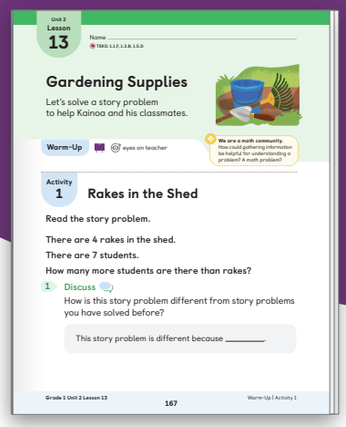
Unit 2
Lesson
13

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


Unit 2 Lesson 13
Name
Gardening Supplies
Let's solve a story problem to help Kainoa and his classmates.
Warm-Up
eyes on teacher
We are a math community. How could gathering information be helpful for understanding a problem? A math problem?
Activity 1
Rakes in the Shed
Read the story problem.
There are 4 rakes in the shed.
There are 7 students.
How many more students are there than rakes?
1 Discuss
How is this story problem different from story problems you have solved before?
This story problem is different because _____
Grade 1 Unit 2 Lesson 13
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Warm-Up | Activity 1

Gardening Supplies

Representing and Solving *Compare, Difference Unknown* Story Problems

Let's solve a story problem to help Kainoa and his classmates.

Key Concepts

Today's Goals

1. **Goal:** Represent and solve a *Compare, Difference Unknown* story problem.
2. **Language Goal:** Describe the relationship between the amounts in a *Compare, Difference Unknown* story problem. **(Listening, Speaking, and Reading)**
   ELPS 1.E, 2.E, 2.F, 3.H

Connections and Coherence

Students analyze a new story problem type, *Compare, Difference Unknown,* to recognize that, in a story problem that compares 2 amounts, the question might ask 'how many fewer?' or 'how many more?' Students represent and solve a *Compare, Difference Unknown* story problem and attend to where the difference is represented in a segmented tape diagram. **(TEKS 1.1.F)**

Prior Learning

In Kindergarten, students compared quantities and numerals up to 10 using counting, matching, and the *5 + n* structure of the numbers and described these comparisons using *more* and *fewer*. In Lesson 12, students prepared for representing and solving *Compare, Difference Unknown* story problems by making sets of 2 towers of connecting cubes equal using addition and subtraction.

Future Learning

In Lesson 14, students will interpret representations of comparison situations to solve *Compare, Difference Unknown* problems.

Integrating Rigor in Student Thinking

- Students build their **conceptual understanding** of the structure of *Compare, Difference Unknown* story problems.
- Students develop **fluency** with addition and subtraction within 10.
- Students **apply** their understanding of addition and subtraction to solve problems with real-world contexts.

Vocabulary

Review Vocabulary

difference

fewer

more

TEKS

Addressing

1.3.B

Use objects and pictorial models to **solve word problems involving joining, separating, and comparing sets within 20** and unknowns as any one of the terms in the problem.

Also Addressing: 1.5.A, 1.5.D

Mathematical Process Standards: 1.1.F

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

Building On

K.3.A

K.5.A

Building Math Identity

We are a math community.
How could gathering information be helpful for understanding a problem? A math problem?

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

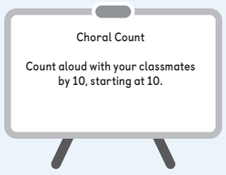
Lesson at a Glance 60 min

TEKS: 1.1.F, 1.3.B, 1.5.A, 1.5.D

Warm-Up

Whole Class | 10 min

Students use the **Choral Count** routine, in which they count as a class by 10. As the count is recorded, students may notice patterns or structures in the count such as the way the digits change each time they count 10 more and consider why those patterns of structures show up. **(TEKS 1.1.F)**



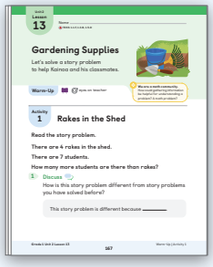
Activity 1

Pairs | 15 min

Students co-craft questions for as they have solved before.

Note: The Student Edition is not required for this activity.

