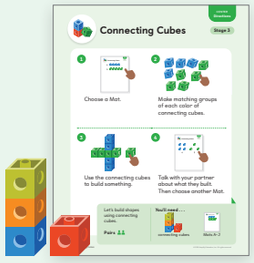


Center

Pairs | 15 min

Students are introduced to the Center, *Connecting Cubes*, *Get and Build*, in which they use a specified number of connecting cubes of each color to build an object of their choice.

Manipulative Kit: connecting cubes
Materials: Directions, Mats (A–J)



Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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.

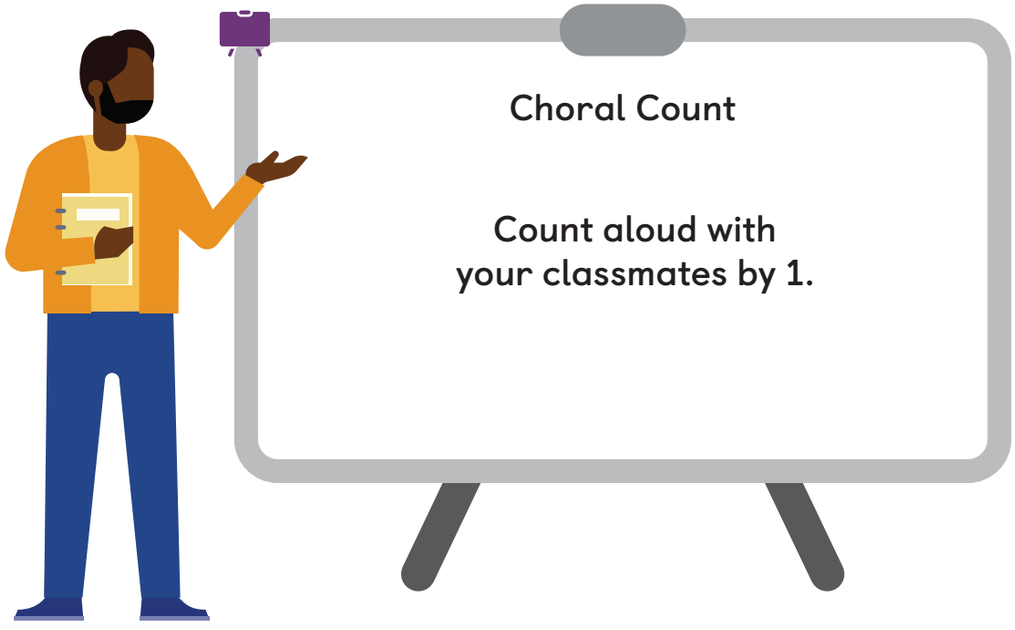
Whole Class | 5 min

Presentation Screen

Warm-Up Choral Count

Fluency

Purpose: Students use connecting cubes to count by 1 to 10 to pair the verbal count sequence with objects.



1 Launch

Use the Choral Count routine.

Display a scattered group of 10 connecting cubes.

Say, "Let's count by 1, starting at 1 and ending at 10. We will say a number each time we put a cube in the cup."

Demonstrate placing each connecting cube into a cup one at a time as students count.

2 Connect

Say, "Let's count again. This time, let's take the cubes out of the cup."

Repeat the count, this time removing the cubes from the cup.

Ask, "How many are there?"

Say, "Let's continue counting to figure out how many there are."

Independent | 15 min

Activity 1 How Many Are There?

Purpose: Students determine the quantity of objects in a group to understand that the last number said tells the quantity of objects counted.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Prepare one bag of 5–10 objects for each student. Distribute the bags.
- Display the *Figuring Out How Many* chart (from Lesson 13) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

Short on time? Consider using this activity as a small group lesson for students who have not yet demonstrated understanding of cardinality.

1 Launch

Play the animation. ELPS 1.F

Say, "There are a lot of grown-ups who also get ready for the first day of school. A box of snacks has arrived at the school cafeteria. The staff need help figuring out how many snacks are in the boxes."

Provide access to 5-frames and Work Mats.

Say, "The objects in your bags show the snacks that have arrived at the school. Figure out how many snacks are in your bag. Use the tools if they are helpful."

A **Accessibility: Executive functioning** Invite students to share ideas for how they could organize the objects or use the 5-frame and Work Mat to figure out how many snacks are in their bags. Invite others to compare how their ideas are similar or different.

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 could you do first?"
- Point to the 5-frame and Work Mat. Ask, "How could these math tools help you?"

3 Connect

Display 1 student's objects and invite the student to share how the objects were counted.

Ask, "How many snacks are there?"

Say, "When you count, the last number you say tells how many." Remove the group of objects from students' view.

Use the Think-Pair-Share routine. Ask:

- "How many snacks are in the group we just counted?"
- "How did you know how many snacks there were without seeing them again?"

Key Takeaway: Say, "You can know how many objects are in a group you have counted even when the group is hidden because the last number you said tells how many objects are in the group."

In this Activity . . .

Students determine the number of snacks in their bag and explain to their partner how they know.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I have 9 snacks. I know because when I counted, I stopped at 9, and there were no more snacks left to count.*
- *I have 6 snacks. I know because I filled each spot on the 5-frame and then had 1 more.*

Hands-On

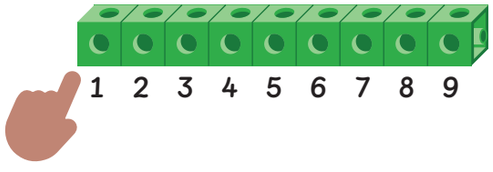
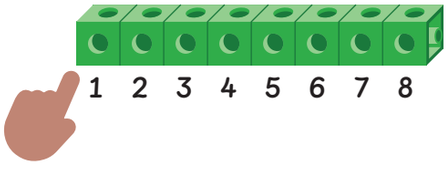
5-frame

collection

Work Mat

Presentation Screen

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Recount their objects and determine a different quantity.	 1 2 3 4 5 6 7 8 9 *First I counted 8. Then I counted again and got 9.*	**Support** Ask, "Why do you think you got a different number each time you counted? How could you make sure you count each object only once?"
Recount their objects.	 1 2 3 4 5 6 7 8	**Strengthen** Ask, "Can you tell me how many snacks there are without counting the cubes again?"
Tell the total number of objects without recounting.	*I know there are 8 because when I counted I stopped at 8.*	**Strengthen** Say, "Trade bags with your partner and figure out how many objects are in the bag to figure out how many snacks are in a box."

Pairs | 15 min

Activity 2 Building With Cubes

Purpose: Students count and build with a group of connecting cubes to understand that a quantity does not change even if it is rearranged.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).
- Prepare one bag **(Classroom materials)** of 5–10 connecting cubes for each pair. Distribute the bags.

Classroom materials:

- Display the *Figuring Out How Many* chart (from Lesson 13) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Say, "Now, you get to work with a partner to figure out how many there are in a new group."

Provide access to 5-frames and Work Mats.

Say:

- "Work with your partner to figure out how many connecting cubes you have." Have partners work together for 2 minutes.
- "Now, you can use your connecting cubes to create whatever you would like. You could make a tower or anything else, but be sure to use all of the connecting cubes."
- "Take turns using all of the cubes to build something. After you are both done building, describe what you made and tell how you know how many cubes there are."

EB **Emergent Bilinguals** Strategically pair students with partners who speak the same primary language. Once students have developed their thinking, encourage them to share in English with another pair of students. **ELPS 1.E, 2.F**

2 Monitor

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

If students need help getting started . . .

- Ask, "What do you want to build?"
- Ask, "How could you use your cubes to build it?"

3 Connect

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

Invite a pair to share their work as shown in Row 3 in the *Differentiation* table. Have 1 partner count the cubes with the class, build an object, and name the quantity of cubes in what was built. Invite the other partner to build a different object using the same cubes.

Use the Think-Pair-Share routine. Ask, "How can we know how many connecting cubes there are without counting again?"

Key Takeaway: Say, "The number of objects in a group stays the same even when the objects are moved."

In this Activity . . .

Students count a group of connecting cubes and take turns with their partner using all the cubes to build something new. They describe what they made and how many cubes they used.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I made the letter E.*
- *I used 7 connecting cubes. I know because we counted 7 cubes before we started building.*

Hands-On

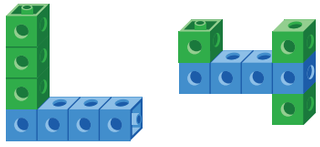
5-frame

connecting cubes

Work Mat

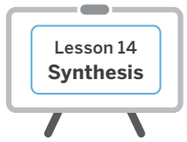
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Build an object and say that there are a different quantity of cubes than what their partner said.	 **My partner used 6 cubes and I used 7.**	**Support** Ask, "How did you figure out how many connecting cubes there are?"
Build an object and recount the cubes when asked to tell the quantity.	**My partner had 7 cubes and I have 1, 2, 3, 4, 5, 6, 7.**	**Strengthen** Ask, "How could you figure out how many connecting cubes you have without counting again?"
Build an object and name the number of cubes without recounting.	**We both used our 7 cubes to build different things.**	**Stretch** Ask, "How many cubes would you have if I gave you 1 more?"

Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: The last number said when counting objects tells the quantity. That quantity stays the same regardless of the objects being rearranged or hidden.

Demonstrate pointing to each cube while counting aloud the cubes with students.

Say, "Diego counted the group of cubes, '1, 2, 3, 4, 5, 6, 7.' When his teacher asked him how many cubes were in the group, he counted the cubes again and said, '1, 2, 3, 4, 5, 6, 7.'"

Ask:

- "Did Diego answer the question? Why or why not?"
- "How many connecting cubes are there?"

Say, "Counting can help you figure out how many. The last number you say when you count tells how many objects are in the group."

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

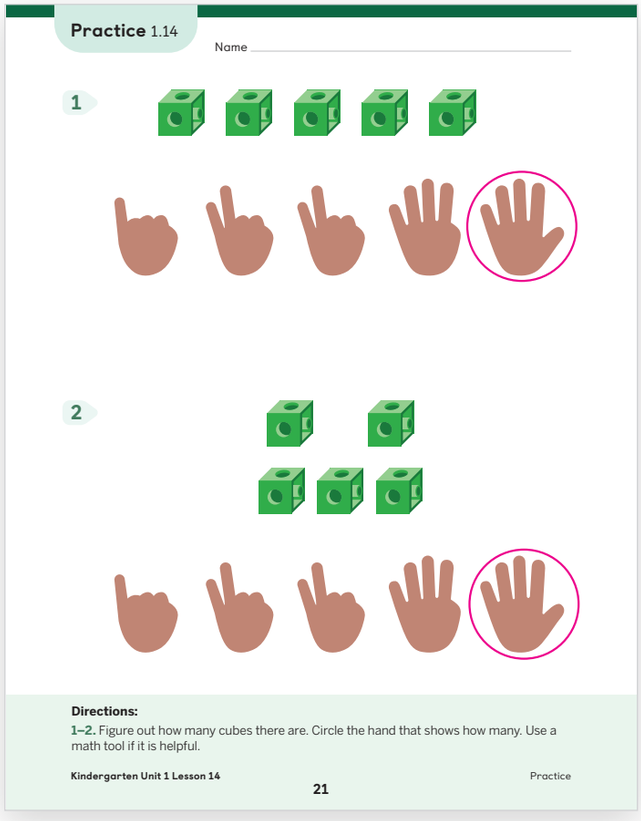
Practice

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.

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.14

Name

1

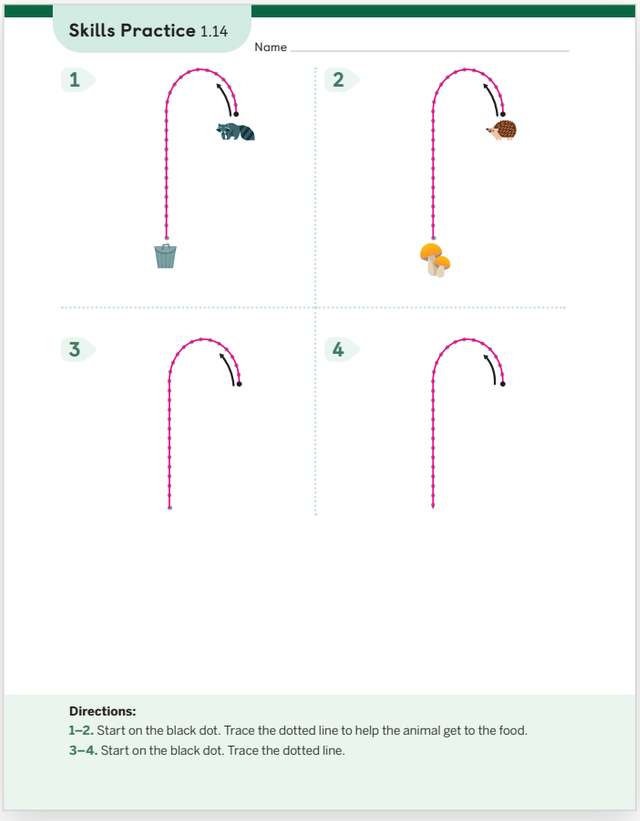
2

Directions:

1–2. Figure out how many cubes there are. Circle the hand that shows how many. Use a math tool if it is helpful.

Kindergarten Unit 1 Lesson 14 Practice

21



Skills Practice 1.14

Name

1 2 3 4

Directions:

1–2. Start on the black dot. Trace the dotted line to help the animal get to the food.

3–4. Start on the black dot. Trace the dotted line.

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	2	K.2.C

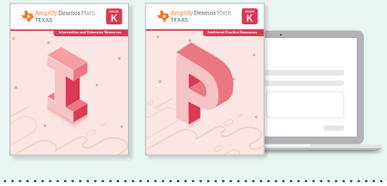
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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
Connecting Cubes, Get and Build

Purpose: Students use a specified number of connecting cubes of each color to build an object of their choice.

Presentation Screen 9

Materials

Manipulative Kit:

- Distribute connecting cubes to each pair.

Centers Resources:

- Display the Directions and Mat A.
- Distribute Mats (A–J) to each pair.

1 Launch

Display the Center materials and the Directions.

Demonstrate how to play *Connecting Cubes, Get and Build*.
While demonstrating: **ELPS 1.C**

- **Say**, "You will play *Connecting Cubes* today."
- **Say**, "First, my partner and I choose a Mat." Display Mat A.
- **Say**, "Next, my partner and I choose the connecting cubes we need."
- **Use the Think-Pair-Share routine.** Ask, "How could we figure out which connecting cubes we need?" Gather the given number of connecting cubes.
- **Say**, "Then my partner and I use the connecting cubes to build something together. We could make a tower or anything else."
- **Say**, "After you and your partner have built something, start with a new Mat and play again."