Materials: Unit Story, *Let's Grow!*



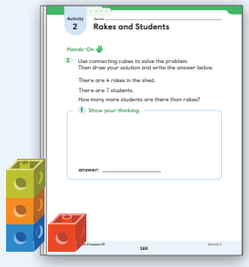
Activity 2

Pairs | 20 min

Students represent and solve the *Compare, Difference Unknowns* resents the amounts being compared in the story problem and identify where the difference between the 2 amounts is represented.

Note: The Student Edition is not required for this activity.

Manipulative Kit: connecting cubes



Synthesis

Whole Class | 5 min

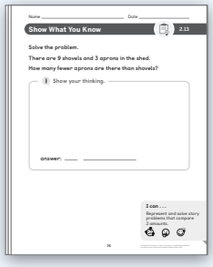
Students review and reflect on the questions 'how many more?' and 'how many fewer?' that are posed in *Compare, Difference Unknown* story problems to recognize that both questions are asking about the difference between the known amounts.

Show What You Know (optional)

Independent | 5 min

Students demonstrate their understanding by solving a compare, difference unknown word problem.

Materials: *Show What You Know* PDF

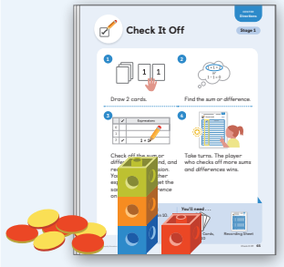


Center Choice Time Fluency

Small Groups | 15 min

Students have an opportunity to revisit these Centers to build fluency and to practice counting and describing quantities using comparative language.

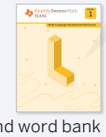
- Check It Off
- Cover Up
- Shake and Spill



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

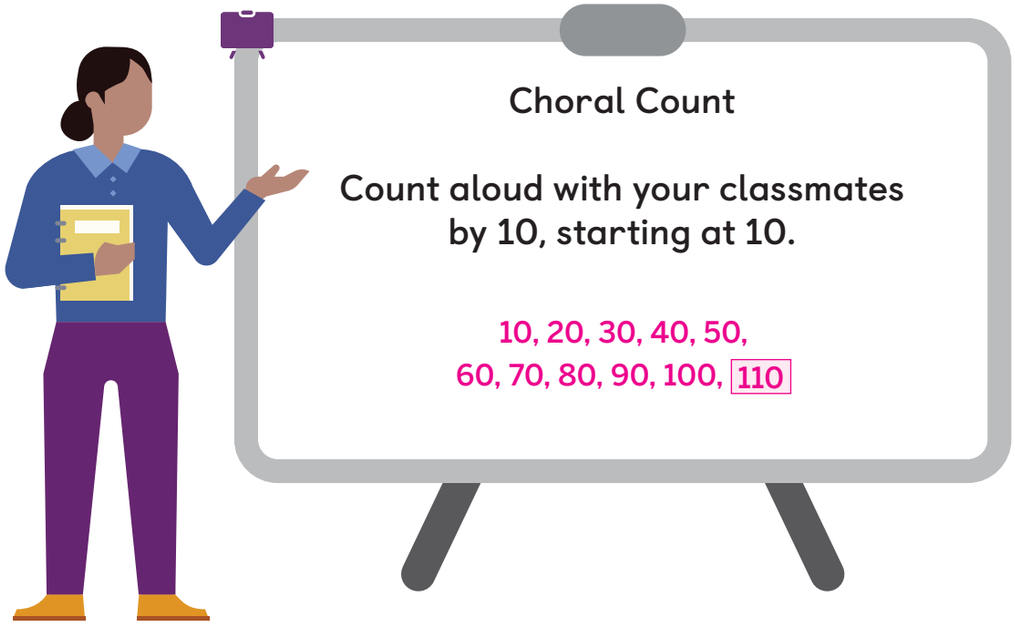
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to and **read** English. They **speak** using their primary languages, gestures, and single words or short phrases.	Students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

Whole Class | 10 min

Presentation Screen

Warm-Up Choral Count

Purpose: Students count by 10 to develop fluency with the counting sequence and notice patterns in the count.



1 Launch

Use the Choral Count routine.

Say, "Let's count by 10, starting at 10 and ending at 100."

Display each number as students count.