2 Monitor

Observe students who place connecting cubes on top of the images, subitize, or count to determine the number of connecting cubes that are needed.

3 Connect

Invite a pair to share what they each built with connecting cubes.

Ask, "What is the same about what they made? What is different?"

Say, "Even though they each built something different, the number of connecting cubes was the same."

Key Takeaway: Say, "We do not have to count objects again when we know how many there are because moving objects does not change how many there are."

Centers Resource Book

CENTER Directions

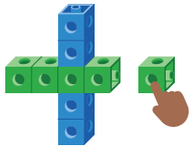
Connecting Cubes

Stage 3

1 Choose a Mat.

2 Make matching groups of each color of connecting cubes.

3 Use the connecting cubes to build something.



4 Talk with your partner about what they built. Then choose another Mat.

Let's build shapes using connecting cubes.

Pairs

You'll need . . .

connecting cubes

Mats A–J

54 Connecting Cubes

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Place connecting cubes on top of the images until all images are covered.	4  5 	**S Strengthen** Ask, "How many blue cubes do you need? How many green cubes do you need?"
Count to determine the number of connecting cubes that are needed.	1, 2, 3, 4. I need 4 blue cubes. 1, 2, 3, 4, 5. I need 5 green cubes.	**S Strengthen** Ask, "How did you figure out how many connecting cubes you needed?"
Conceptually subitize to determine the number of connecting cubes that are needed.	I know I need 9 cubes because I saw 4 blue cubes and 5 green cubes.	

Differentiation Use after Lesson 14

Lesson Goal: Know that the last number said tells the quantity of objects counted.

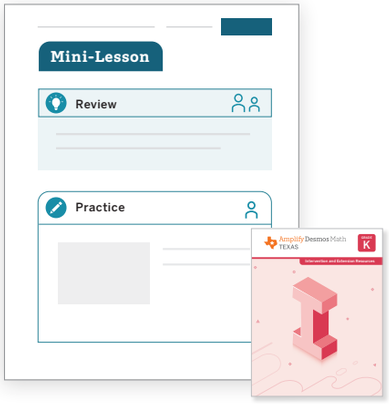
Support

Provide targeted intervention for students by using these resources.

If students recount their objects and determine a different quantity when asked how many:

Respond:

- Assign the Exploring *How Many Are in a Group* Mini-Lesson. | 15 min



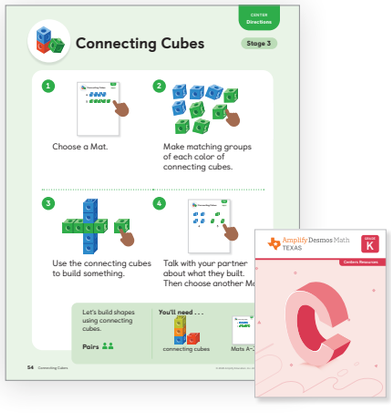
Strengthen

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

If students recount their objects when asked how many:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Get and Build
  Pattern Blocks: Get and Build
- Have students complete **Lesson 14 Practice.** | 15 min
- **Item Bank**



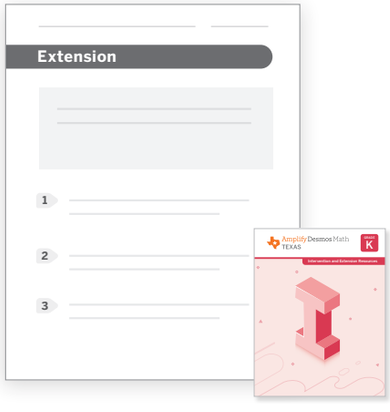
Stretch

Challenge students and extend their learning with these resources.

If students tell the total number of objects without recounting when asked how many:

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
- Vocabulary routines

Professional Learning

In the next unit, students will count groups of images in different arrangements. How does the work in this lesson help prepare them to count images?

Unit 1
Lesson
15

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

Charlie Helps Coach Kelley

Using Strategies to Keep Track When Counting

Let's keep track of objects as we count to figure out how many.

Key Concepts

Today's Goals

1. **Goal:** Use one-to-one correspondence to determine the quantity of a group of up to 10 objects.
2. **Language Goal:** Explain strategies for keeping track while counting. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students apply what they have learned about early counting concepts to determine the quantity of a group of up to 10 objects. This lesson provides an opportunity for students to discuss strategies for keeping track as they count, such as moving objects from pile to pile, lining objects up, or using a math tool. Students are prompted to use egg cartons to support accuracy, one-to-one correspondence, and keeping track of the count. **(TEKS K.1.C)**

Prior Learning

In Lesson 14, students determined the quantities of groups of up to 10 objects and furthered their understanding of cardinality and conservation of number.

Future Learning

In Lesson 16, students will continue to develop counting concepts and skills with a focus on using tools, such as Work Mats and 5-frames, to keep track of objects as they count.

Integrating Rigor in Student Thinking

- Students strengthen their **conceptual understanding** of one-to-one correspondence and develop procedural skills for keeping track as they count objects.

TEKS

Addressing

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Addressing: **K.2.A**

Math Process Standards: K.1.C

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

Building Math Identity

I can be all of me in math class.
How have you grown in math class so far?

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

Lesson at a Glance 60 min

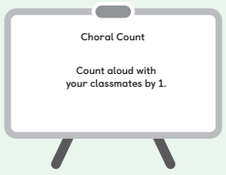
TEKS: K.1.C, K.2.A, K.2.C

Warm-Up Fluency

Whole Class | 5 min

Students use the **Choral Count** routine, in which they count as a class by 1. They are shown a group of scattered cubes that the teacher demonstrates moving as students chorally count.

Additional Prep Prepare: 8 connecting cubes



Activity 1

Independent | 15 min

Students determine the quantities of groups of up to 10 objects. In the Connect, students compare the various strategies used to keep track of objects as they count. **(TEKS K.1.C)**

Manipulative Kit: 5-frames (optional)
Materials: assorted objects, *Figuring Out How Many* chart (from prior lessons), paper bags, Work Mats (optional)
Additional Prep Assemble: bags of 5–10 objects of the same type, such as cubes, counters, pattern blocks, or buttons

Activity 2

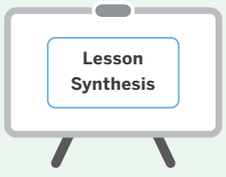
Pairs | 15 min

Students determine the quantity of another group of up to 10 objects and are prompted to use egg cartons to support one-to-one correspondence and keeping track. In the Connect, students discuss the usefulness of using math tools to keep track of objects. **(TEKS K.1.C)**
Manipulative Kit: 5-frames (optional)
Materials: bags of objects, egg cartons, *Figuring Out How Many* chart (from prior lessons), Work Mats (optional)

Synthesis

Whole Class | 10 min

Students review and reflect on the importance of one-to-one correspondence and the role of math tools in counting accurately.

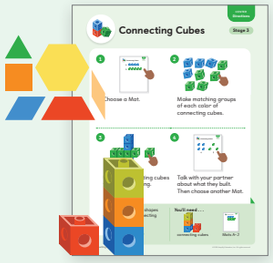


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of one-to-one correspondence and to learn the structure of Center Choice Time.

- Connecting Cubes
- Pattern Blocks



Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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.

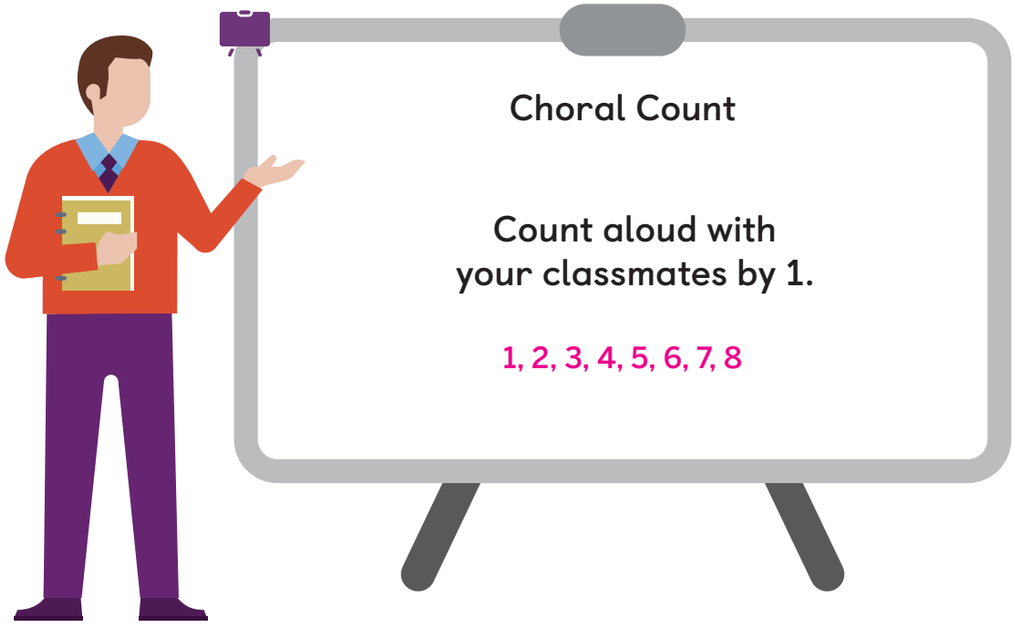
Whole Class | 5 min

Presentation Screen

Warm-Up Choral Count

Fluency

Purpose: Students count by 1 to 8 to pair the verbal count sequence with objects.



1 Launch

Use the Choral Count routine.

Display 8 scattered connecting cubes.

Say, "Let's count all of the cubes, starting at 1 and ending once we have counted each cube."

Demonstrate moving each cube, one at a time, as students count.

2 Connect

Have a student demonstrate counting the cubes.

Say, "Let's count all the cubes again, starting at 1."

Display each number as students count.

Say, "Let's think about how to keep track of objects as we count them."

Independent | 15 min

Activity 1 How Many Are There?

Purpose: Students strengthen their understanding of one-to-one correspondence as they explain strategies for keeping track as they count objects.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Prepare one bag of 5–10 objects for each student. Distribute the bags.
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Play the animation. ELPS 1.F

Say, "To get ready for the first day of school, Coach Kelley asks Charlie to help get the recess bags ready. Each bag has some balls for the kids to use at recess, but Coach Kelley does not know how many are in each bag. The objects in your bags show the number of balls in the recess bags."

Provide access to 5-frames and Work Mats.

Say, "Figure out how many are in your bag. Use the tools if they are helpful."

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 are you trying to figure out?"
- Say, "Let's count to 10 together. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Now, figure out how many are in your bag."

A **Accessibility: Visual-spatial processing** Guide visualization by holding up fingers while counting to 10 so students can see what counting to 10 looks like.

3 Connect

MLR **MLR7:** 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 strategies for keeping track of the count. Select and sequence their strategies in the order shown in the *Differentiation* table. As students share, add their strategies to the *Figuring Out How Many* chart. Draw and annotate images to highlight students' thinking.

EB **Emergent Bilinguals** Strategically pair students with partners who speak the same primary language. This will allow them to provide and receive feedback in their primary language before sharing their strategies in English with the class. ELPS 1.E, 2.F

Use the Think-Pair-Share routine. Ask, "What is the same about the way each student figured out how many? What is different?"

Key Takeaway: Say, "You can make sure you count each object only once by moving the objects, one at a time, from 1 pile to another pile or by lining up the objects as you say each number."

In this Activity . . .

Students figure out how many objects are in a bag using tools such as Work Mats or 5-frames to help them keep track while they count. They share and compare strategies as a class.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- *I kept track by lining the cubes up.*
- *I kept track by moving the cubes from one pile to another.*

Hands-On

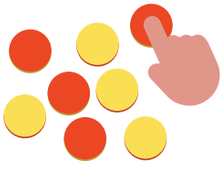

5-frames


collection

Work Mat

D Differentiation | Teacher Moves

Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Count each object once by pointing and counting.		**Stretch** Give the student more objects, and ask, "How many balls does Coach Kelley have now?"
Count each object once by moving the objects from pile to pile as they say each number.		
Count each object once by lining them up as they say each number.		

Pairs | 15 min

Activity 2 Egg Cartons

Purpose: Students use an egg carton as a math tool to keep track of their count and to support their understanding of one-to-one correspondence.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Have students trade their bags of objects (from Activity 1).
- Display an egg carton and distribute an egg carton to each student.
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

Short on time? Consider using this activity as a small group lesson for students who have not yet demonstrated understanding of one-to-one correspondence.

1 Launch

Have students trade bags with a partner.

Display an egg carton and a group of objects.

Use the Notice and Wonder routine.

Say, "This is an egg carton. How could you use an egg carton as a tool to keep track as you figure out how many?"

EB **Emergent Bilinguals** Clarify that although egg cartons are typically used to hold eggs, they will use the egg cartons differently today. ELPS 3.D, 3.F

Provide access to 5-frames and Work Mats.

Say, "Figure out how many are in your bag. Use the egg carton if it helps. Tell your partner how you figured out how many."

A **Accessibility: Executive functioning** Optimize access to tools by having students share ideas for how they could use the egg carton to figure out how many are in their bags. Invite others to compare how their ideas are alike or different.

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, "How could an egg carton help you?"
- Place 1 object in 1 egg carton space and ask, "What does this make you think about how an egg carton could help you?"

3 Connect

Display an egg carton and a group of objects.

Invite a student to share how the egg carton could be used to keep track of the count as shown in Row 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask, "What do you notice about how the objects were counted?"

Record language students use and show connections to other words on the *Figuring Out How Many* chart. Remind students to continue to refer to and use the chart.

Ask, "How did you see the egg carton used as a math tool today?"

Key Takeaway: Say, "We will continue to think about how math tools can be used to help count each object in a group only 1 time."

In this Activity . . .

Students explore how using an egg carton can help to keep track while they count a group of objects.

Oral activity: No writing expected.

Students might say . . .

Sample response:

- *The egg carton is helpful because I can put an object in each space while I count.*

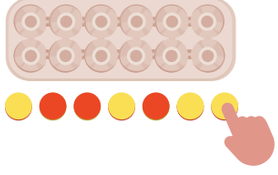
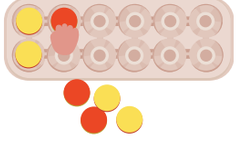
Hands-On

collection

egg carton

D Differentiation | Teacher Moves

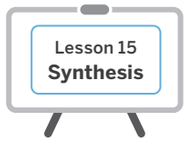
Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Count without using the egg carton.		**S Strengthen** Ask, "How did you keep track as you counted?"
Place 1 object in each egg carton space and then count to find how many.		**S Strengthen** Ask, "How did the egg carton help you?"
Say 1 number for each object as they place 1 object in each egg carton space.		

Whole Class | 10 min

Synthesis

Presentation Screen



Lesson Takeaway: Counting strategies, including moving or organizing objects, support the application of one-to-one correspondence and keeping track of the count.

Demonstrate counting the group inaccurately by pointing to and counting the counters, counting some twice.

Ask, "What did you notice?"

Say, "Even though I pointed and counted, I forgot which counters I had already counted."

Use the Think-Pair-Share routine. Ask, "How could I keep track of the counters as I count them?"

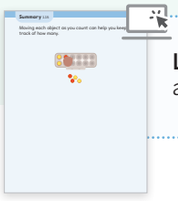
Say, "When you count, say 1 number for each object. Moving the objects as you count can help you keep track of which objects have been counted already."

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

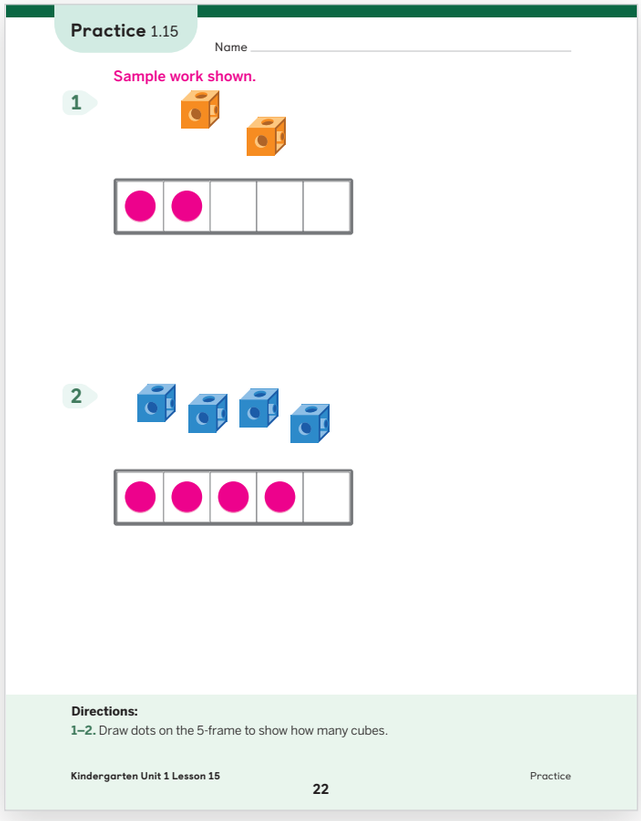
Practice

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.



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Practice 1.15

Name

Sample work shown.

1

2

Directions:

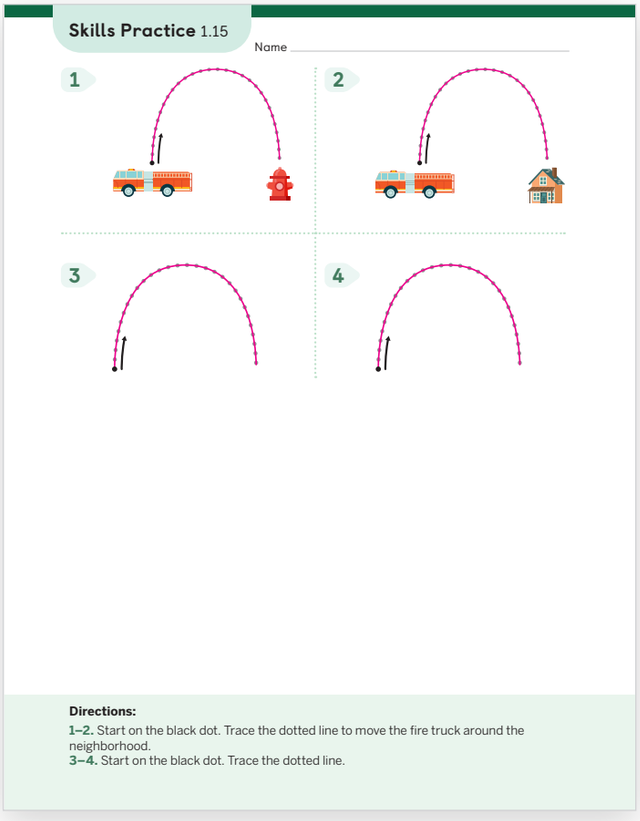
1–2. Draw dots on the 5-frame to show how many cubes.

Kindergarten Unit 1 Lesson 15 22 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	2	K.2.C, K.2.E

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Skills Practice 1.15

Name

1

2

3

4

Directions:

1–2. Start on the black dot. Trace the dotted line to move the fire truck around the neighborhood.

3–4. Start on the black dot. Trace the dotted line.

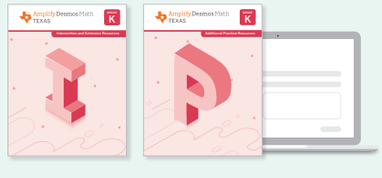
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*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).



Center Choice Time

Presentation Screen 9

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.

Connecting Cubes

Get and Build

Pairs | 15 min | K.2.B, K.2.E

Students use a specified number of connecting cubes to build an object of their choice.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Mats (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Pattern Blocks

Get and Build

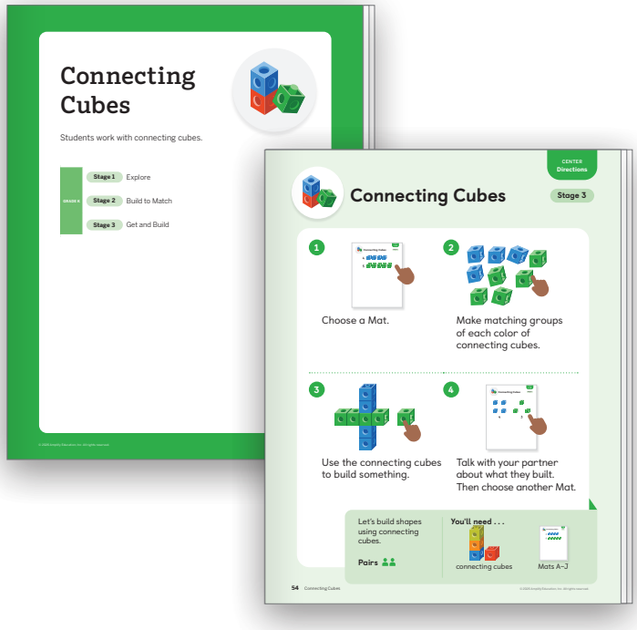
Independent | 15 min | K.2.B, K.2.E

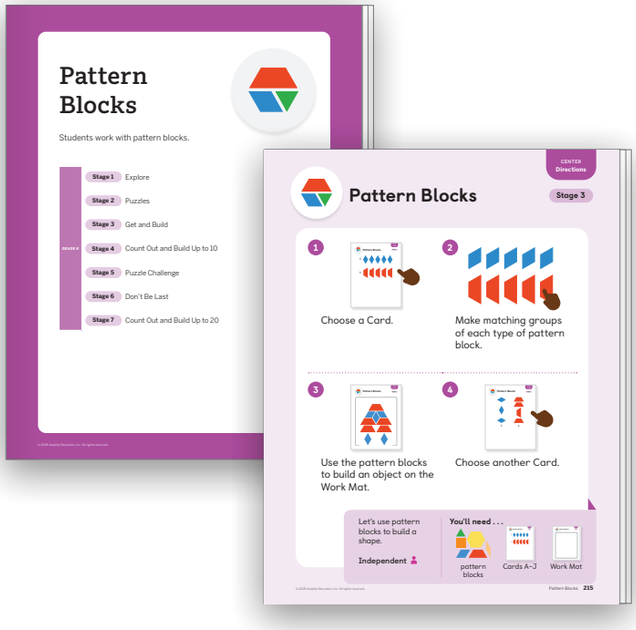
Students use a specified number of pattern blocks to build a creation of their choice.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Cards (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.





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

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.

Differentiation Use after Lesson 15

Lesson Goal: Explain strategies for keeping track while counting.

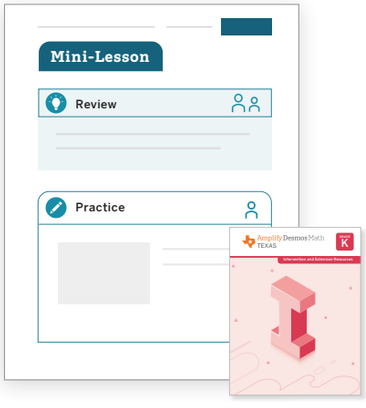
Support

Provide targeted intervention for students by using these resources.

If students count each object once by pointing and counting:

Respond:

- Assign the *Exploring Counting Strategies* Mini-Lesson. | 15 min



Strengthen

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

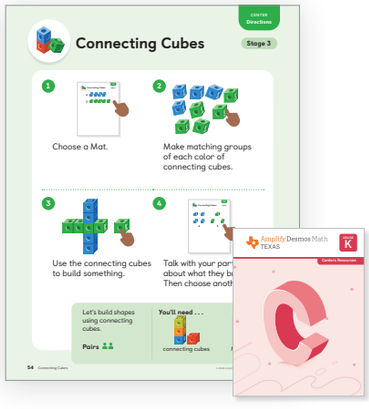
If students count each object once by moving the objects from pile to pile as they say each number:

Respond:

- Invite students to play these **Centers**. | 15 min

  Connecting Cubes: Get and Build
  Pattern Blocks: Get and Build

- Have students complete **Lesson 15 Practice.** | 15 min
- **Item Bank**



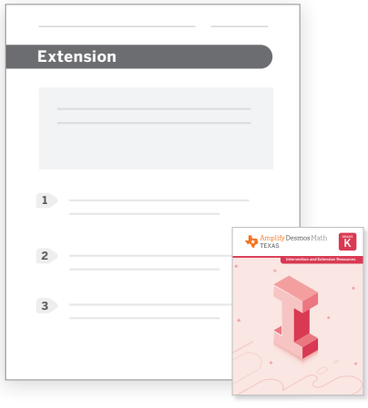
Stretch

Challenge students and extend their learning with these resources.

If students count each object once by lining them up as they say each number:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities.** | 15 min
- Revisit Activity 1 and invite students to respond to the **Stretch** questions 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
- Vocabulary routines

Professional Learning

In the next lesson, students will have access to a variety of tools that support keeping track while counting. What did you notice about how students are keeping track while counting? How can you use this to inform your instruction in the next lesson?

Unit 1
Lesson
16

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

Ms. Khan's Book Baggies

Using Math Tools to Keep Track When Counting

Let's use math tools to figure out how many.

Key Concepts

Today's Goals

1. **Goal:** Determine the quantity of a group of up to 10 objects.
2. **Language Goal:** Explain strategies for keeping track while counting. **(Listening and Speaking)** **ELPS 1.E, 2.E, 2.F**

Connections and Coherence

Students continue to develop strategies for keeping track of their count. They discuss how organizing the objects using math tools, such as Work Mats, egg cartons, and 5-frames, helps them count accurately. Students have an opportunity to show and explain how they counted to a partner. This lesson will be helpful for students who are not yet counting all objects or for students who are counting some objects more than 1 time. **(TEKS K.1.C)**

Prior Learning

In Lessons 13–15, students determined the quantities of groups of up to 10 objects and discussed strategies to support their counting.

Future Learning

In Lesson 17, students will determine a quantity and represent it using math tools and drawings.

Integrating Rigor in Student Thinking

- Students strengthen their **conceptual understanding** of one-to-one correspondence and develop procedural skills for keeping track as they count objects.

TEKS

Addressing

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Addressing: **K.2.A**

Math Process Standards: K.1.C

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

Building Math Identity

I am a doer of math.
When have you felt proud in math class?

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

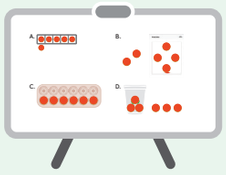
Lesson at a Glance 60 min

TEKS: K.1.C, K.2.A, K.2.C

Warm-Up

Whole Class | 5 min

Students use the **Notice and Wonder** routine to share what they notice and wonder about a group of counters arranged with different math tools. This is an opportunity for students to notice and discuss different math tools that could help them determine a quantity.



Activity 1

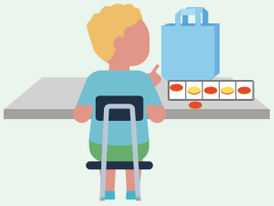
Independent | 15 min

Students determine the quantity of a group of up to 10 counters using a math tool of their choice. In the Connect, students discuss how various math tools help them keep track while counting. The bags of counters that students use in this activity will be used again in Activity 2. **(TEKS K.1.C)**

Manipulative Kit: 5-frames (optional), two-color counters

Materials: egg cartons (optional), *Figuring Out How Many* chart (from prior lessons), paper bags, Work Mats (optional)

Additional Prep Assemble: one bag of 5–10 counters per student



Activity 2

Pairs | 20 min

Students apply strategies they discussed in Activity 1 to determine the quantities of groups of up to 10 counters using a math tool of their choice. In the Connect, students use the **Mix and Mingle** routine to demonstrate and explain how they kept track of objects while counting. **(TEKS K.1.C)**

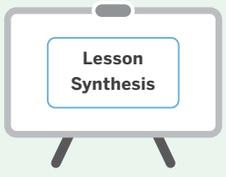
Manipulative Kit: 5-frames (optional)

Materials: bags of counters, egg cartons (optional), *Figuring Out How Many* chart (from prior lessons), Work Mats (optional)

Synthesis

Whole Class | 5 min

Students review and reflect on the math tools they use to keep track of their count.

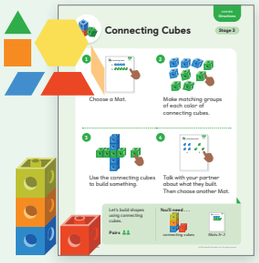


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of one-to-one correspondence and to learn the structure of Center Choice Time.