Ask:

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

2 Connect

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

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

Ask, "How do you know?"

Say, "You will continue to think about counting as you solve story problems."

Students might say . . . ELPS 2.E

I notice that there is a 0 in each number.

I notice that it goes in counting order: 1, 2, 3, ...9, 10.

Some numbers have 2 numbers in them and the last one has 3.

Each number is 10 more than the number before it.

Pairs | 15 min

Activity 1 Rakes in the Shed

Purpose: Students interpret the relationship between the amounts in a *Compare, Difference Unknown* story problem to prepare to represent and solve the story problem in Activity 2.

Presentation Screens

Materials

- Read aloud page 5 of the Unit Story, *Let's Grow!* during the Launch.

1 Launch

Note: Have students begin the activity with their Student Editions closed.

Display and read aloud page 5 of the Unit Story.

Say, "Kainoa shared what he noticed with his classmates." Read aloud what Kainoa noticed.

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

- Have students work with their partner to come up with 2–3 questions they could ask about the story.
- Ask, "Which of your questions do you think Kainoa might want to know the answer to and why?"

Display and read aloud the story problem and Problem 1.

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 is this question different from questions in story problems you have solved before?"
- Ask, "Does this story problem describe an amount that changes, parts of a total, or something else?"

3 Connect

Invite students to share how this story problem is different from story problems they have solved before. Select and sequence their responses using Rows 2 and 3 in the *Differentiation* table.

Key Takeaway: Say, "You have seen story problems about an amount that changes and story problems about 2 parts that make a total. In this story problem, 2 amounts are being compared. When 2 amounts are being compared, the question might ask 'how many more?' or 'how many fewer?'"

Student Edition

Unit 2
Lesson
13

Name

TEKS: 1.1.F, 1.3.B, 1.5.D

Gardening Supplies

Let's solve a story problem to help Kainoa and his classmates.

Warm-Up eyes on teacher

We are a math community. How could gathering information be helpful for understanding a problem? A math problem?

Activity 1

Rakes in the Shed

Read the story problem.

There are 4 rakes in the shed.

There are 7 students.

How many more students are there than rakes?

1 Discuss

How is this story problem different from story problems you have solved before? Oral activity: No writing expected.

This story problem is different because _____.

Presentation Screens

D Differentiation | Teacher Moves

Look for students who . . .	For example . . .	Provide support . . .
Recognize that the context is different.	**This story problem is different because it is about students.**	S **Strengthen** Ask, "What else makes this story problem different?"
Recognize that the question is different.	**This story problem is different because it asks a new question.**	S **Strengthen** Ask, "In your own words, what is the question asking?"
Recognize that the problem type is different.	**This story problem is different because it asks us to compare 2 amounts.**	S **Strengthen** Ask, "How could you represent the 2 amounts being compared?"

Pairs | 15 min

Activity 2 Rakes and Students

Purpose: Students represent and solve a *Compare, Difference Unknown* story problem to recognize that, when finding 'how many fewer?', they are finding the difference between 2 amounts being compared.

Presentation Screens

Materials

Manipulative Kit:

- Distribute 15 connecting cubes to each student

1 Launch

Say, "Kainoa and his classmates wanted to make a plan for sharing the rakes. They decided their first step would be to figure out how many more students there were than rakes."

Read aloud Problem 2.

Ask, "How can you use the connecting cubes to figure out how many more students are than rakes?"

A **Accessibility: Visual-spatial processing** Guide visualization by inviting students to draw a picture or a diagram to represent the problem before they show their 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 amounts do you know in this problem and what do they represent?"
- Ask, "Which amount will you represent first?"

EB **Emergent Bilinguals:** Encourage students to ask for help as needed using sentence frames such as "I need help with _____ ." or "I don't understand _____0".
ELPS 1.E, 2.C, 2.E, 2.F

3 Connect

Display Problem 2 and the representation.

Use the Think-Pair-Share routine. Ask:

- "Where do you see each part of the story represented?"
- "Where do you see how many more students there are than rakes?"

Play the animation. ELPS 1.F

Key Takeaway: Say, "When a question asks 'how many more?' you are being asked to find the difference between 2 amounts that are being compared. Representing the problem with drawings and objects, can help you see the difference between 2 amounts."