- Connecting Cubes
- Pattern Blocks



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

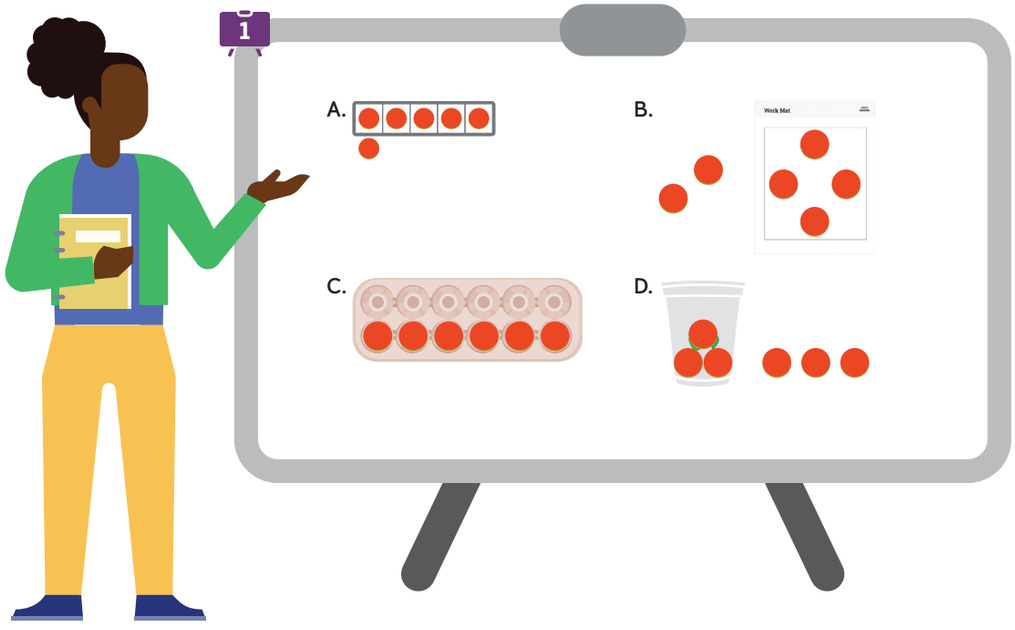
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up Notice and Wonder

Purpose: Students examine a group of 6 counters arranged with different math tools to prepare for choosing a math tool to help them determine a quantity.



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 could each of these math tools help you count?"

Say, "Let's use math tools to help us figure out how many are in a group."

Students might say . . . ELPS 2.B

I notice all the images show 6 counters.

I notice that they all show different tools.

I wonder why some counters are on the mat and some are off of the mat.

I wonder where to put the next counter on the 5-frame.

Independent | 15 min

Activity 1 Organizing Library Books

Purpose: Students determine the quantity of objects in a group using a math tool of their choice to further develop strategies for keeping track of their count.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).
- Prepare one bag **(Classroom materials)** of two-color counters for each student. Distribute the bags.

Classroom materials:

- Provide students with access to egg cartons (optional).
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the lesson.

Centers Resources:

- Provide students with access to Work Mats (optional).

Short on time? Consider using this activity as a small group lesson for students who have not yet demonstrated understanding of one-to-one correspondence.

1 Launch

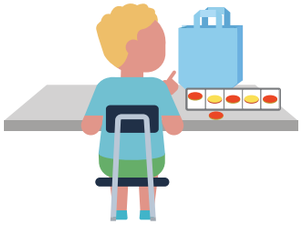
Play the animation. ELPS 1.F

Say, "To prepare for the first day of school, Ms. Khan, the school librarian, is organizing books into book baggies for each student. Let's figure out how many books Ms. Khan has in each bag."

Provide access to egg cartons, 5-frames, and Work Mats.

Say, "The counters in your bags show the books in each book baggie. Figure out how many books are in your bag. You can use any math tool to help you."

2 Monitor



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

If students need help getting started . . .

- Ask, "What could you do first?"
- Ask, "What tool could you use to help you organize the books?"

3 Connect

Display 7 counters and a 5-frame. Demonstrate counting and moving 4 of the counters to the 5-frame.

Ask:

- "Which books did I already count?"
- "Which books do I still need to count? How do you know?"

EB **Emergent Bilinguals** Use wait time to allow students to formulate a response. Consider having students rehearse with a partner before sharing with the whole class. ELPS 1.E, 2.F

Use the Think-Pair-Share routine. Ask, "How can tools help us figure out how many?"

Key Takeaway: Say, "Let's continue to explore how math tools help us figure out how many."

In this Activity . . .

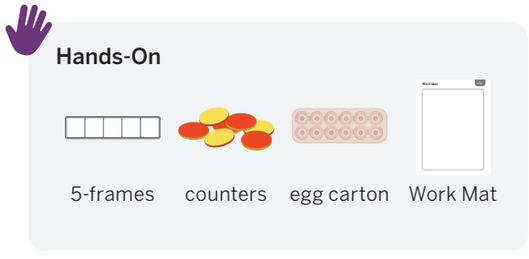
Students use math tools to determine the quantity of counters in a bag and share as a class.

Oral activity: No writing expected.

Students might say . . .

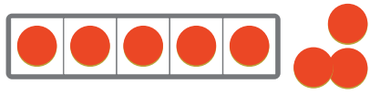
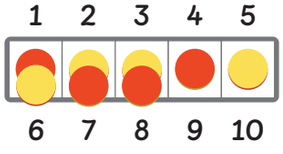
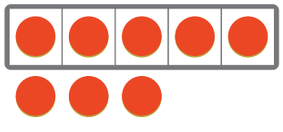
Sample responses:

- *I figured out how many books by putting each counter in the 5-frame 1 by 1.*
- *I put 1 counter in the egg carton at a time to figure out how many books.*



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Only count the counters that are on the 5-frame, in the egg carton, or on the mat.	 There are 5 books.	**Support** Ask, "How can you be sure that you have counted all of the books?"
Almost there Layer counters on top of each other and count some counters more than once.	 There are 10 books.	**Support** Ask, "How do you know which books you have counted and which books you have not?"
Use a tool to organize and count all the counters in their group.	 There are 8 books.	**Stretch** Remove a counter and ask, "How many books are there now?"

Pairs | 20 min

Activity 2 How Many Are There?

Purpose: Students strengthen their counting skills as they determine the quantity of objects in a group and explain their strategies for keeping track of their count.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Have students trade their bags of counters (from Activity 1).
- Provide students with access to egg cartons (optional).
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Have students trade bags with a partner.

Say, "Ms. Khan is setting up the classroom library for the first day of school. She has bins of books to put on the shelves. Let's figure out how many books are in each of the bins. The counters in your bags show the books in the bins."

Provide access to egg cartons, 5-frames, and Work Mats.

A **Accessibility: Executive functioning** Optimize access to tools by having students plan with a partner which tool they will use to figure out how many books are in the bin.

Say, "Figure out how many books are in the bins. You can use any math tool to help you."

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 could you do first?"
- Hold up a counter and ask, "How many books am I holding?"

3 Connect

Say:

- "We will use a routine called **Mix and Mingle**. To mix and mingle means to move around the room and talk with different people. During each round of this routine, you will talk with a new partner about your math thinking."
- "You will tell your partner how many books are in your group and show how you kept track as you counted. Bring any math tool you used. You can use these sentence frames as you talk with your partner."

MLR **MLR8: Discussion Supports — Sentence Frames** ELPS 1.E, 2.C, 2.E
Before students begin, read aloud and display these sentence frames to support discussion.

- "I have _____ books."
- "I figured out how many by _____"
- "First I _____. Then I _____."

Use the Mix and Mingle routine. Place students in pairs. Repeat 1–2 times.

Key Takeaway: Say, "Using a math tool, such as an egg carton, 5-frame, or Work Mat, can help you organize and keep track of the objects you are counting."

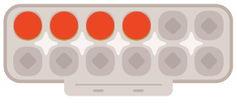
In this Activity . . .

Students use math tools to determine the quantity of counters in a bag.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

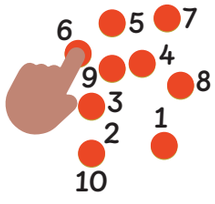
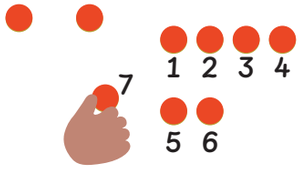
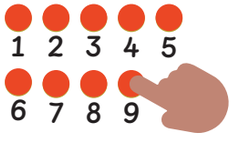


Hands-On

5-frames | counters | egg carton | Work Mat

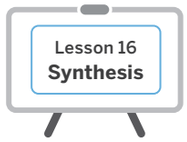
D Differentiation | Teacher Moves

Presentation Screens

Look for students who . . .	For example . . .	Provide support . . .
Almost there Place the counters in a scattered configuration and count a counter more than once.		**Support** Say, "Move 1 book at a time to the mat as you count. Now, how many books do you have?"
Count as they move each counter.		**Strengthen** Ask, "How did the math tool help you count?"
Arrange the counters strategically to count them.		

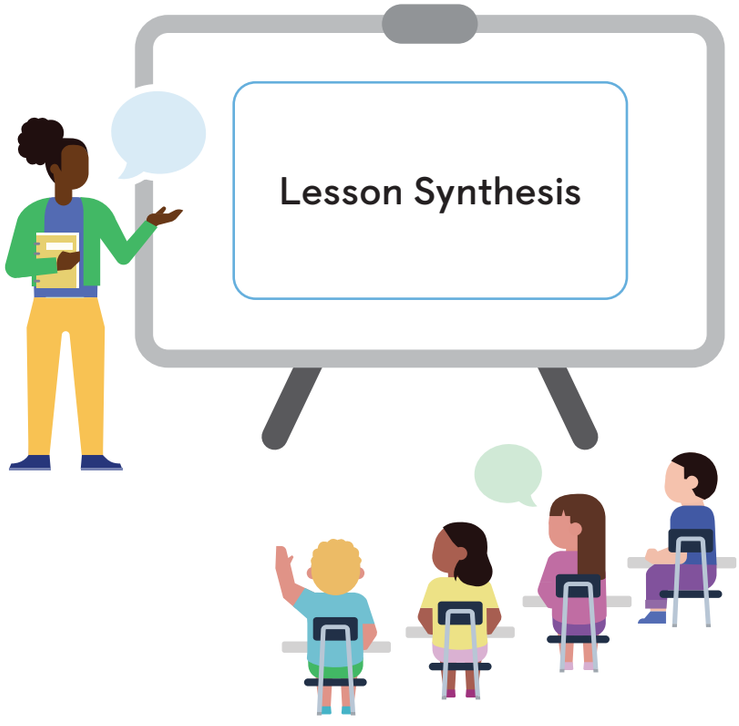
Whole Class | 5 min

Presentation Screen



Synthesis

Lesson Takeaway: Math tools can be used to help keep track of objects while they are being counted.



Ask:

- "How do you keep track as you count? What math tools help you?"
- "What new ways of keeping track did you see today?"
- "What new ways of keeping track do you want to try?"

Say, "There are many ways to keep track as you count."

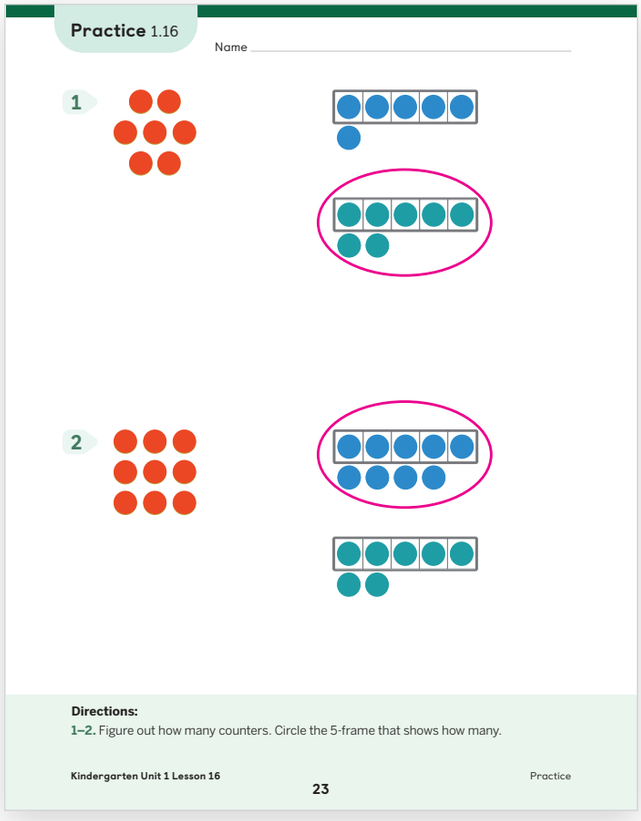
Invite students to refer to the **Summary** during Practice or anytime during the year.

Practice

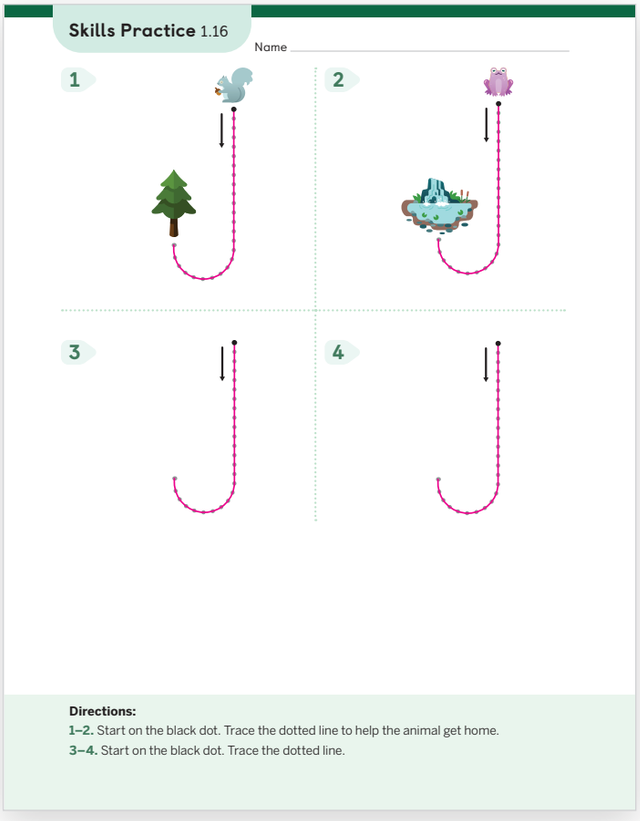
Independent

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

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**



Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	2	K.2.C

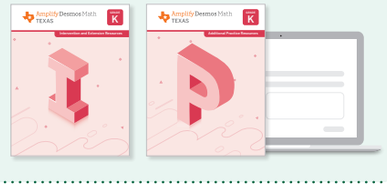
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–4	1	K.2.B*

*These problems build toward the standard shown.

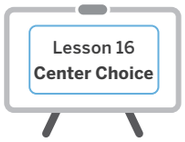
Need more Practice?

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



Center Choice Time

Presentation Screen 9



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.

Connecting Cubes

Get and Build

Pairs | 15 min | K.2.B, K.2.E

Students use a specified number of connecting cubes to build an object of their choice.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Mats (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Pattern Blocks

Get and Build

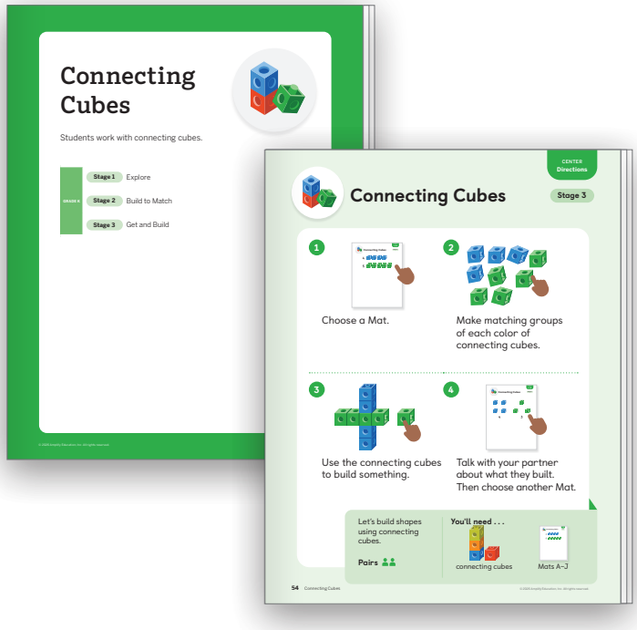
Independent | 15 min | K.2.B, K.2.E

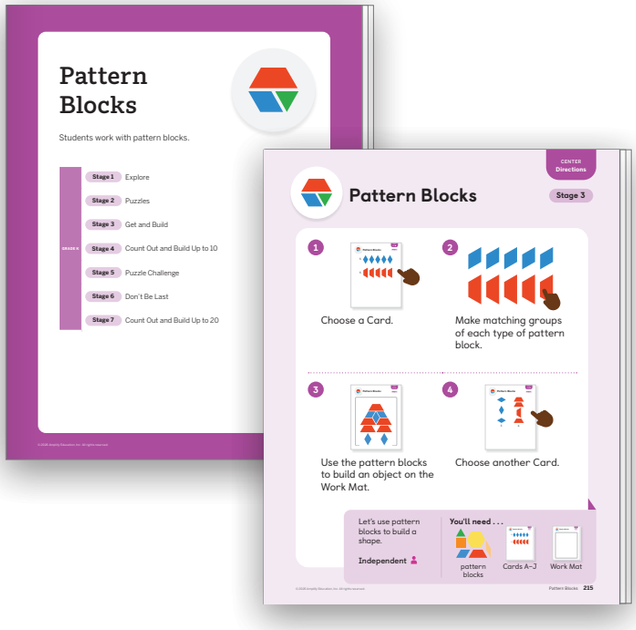
Students use a specified number of pattern blocks to build a creation of their choice.

Materials

- pattern blocks **(Manipulative Kit)**
- Directions, Cards (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.





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

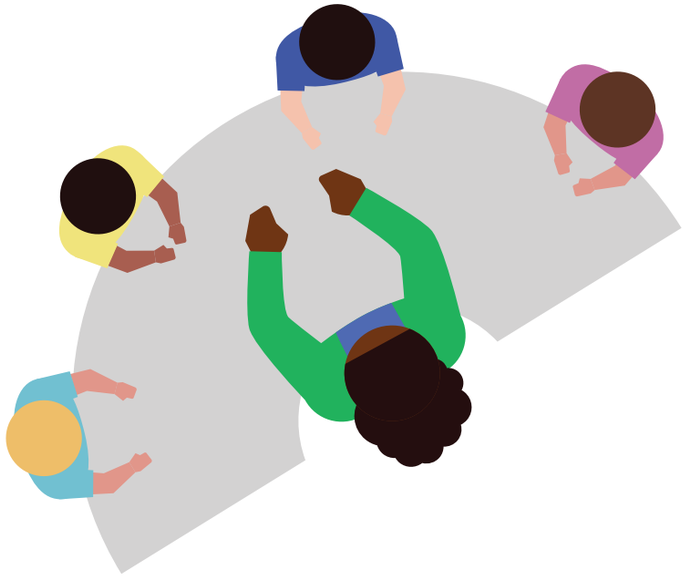
D Differentiation | Teacher Moves

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.



Differentiation Use after Lesson 16

Lesson Goal: Explain strategies for keeping track while counting.

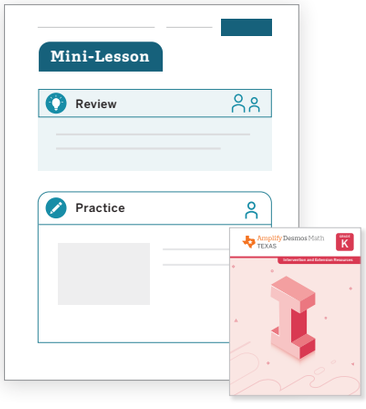
Support

Provide targeted intervention for students by using these resources.

If students count objects in a scattered configuration:

Respond:

- Assign the *Counting With Math Tools* Mini-Lesson. | 15 min



Strengthen

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

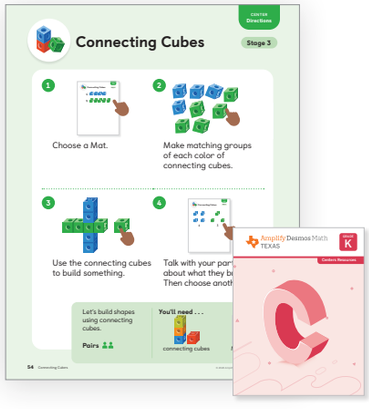
If students count as they move each counter:

Respond:

- Invite students to play these **Centers**. | 15 min

  Connecting Cubes: Get and Build
  Pattern Blocks: Get and Build

- Have students complete **Lesson 16 Practice.** | 15 min
- **Item Bank**



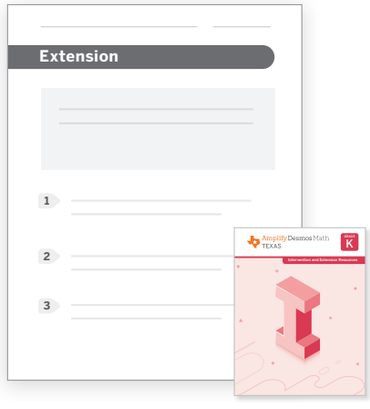
Stretch

Challenge students and extend their learning with these resources.

If students arrange the counters strategically to count them:

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
- Vocabulary routines

Professional Learning

In this lesson, students had access to various math tools to help them organize and count their objects. How did students use the math tools to help them keep track of the counted objects?

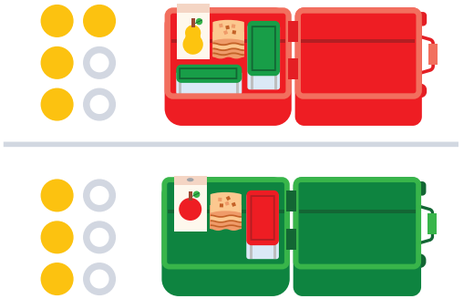
Unit 1
Lesson
17

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

Principal Mack's Problem

Different Ways to Represent Quantity

Let's figure out and show how many.



Key Concepts

Today's Goals

1. **Goal:** Determine the quantity of a group of up to 10 objects.
2. **Goal:** Represent the quantity of a group of up to 10 objects.
3. **Language Goal:** Explain how to represent a quantity. **(Listening and Speaking)** ELPS 1.E, 2.E, 2.F

Connections and Coherence

Students determine the quantities of groups of up to 10 objects using the counting concepts and skills they have practiced throughout the sub-unit. For the first time, students represent the quantity they determined. At first, some students may demonstrate and explain how they determined the quantity of objects or use other objects to make an equivalent group. Later, all students are prompted to represent the quantity of objects with a drawing to further connect number and quantity and to understand drawings as an important representational tool. **(TEKS K.1.E)**

Prior Learning

In Lessons 13–16, students developed their conceptual understanding of determining the quantity of a group and practiced their counting skills.

Future Learning

In Lesson 18, students will engage in a culminating lesson in which they will build a connecting cube creation to represent something important to them and then ask and answer "how many?" questions about the representations. In Unit 2, students will create written representations of how many, including writing numerals.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of representing a quantity.

TEKS

Addressing

K.2.B

Read, write, and **represent whole numbers** from 0 to at least 20 **with and without objects or pictures.**

Also Addressing: **K.2.A, K.2.C, K.2.D**

Math Process Standards: K.1.D, K.1.E

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

Building Math Identity

I am a doer of math.

How would you describe a mathematician? What makes you a mathematician?

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

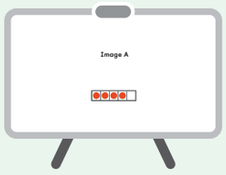
Lesson at a Glance 60 min

TEKS: K.1.D, K.1.E, K.2.A, K.2.B, K.2.C, K.2.D

Warm-Up Fluency

Whole Class | 5 min

Students use the **How Many Do You See?** routine, in which they develop fluency by subitizing quantities up to 5 on a 5-frame. **(TEKS K.1.D)**



Activity 1

Independent | 15 min

Students determine the quantities of groups of up to 10 objects. They represent the quantity using drawings, numbers, words, or objects. In the Connect, students compare ways to represent quantity in a **Gallery Tour.**

Manipulative Kit: 5-frames (optional)
Materials: Activity 1 PDF, assorted objects, *Figuring Out How Many* chart (from prior lessons), paper bags, Work Mats (optional)
Additional Prep Assemble: bags of 5–10 objects of the same type, such as cubes, counters, pattern blocks, or buttons

Activity 2

Pairs | 15 min

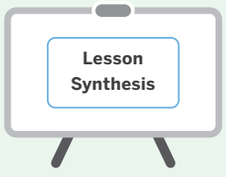
Students extend their understanding of representations as they draw to represent a quantity. In the Connect, students consider why a drawing is a valuable representational tool.

Manipulative Kit: 5-frames (optional)
Materials: Activity 2 PDF, bags of objects, *Figuring Out How Many* chart (from prior lessons), Work Mats (optional)

Synthesis

Whole Class | 10 min

Students review and reflect on how to efficiently represent a quantity with a drawing.

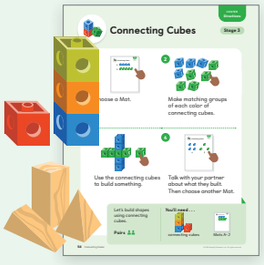


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of math tools and to learn the structure of Center Choice Time.

- Connecting Cubes
- Solid Shapes



Math Language Development

EB Emergent Bilinguals

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

✓Cognates ✓Sentence frames and word bank
✓Visuals

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

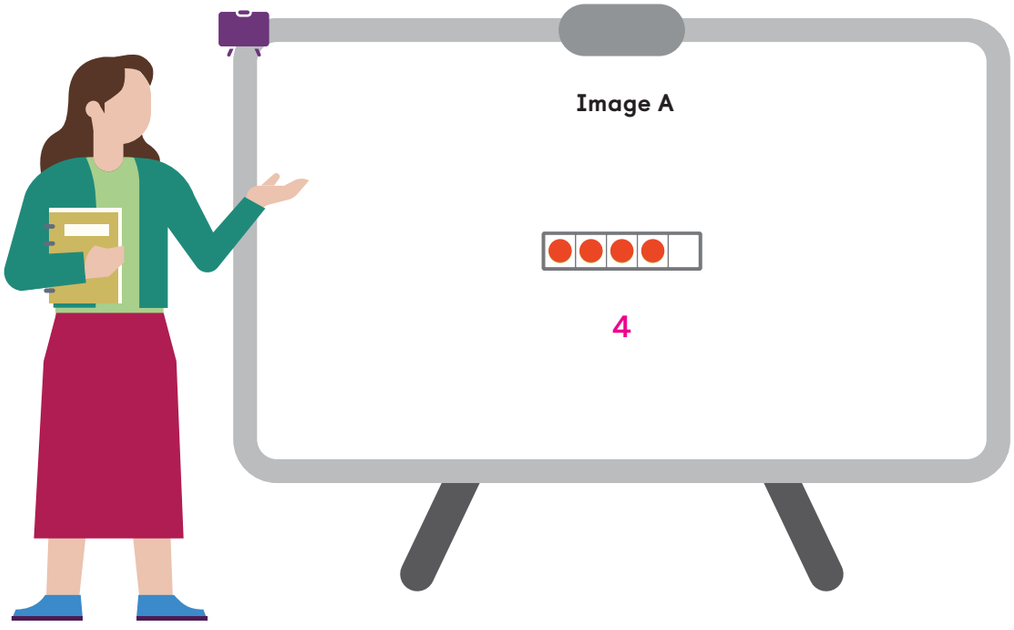
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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.

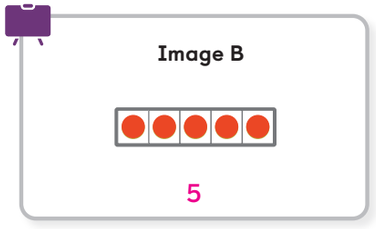
Whole Class | 5 min

Presentation Screens

Warm-Up How Many Do You See? Fluency

Purpose: Students determine the number of dots as they become familiar with the structure of the 5-frame and build fluency with subitizing quantities up to 5.





Why these problems? These images lend themselves to using the structure of the 5-frame to subitize quantities up to 5.

1 Launch

Use the How Many Do You See? routine.

Flash Image A for 5–10 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 do you see them?"

Repeat for Image B.

Display Image A and say, "Show how many on your fingers. What do you notice? What is the same about your fingers and the dots? What is different?"