Student Edition

Activity 2

Name

Rakes and Students

Hands-On

2 Use connecting cubes to solve the problem.
Then draw your solution and write the answer below.

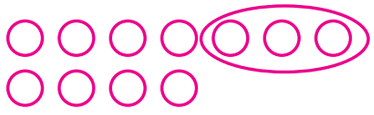
There are 4 rakes in the shed.

There are 7 students.

How many more students are there than rakes?

Show your thinking.

Sample work shown.

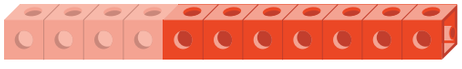
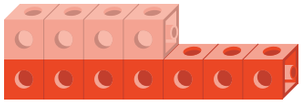
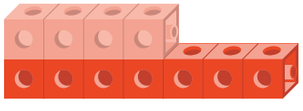


answer: 3 more students

Grade 1 Unit 2 Lesson 13 168 Activity 2

Presentation Screens

D Differentiation | Teacher Moves

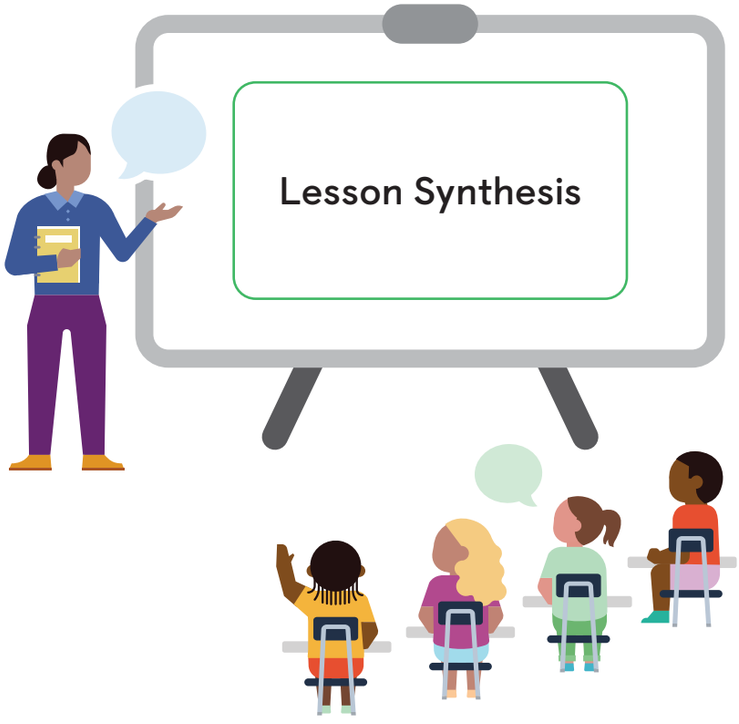
Look for students who . . .	For example . . .	Provide support . . .
Almost there Represent the total number of rakes and students.	 The question says 'more,' so I added.	**Support** Ask, "Where in your representation do you see how many more students there are than rakes?"
Almost there Represent the number of students and the number of rakes and identify which is more.	 There are more students. 7 is more than 4.	**Support** Ask, "Where in your representation does it show how many more students there are than rakes?"
Represent the number of students and the number of rakes to compare them.	 There are 3 more students than rakes.	**Stretch** Ask, "How many fewer rakes are there than students? How do you know?"

Whole Class | 5 min

Presentation Screen

Synthesis

Lesson Takeaway: When comparing 2 amounts, the answers to the questions 'how many more?' and 'how many fewer?' are the same because both questions are asking for the difference between the 2 amounts.



Read aloud the story problems.

Use the Think-Pair-Share routine. Ask, "What is different about the questions in these story problems?"

Ask, "Where in the representation do you see how many fewer rakes there are than students?"