Repeat for Image B.

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

A: *I see 4.*

B: *The 5-frame is full, so there are 5.*

Independent | 15 min

Activity 1 How Many Are There?

Purpose: Students determine a quantity and explore ways to represent the quantity using math tools or drawings.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Prepare one bag of 5–10 objects for each student. Distribute the bags.
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.
- Distribute the Activity 1 PDF to each student during the launch.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Play the animation. ELPS 1.F

Say, "Principal Mack got ready for the first day of school by figuring out how many school buses were in the parking lot. But, there was a problem! Principal Mack could not take the buses inside to show the teachers how many."

Ask, "How could Principal Mack show how many buses?"

Record students' ideas.

Distribute a bag of objects and the Activity 1 PDF to each student.

Provide access to 5-frames and Work Mats.

Say:

- "The objects in your bags show the number of buses in the parking lot."
- "Figure out how many are in your bag. Show how many using objects, drawings, numbers, or words."

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 is Principal Mack's problem?"
- Ask, "Looking at your tools, what ideas do you have for showing how many?"

3 Connect

Use the Gallery Tour routine. Say, "We will do a *Gallery Tour*. As you look at the ways students showed how many, notice what is the same and what is different." ELPS 1.C

EB **Emergent Bilinguals** If possible, pair students with different levels of English language proficiency together as they complete the Gallery Tour. Allow multilingual learners to share in their primary language first before sharing in English. ELPS 1.E, 2.C, 2.D, 2.F

Ask, "What is the same or different about how each student showed how many?"

Key Takeaway: Say, "There are different ways to show how many are in a group."

In this Activity . . .

Students determine how many objects are in a bag and then represent the quantity using objects, drawings, numbers, or words. They compare and share strategies using the **Gallery Tour** routine.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- Ours are the same because we both have 6 objects.
- Ours are different because I drew 5 circles and my partner wrote the number 5.
- I used 4 counters on my 5-frame, and my partner drew 4 circles.

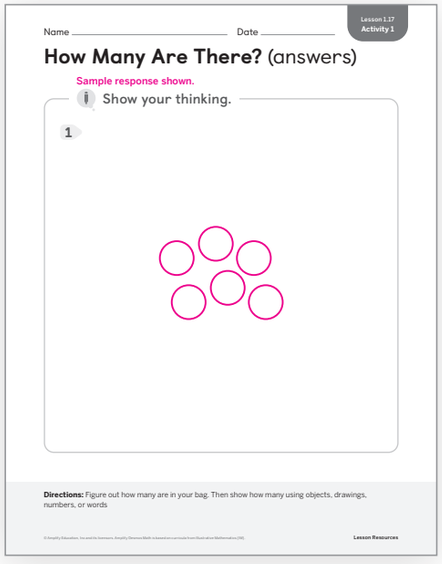
Hands-On

5-frames

collection

Work Mat

Activity PDF



Name _____ Date _____

Lesson 1.17 Activity 1

How Many Are There? (answers)

Sample response shown.

Show your thinking.

1

Directions: Figure out how many are in your bag. Then show how many using objects, drawings, numbers, or words

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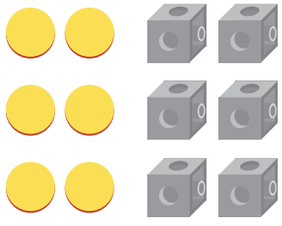
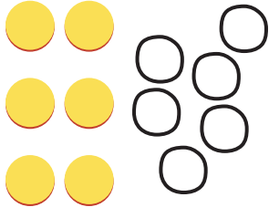
Lesson Resources

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Use words to say how many.	*I had 6 counters in my bag.*	**Support** Ask, "What tool could you use to show how many?"
Use math tools to represent how many.		**Stretch** Ask, "What does your work show? How could you show how many in a different way?"
Draw a picture to represent how many.		

Pairs | 15 min

Activity 2 Drawing to Show How Many

Purpose: Students extend their understanding of representations as they draw to represent a group of objects.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Have students trade their bags of objects (from Activity 1).
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.
- Distribute the Activity 2 PDF to each student.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Display the Student Edition.

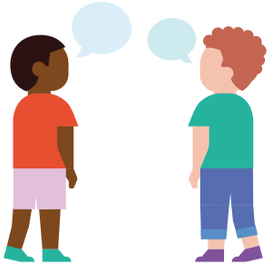
Say, "Principal Mack had another problem. Principal Mack only had a clipboard, paper, and a pencil and decided that a drawing could show how many buses were in the parking lot." Have students trade bags from Activity 1 with a partner.

Say:

- "The objects in your bags show the number of buses in the parking lot."
- "Figure out how many are in your bag. Then show how many using a drawing."

Provide access to 5-frames and Work Mats.

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, "How many objects are in your bag? How could you show that many with a drawing?"

A **Accessibility: Executive functioning** Optimize access to tools by having students plan with a partner what they will draw to represent the quantity.

3 Connect

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

Invite a student to share a group of objects and a drawn representation as shown in Row 3 in the *Differentiation* table.

Use the Think-Pair-Share routine. Ask:

- "What is the same about how they showed how many?"
- "What is different about how they showed how many?"
- "Why might a drawing be a helpful way to show how many?"

Key Takeaway: Say, "Drawings can be a useful way to quickly show how many."

In this Activity . . .

Students figure out how many objects are in a bag and then show how many with a drawing. They share why drawings are a helpful way to show how many.

Oral activity: No writing expected.

Students might . . .

Sample responses:

- Draw organized groups of objects.
- Draw detailed groups of objects.
- Use a 5-frame to organize their group of objects.

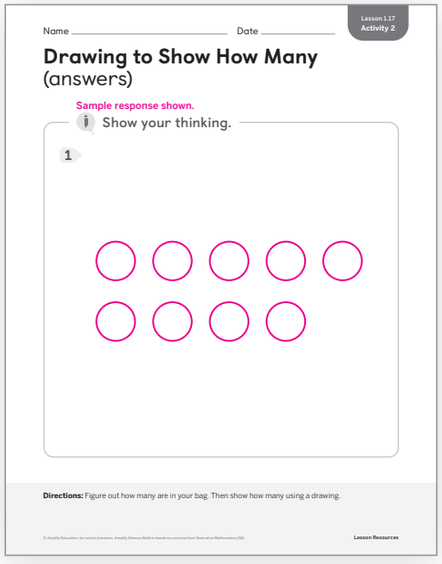
Hands-On

5-frames

collection

Work Mat

Activity PDF



Name _____ Date _____

Lesson 1.17 Activity 2

Drawing to Show How Many (answers)

Sample response shown.

Show your thinking.

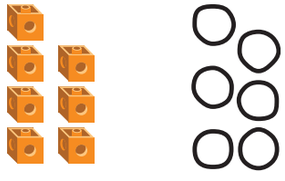
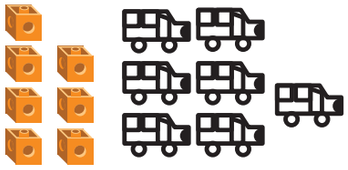
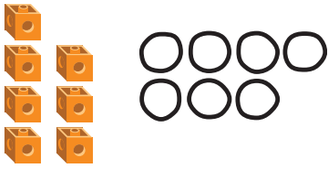
1

Directions: Figure out how many are in your bag. Then show how many using a drawing.

Lesson Resources

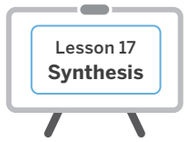
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Draw a different number of objects than are shown in the bag.		**Support** Ask, "How did you figure out how many connecting cubes there were? How did you show how many?"
Attend to the quantity and represent the objects by drawing a detailed group of objects.		**Strengthen** Ask, "How does your drawing show how many were in the group of objects?"
Attend to the quantity and represent the objects by drawing simple symbols.		

Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: There are different ways to represent a quantity. A drawing is an efficient representation.

Say, "Han and Jada drew pictures to show how many butterflies they saw at the playground."

Use the Notice and Wonder routine.

Say, "Both drawings show 6 objects. Han drew 6 butterflies and Jada drew 6 circles to show the number of butterflies."

Ask, "Which drawing would you use in math class? Why?"

Say, "When showing how many in math class, we can use simple drawings, such as circles."

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

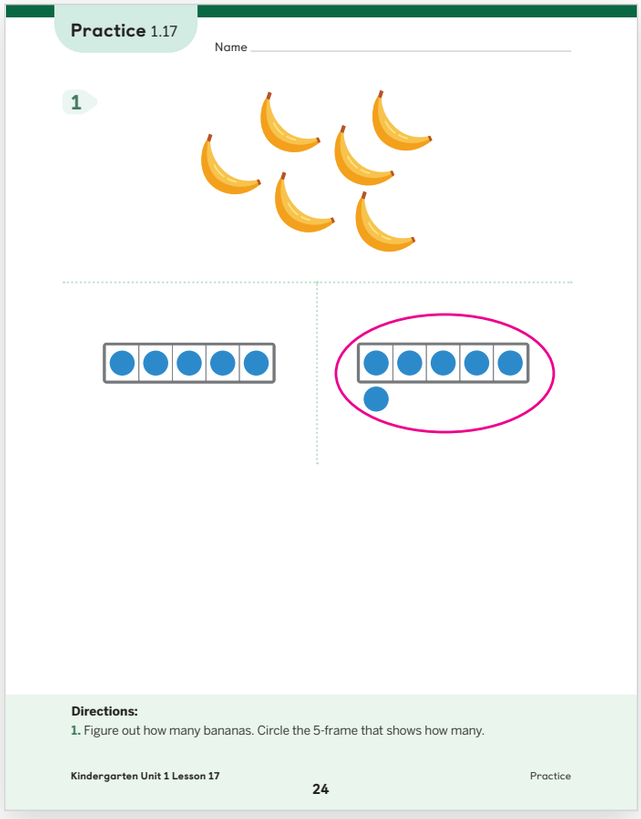
Practice

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.

Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.17

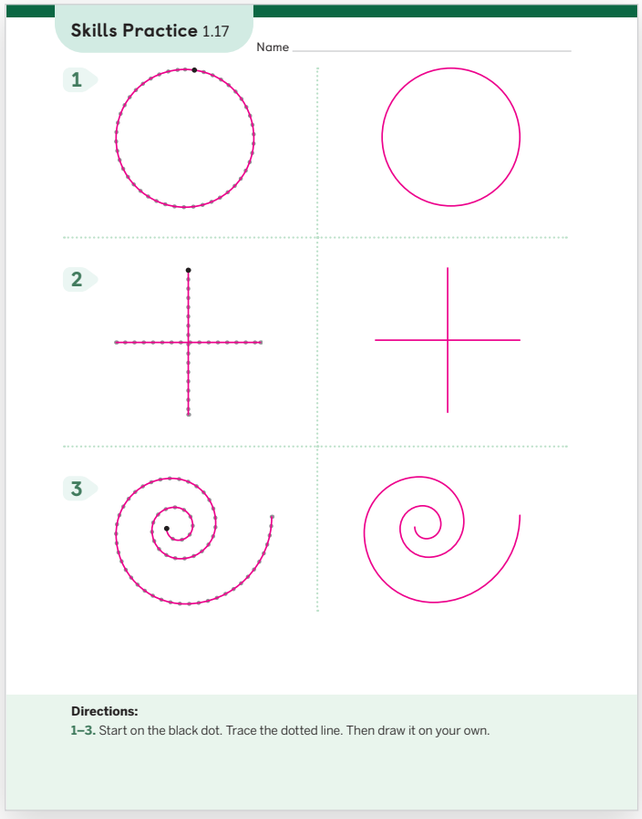
Name

1

Directions:

1. Figure out how many bananas. Circle the 5-frame that shows how many.

Kindergarten Unit 1 Lesson 17 24 Practice



Skills Practice 1.17

Name

1

2

3

Directions:

1–3. Start on the black dot. Trace the dotted line. Then draw it on your own.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	2	K.2.C

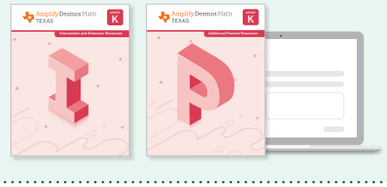
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

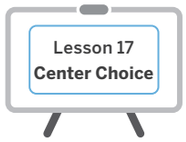
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 10



Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Get and Build

Pairs | **15 min** | **K.2.B, K.2.E**

Students use a specified number of connecting cubes to build an object of their choice.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Mats (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Solid Shapes

Build to Match

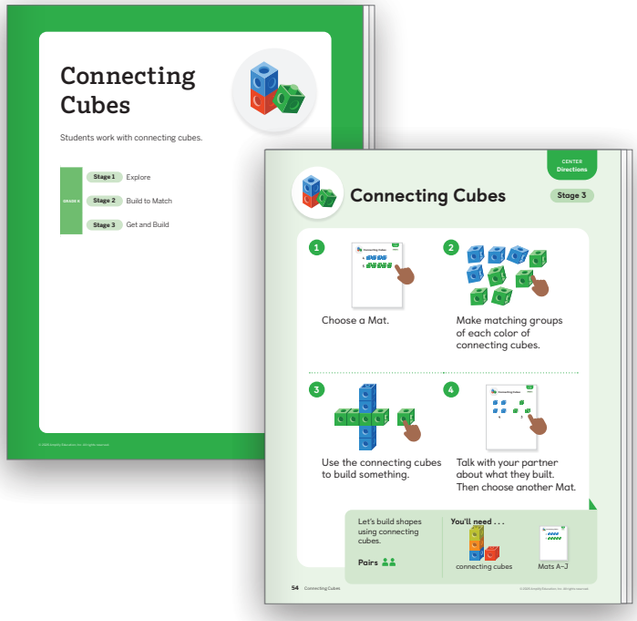
Pairs | **15 min** | **Building Toward K.6.B**

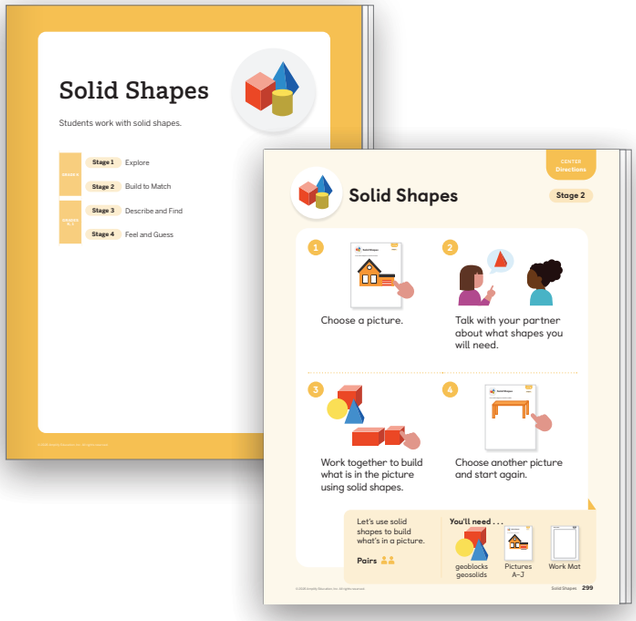
Students work together to build pictures using solid shapes.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Pictures (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.