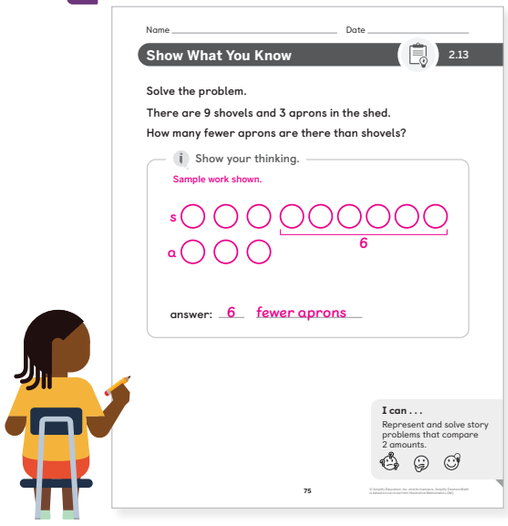
Say, "When comparing 2 amounts, the answer to the question 'how many fewer?' is the same as the answer to the question 'how many more?' because both questions are asking for the difference."

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

Show What You Know (Optional)

Independent | 5 min

Show What You Know PDF


Name _____ Date _____

Show What You Know 2.13

Solve the problem.

There are 9 shovels and 3 aprons in the shed.

How many fewer aprons are there than shovels?

Show your thinking.

Sample work shown.

s ○ ○ ○ ○ ○ ○ ○ ○ ○

a ○ ○ ○ 6

answer: 6 fewer aprons

I can . . .

Represent and solve story problems that compare 2 amounts.

75

Today's Goals

1. **Goal:** Represent and solve a *Compare, Difference Unknown* story problem.
   - In the *Show What You Know,* students represented and solved a story problem that compares two amounts.
2. **Language Goal:** Describe the relationship between the amounts in a *Compare, Difference Unknown* story problem. **(Listening, Speaking, and Reading)** ELPS 1.E, 2.E, 2.F, 3.H

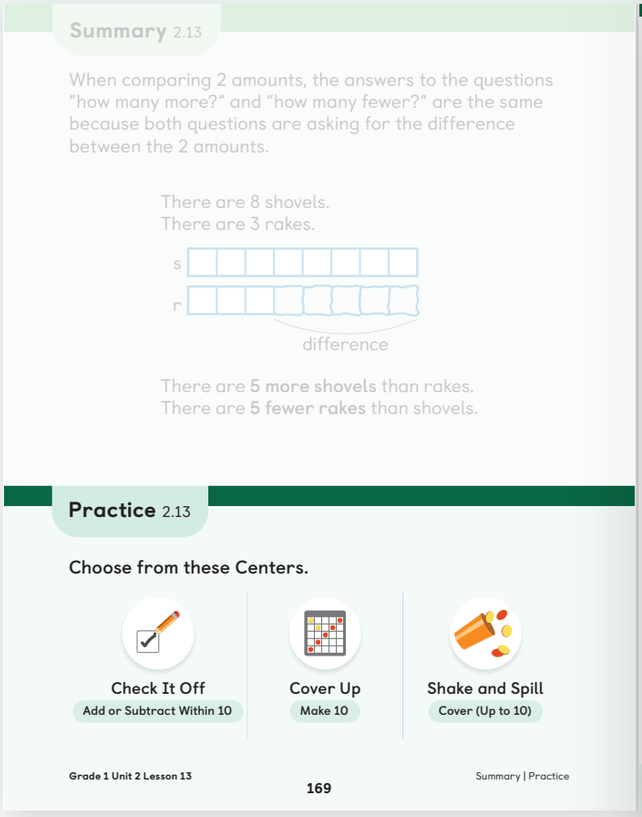
D **Differentiation** See the last page of the lesson for differentiation and Math Language Development support.

Practice

Independent

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

Students using print



Summary 2.13

When comparing 2 amounts, the answers to the questions "how many more?" and "how many fewer?" are the same because both questions are asking for the difference between the 2 amounts.

There are 8 shovels.
There are 3 rakes.

s
r
difference

There are **5 more shovels** than rakes.
There are **5 fewer rakes** than shovels.

Practice 2.13

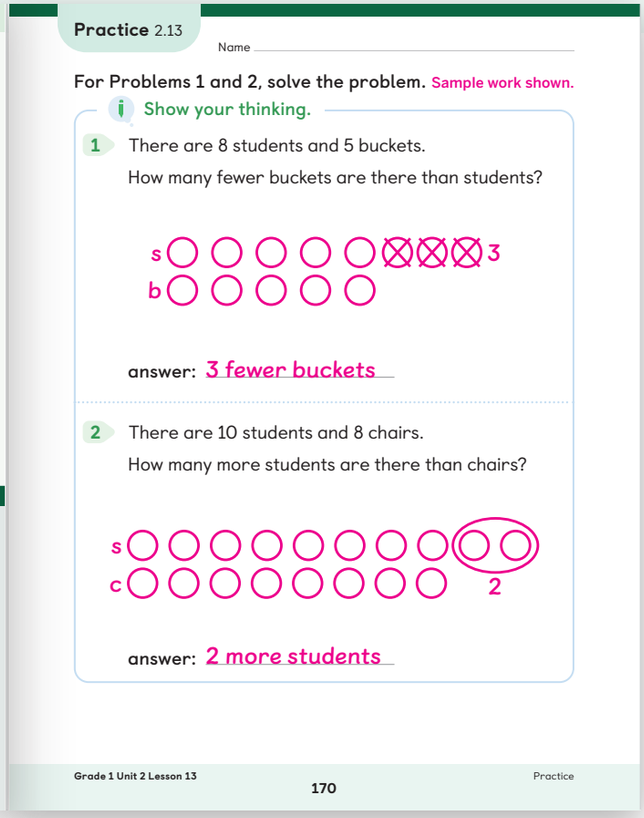
Choose from these Centers.

Check It Off
Add or Subtract Within 10

Cover Up
Make 10

Shake and Spill
Cover (Up to 10)

Grade 1 Unit 2 Lesson 13 169 Summary | Practice



Practice 2.13

Name

For Problems 1 and 2, solve the problem. Sample work shown.

Show your thinking.

1 There are 8 students and 5 buckets.
How many fewer buckets are there than students?

s ○ ○ ○ ○ ○ ⊗ ⊗ ⊗ 3
b ○ ○ ○ ○ ○

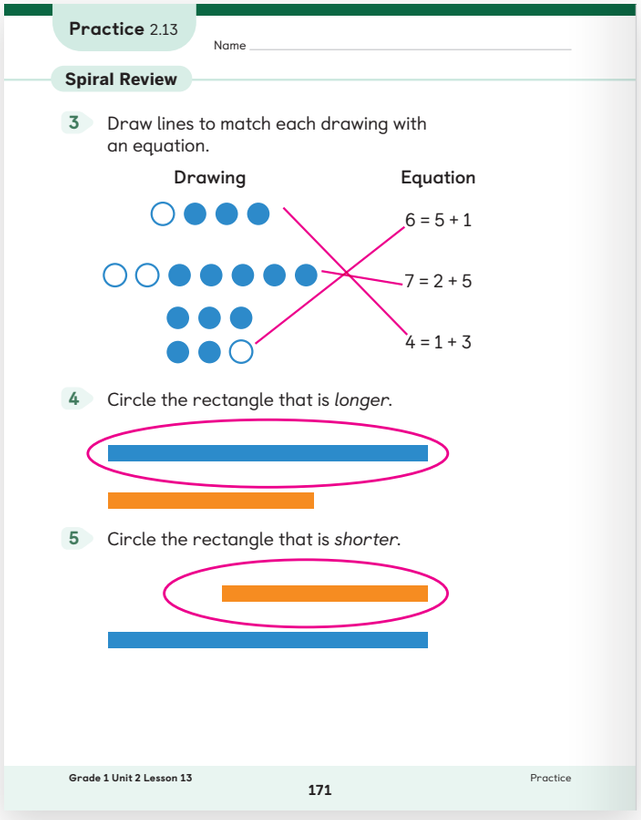
answer: 3 fewer buckets

2 There are 10 students and 8 chairs.
How many more students are there than chairs?

s ○ ○ ○ ○ ○ ○ ○ ○ ○
c ○ ○ ○ ○ ○ ○ ○ ○ 2

answer: 2 more students

Grade 1 Unit 2 Lesson 13 170 Practice



Practice 2.13

Name

Spiral Review

3 Draw lines to match each drawing with an equation.

Drawing	Equation
○ ● ● ●	6 