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

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.

Differentiation Use after Lesson 17

Lesson Goal: Represent the quantity of a group of up to 10 objects.

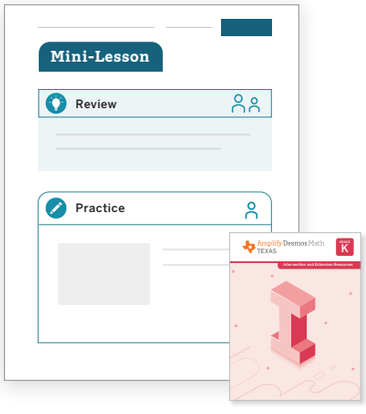
Support

Provide targeted intervention for students by using these resources.

If students draw a different quantity:

Respond:

- Assign the *Representing Quantities Using Drawings* Mini-Lesson. | 15 min



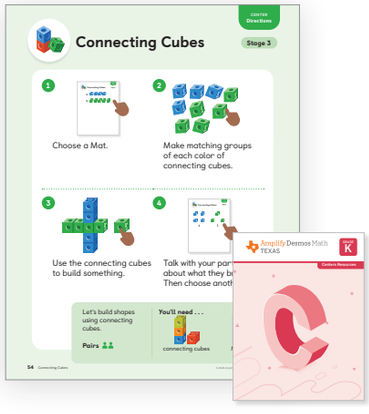
Strengthen

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

If students draw a detailed group of objects to represent the quantity:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Get and Build
  Pattern Blocks: Get and Build
- Have students complete **Lesson 17 Practice.** | 15 min
- **Item Bank**



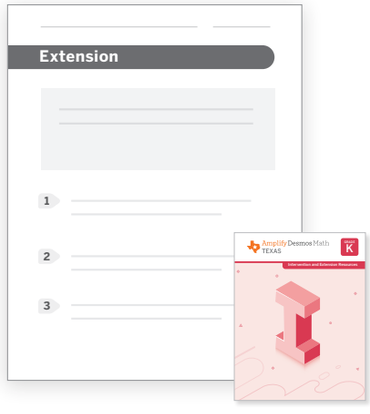
Stretch

Challenge students and extend their learning with these resources.

If students draw simple symbols to represent the quantity:

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
- Vocabulary routines

Professional Learning

Reflect on what students have shared about their identity in the first weeks of school. How could you honor and uplift the things identified by students as important to them? How could you continue to make students feel seen and heard in regard to their identities?

Unit 1
Lesson
18

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

Sharing More About You

Asking and Answering "How many?" Questions

Let's build with math tools and figure out how many.

Key Concepts

Today's Goals

1. **Goal:** Determine the quantity of a group of up to 10 objects.
2. **Goal:** Represent the quantity of a group of up to 10 objects.
3. **Language Goal:** Ask and answer "how many?" questions. **(Listening and Speaking)** **ELPS 1.D, 2.C, 2.D, 2.F**

Connections and Coherence

Students continue to develop counting concepts and skills by creating a representation of something important to them and then generating and asking "how many?" questions about their creations. Students are encouraged to answer the questions without recounting the group of objects by using their understanding of cardinality and conservation of number. Students strategically select tools, such as 5-frames, egg cartons, and Work Mats, to help count objects in groups. They apply precursor skills of mathematical modeling by representing real-world objects with math tools. **(TEKS K.1.C)**

Prior Learning

In Lesson 17, students determined and represented the quantities of groups of objects.

Future Learning

In Unit 2, students will answer "how many?" questions and determine, represent, and compare quantities within 10. They will also recognize and write numbers to represent a quantity.

Integrating Rigor in Student Thinking

- Students **apply** their understanding of cardinality and conservation of number as they practice **procedural skills** for determining a quantity.

TEKS

Addressing

K.2.C

Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.

Also Addressing: **K.2.A**

Math Process Standards: K.1.C

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

Building Math Identity

I am a doer of math.

When you do math, what does that mean to you?

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

Lesson at a Glance 60 min

TEKS: K.1.C, K.2.A, K.2.C

Warm-Up

Whole Class | 5 min

Students use the **What Do You Know About _____?** routine, which provides an opportunity to hear the knowledge they already have about math tools. This allows all students to contribute to the discussion and reflect on their learning since the beginning of the unit.

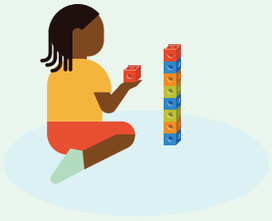
Additional Prep Prepare: *Math Tools* chart (from prior lessons)

Activity 1

Independent | 15 min

Students use math tools of their choice to create objects and then share how their creations represent who they are. In the Connect, students reflect on how they used math tools. **(TEKS K.1.C)**

Manipulative Kit: 5-frames (optional), connecting cubes (optional), pattern blocks (optional), solid shapes (optional), two-color counters (optional)
Materials: egg cartons (optional), *Figuring Out How Many* chart (from prior lessons), Work Mats (optional)



Activity 2

Small Groups | 15 min

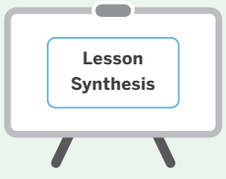
Students generate "how many?" questions about each other's creations. As they determine the quantity of objects used to make the creations, students may apply their understanding of conservation of number by stating a quantity without recounting.

Manipulative Kit: 5-frames (optional)
Materials: egg cartons (optional), *Figuring Out How Many* chart (from prior lessons), Work Mats (optional)

Synthesis

Whole Class | 10 min

Students review and reflect on the work they did in the unit, sharing something that makes them feel proud.

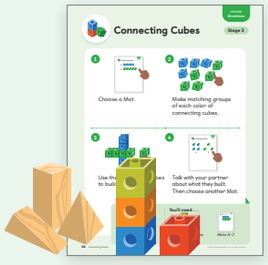


Center Choice Time

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build understanding of one-to-one correspondence and to learn the structure of Center Choice Time.

- Connecting Cubes
- Solid Shapes



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

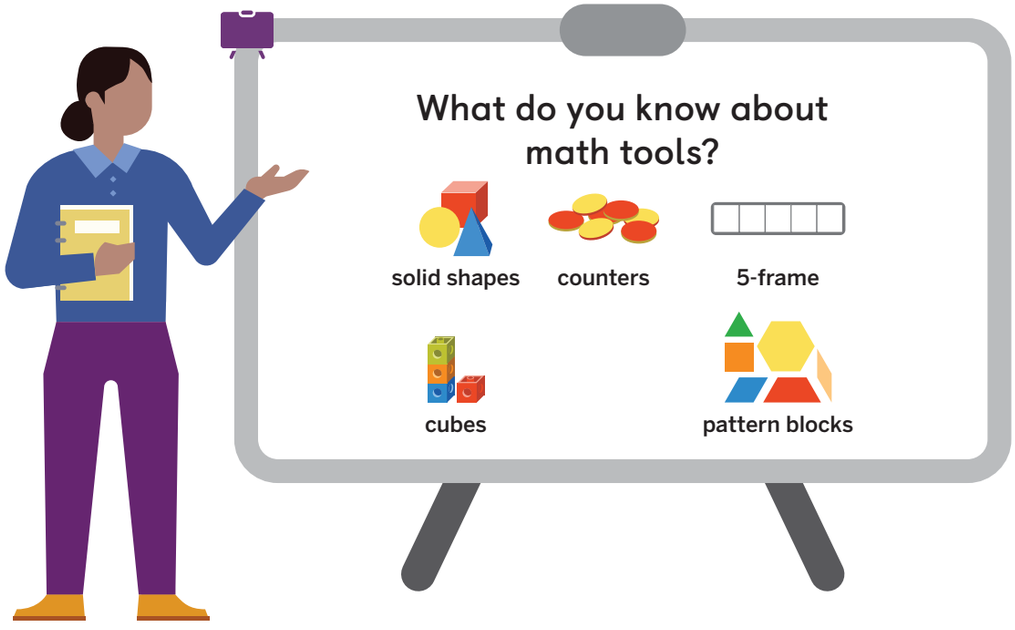
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen** 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 | 5 min

Presentation Screen

Warm-Up What Do You Know About ___?

Purpose: Students share ideas about math tools to honor what students have discovered about using tools throughout the unit.



1 Launch

Display the question and the *Math Tools* chart.

Use the What Do You Know About ____? routine.

Ask, "What do you know about math tools?"

Invite students to share their responses.

2 Connect

Record any new responses as students share, and point out previously recorded ideas on the chart to help students make connections to prior learning.

Ask, "What math tools do you see?"

EB **Emergent Bilinguals** Consider storing math tools labeled with pictures and words to support students with connecting the printed words to the tools. ELPS 3.A, 3.E

Students might say . . . ELPS 1.E, 2.C, 2.D, 2.F

I know that pattern blocks are shapes.

I use counters to help me figure out how many.

I can build towers with connecting cubes.

Independent | 15 min

Activity 1 Tool Creations

Purpose: Students create objects with math tools and describe their creations.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames, connecting cubes, pattern blocks, solid shapes, and two-color counters. (optional)

Classroom materials:

- Provide students with access to egg cartons (optional).
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

Display Mr. Romero's Tree.

Use the Notice and Wonder routine by asking students to describe what they notice about the creation and what they wonder.

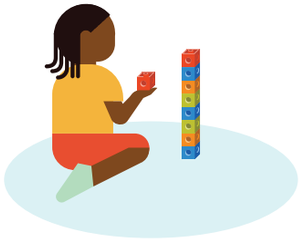
Say:

- "Mr. Romero enjoys nature and loves going outside to admire the trees. He decided to share some of his interests with his class. He wanted to use math tools to show how nature was important to him, so he decided to make this tree using connecting cubes."
- "Today, you can choose any math tool to help you make a creation that shows something important to you."

Provide access to 5-frames, connecting cubes, egg cartons, pattern blocks, solid shapes, two-color counters, and Work Mats.

A **Accessibility: Memory and attention** Activate background knowledge by having students share what is important to them and what they value. Give time for students to brainstorm how to represent the shared ideas using the tools.

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 is something you would like others to know about you?"
- Ask, "What do you want to create?"

3 Connect

Use the Think-Pair-Share routine. Say, "Tell your partner what you created and why."

MLR **MLR8: Discussion Supports — Pressing for Details** ELPS 2.E

As students share what they created, press for details in their reasoning. For example:

- If a student says, "I made a flower." . . .
- Press for details by asking, "Why did you make it? Why is that important to you?"

Ask, "How did you use math tools today?"

Key Takeaway: Say, "Now you will get to see and ask questions about the creations that other students made with math tools."

In this Activity . . .

Students create objects with math tools and describe their creations.

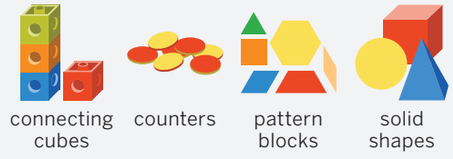
Oral activity: No writing expected.

Students might say . . .

Sample responses:

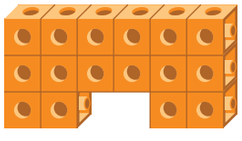
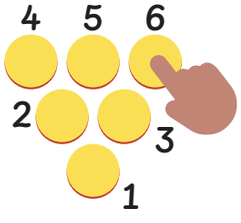
- *I made a bird because I like learning about birds.*
- *I used 1 yellow shape, 1 green shape, 3 orange shapes, and 2 blue shapes.*

Hands-On



Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Describe what they made.	 *I made a video game controller.*	S **Strengthen** Ask, "What did you make? Why is that important to you?"
Describe characteristics of the tools they used.	 *I used some yellow and orange shapes.*	
Describe the quantity of the objects or tools they used.	 *I used 6 counters to make a samosa.*	

Small Groups | 15 min

Activity 2 Sharing Our Creations

Purpose: Students ask and answer "how many?" questions about their creations.

Presentation Screens

Materials

Manipulative Kit:

- Provide students with access to 5-frames (optional).

Classroom materials:

- Provide students with access to egg cartons (optional).
- Display the *Figuring Out How Many* chart (from prior lessons) throughout the activity.

Centers Resources:

- Provide students with access to Work Mats (optional).

1 Launch

MLR This activity is structured using the *MLR5: Co-Craft Questions* routine. ELPS 2.B, 2.C, 2.D, 2.F

Say, "Let's think of some questions we could ask to learn more about each other and our creations."

Display 1 student's creation from Activity 1.

Use the Think-Pair-Share routine. Ask, "What math questions could you ask?" Record students' responses.

Say (if not yet mentioned), "You could ask about how many tools they used or how many of a certain color they used, like blue cubes or yellow counters."

Say, "When you meet with your group, take turns showing your creations. Ask and answer each other's questions about how many objects you used."

Provide access to 5-frames, egg cartons, and Work Mats.

EB **Emergent Bilinguals** If possible, group students with peers who speak the same primary language. ELPS 1.E, 2.C, 2.D

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 creation?"
- Ask, "How could you turn that idea into a question?"

3 Connect

Display 2 students' creations.

Invite students to share a mathematical question they were asked about their creation and their explanation for determining the answer. Select and sequence their explanations using Rows 2 and 3 in the *Differentiation* table.

Key Takeaway: Say, "You will continue asking and answering questions about how many in math class."

In this Activity . . .

Students ask and answer "how many?" questions about their creations.

Oral activity: No writing expected.

Students might say . . .

Sample responses:

- How many blue cubes did you use?
- I used 5 blue cubes.

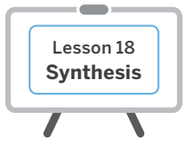
Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Almost there Recount when asked how many.	1, 2, 3, 4, 5. I used 5 blue cubes.	**Support** Ask, "Could you tell me how many you have without counting them again?"
Answer how many using cardinality.	There are 5 blue cubes because, when I counted, that was the last number I said.	**Stretch** Ask, "How many would you have if you used 1 more object? How many would you have if you used 1 less object?"
Answer how many using conservation of number.	There are 5 blue cubes because I counted before I built my creation, and it's the same number.	

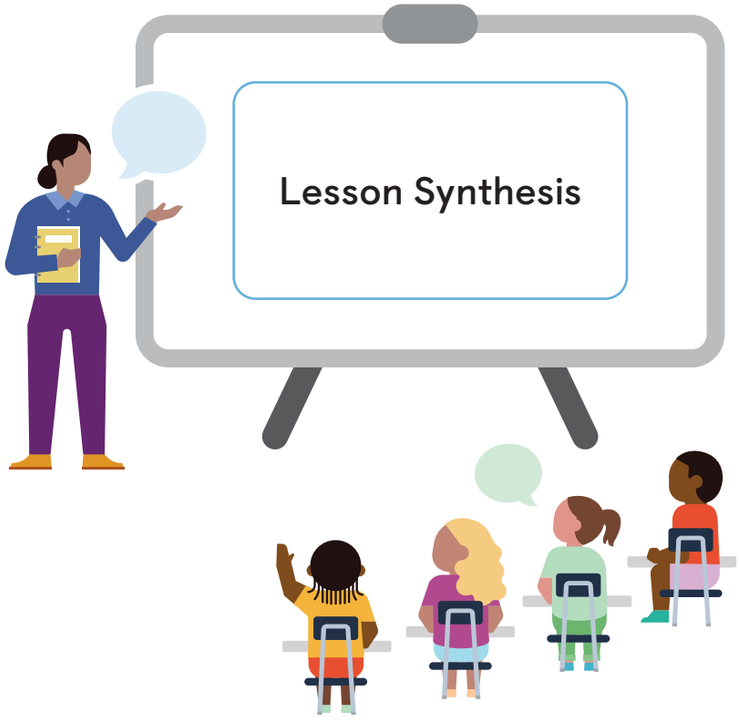
Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: Math is everywhere. Math can be used to count and represent important things in the world.



Say, "We have spent lots of time doing math together since our first day of school."

Ask:

- "What have you learned about each other and our math community?"
- "What new things did you learn about math?"
- "What is something you are proud of from this unit?"

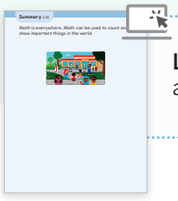
Say, "We will continue to build our math community and work with groups of up to 10 objects in the next unit."

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

Practice

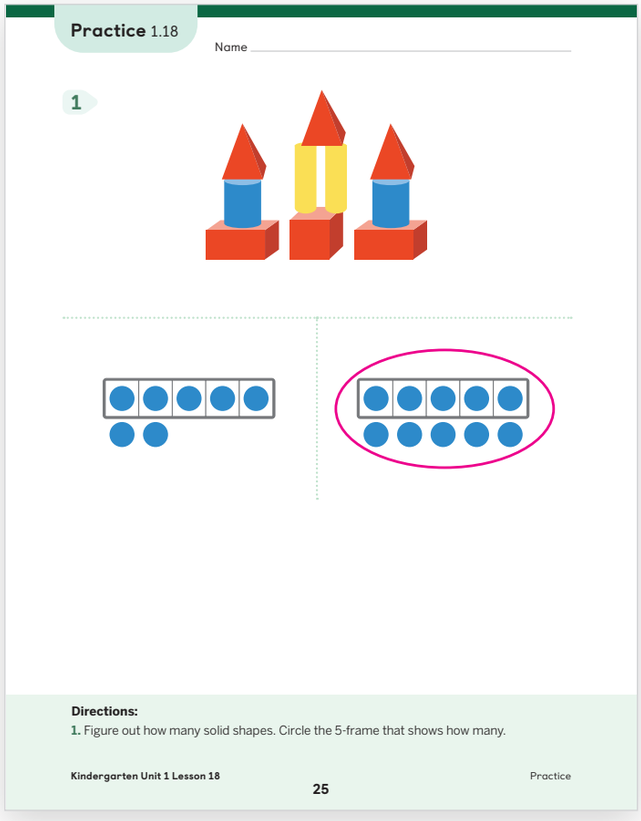
Independent

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



Lesson Summaries, along with additional helpful resources, can be accessed on the Caregiver Hub at **amplify.com/caregiver-hub.**

Fine Motor Skills practice pages for Kindergarten Unit 1 can be accessed in the digital program.



Practice 1.18

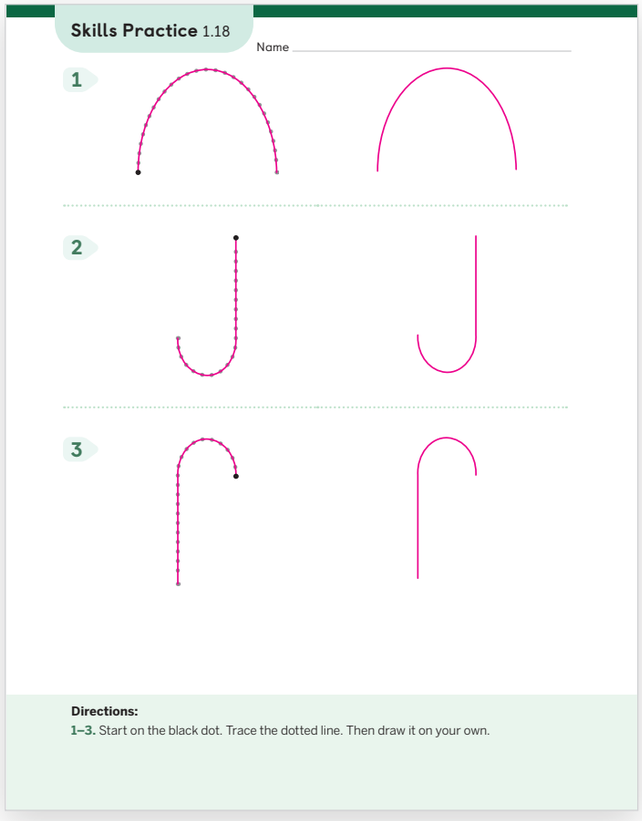
Name

1

Directions:

1. Figure out how many solid shapes. Circle the 5-frame that shows how many.

Kindergarten Unit 1 Lesson 18 25 Practice



Skills Practice 1.18

Name

1

2

3

Directions:

1–3. Start on the black dot. Trace the dotted line. Then draw it on your own.

Practice Problem Item Analysis

	Problem	DOK	TEKS
On-Lesson			
	1	2	K.2.C

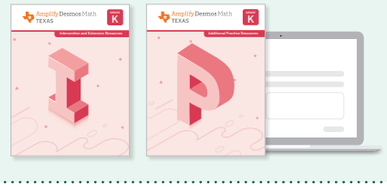
Fine Motor Skills Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1–3	1	K.2.B*

*These problems build toward the standard shown.

Need more Practice?

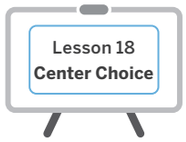
Additional practice can be found in the **Practice Resources, Intervention and Extension Resources,** and online resources (item banks, Boost Personalized Learning, and Fluency Practice).



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 9



Short on time? Consider omitting the Center Choice Time.

Connecting Cubes

Get and Build

Pairs | 15 min | K.2.B, K.2.E

Students use a specified number of connecting cubes to build an object of their choice.

Materials

- connecting cubes **(Manipulative Kit)**
- Directions, Mats (A–J) **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 3.

Solid Shapes

Build to Match

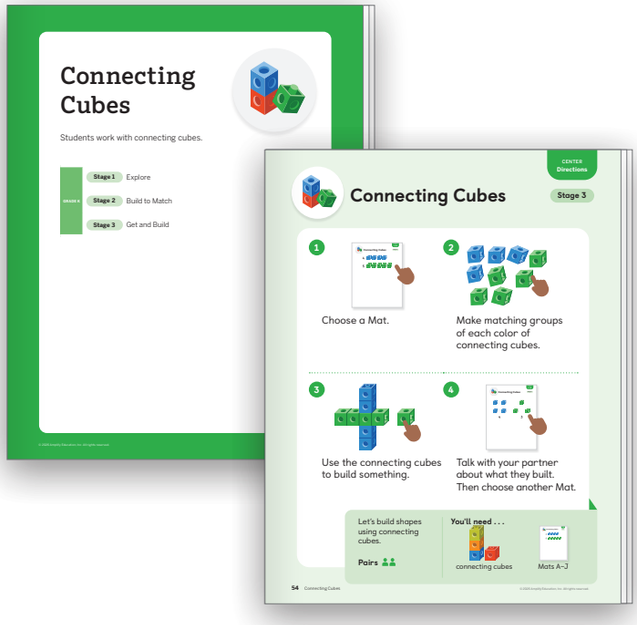
Pairs | 15 min | Building Toward K.6.B

Students work together to build pictures using solid shapes.

Materials

- solid shapes **(Manipulative Kit)**
- Directions, Pictures (A–J), Work Mat **(Centers Resources)**

Corresponds with the checklist from Unit 1, Sub-Unit 1.



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

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.

Differentiation Use after Lesson 18

Lesson Goal: Ask and answer "how many?" questions.

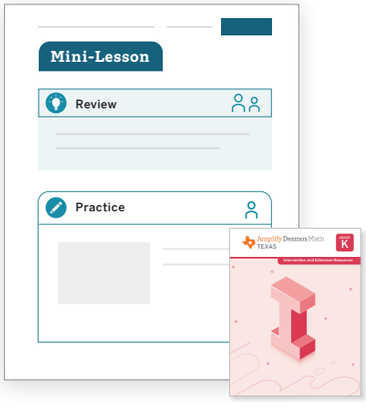
Support

Provide targeted intervention for students by using these resources.

If students recount when asked how many:

Respond:

- Assign the *Asking and Answering "How Many?" Questions* Mini-Lesson. | 15 min



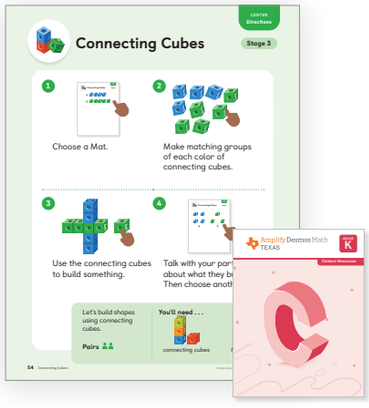
Strengthen

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

If students answer how many using cardinality:

Respond:

- Invite students to play these **Centers.** | 15 min
  Connecting Cubes: Get and Build
  Pattern Blocks: Get and Build
- Have students complete **Lesson 18 Practice.** | 15 min
- **Item Bank**



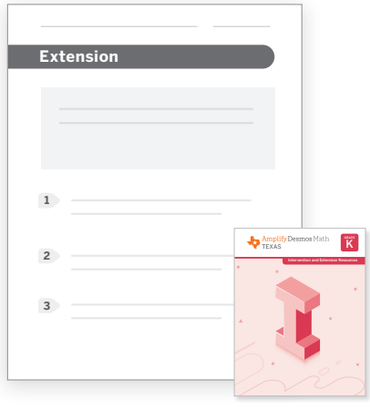
Stretch

Challenge students and extend their learning with these resources.

If students answer how many using conservation of number:

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
- Vocabulary routines

Professional Learning

How have you seen each student grow as a mathematician throughout this unit? How have you seen yourself grow? What will you continue to do and what will you focus on for improvement in Unit 2?

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.

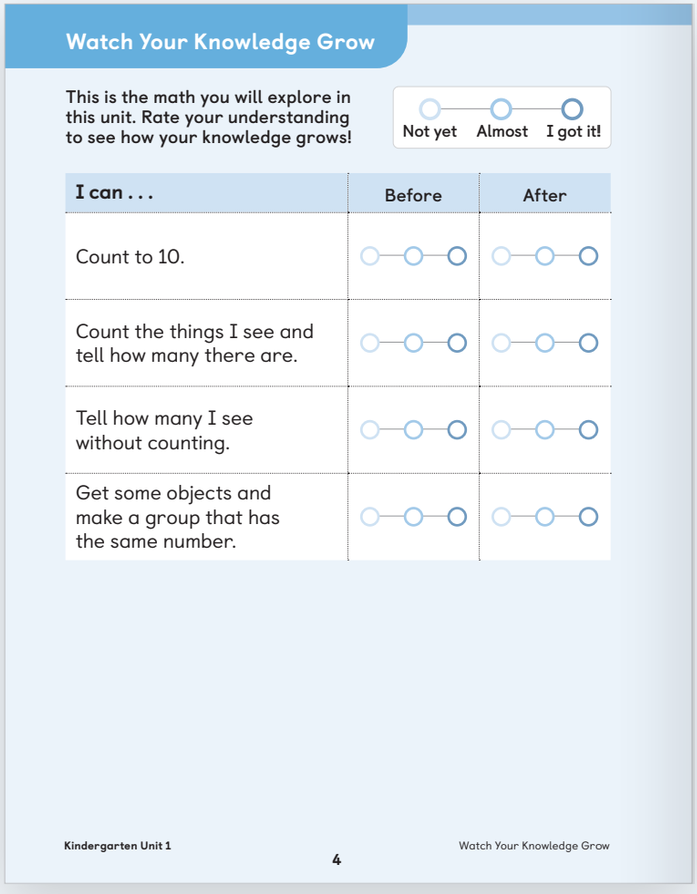
Say, "These were the math concepts that you explored in this unit." Read aloud, or ask a student volunteer to read aloud, the I can statements.

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** Strategically pair students together who speak the same primary language. This will give students an opportunity to discuss and think aloud in their primary language as they rate their understanding now that they have completed the unit. ELPS 1.C, 1.E, 2.C

Math Identity and Community Have students reflect on the concepts they initially did not understand before learning about them. Celebrate the number of "I got it" responses. Remind them that it is normal not to understand concepts or topics at first. Encourage them to recognize and appreciate how their understanding has improved through learning and practice.



Watch Your Knowledge Grow

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

Not yet Almost I got it!

I can . . .	Before	After
Count to 10.		
Count the things I see and tell how many there are.		
Tell how many I see without counting.		
Get some objects and make a group that has the same number.		

Kindergarten Unit 1 4 Watch Your Knowledge Grow

Notes: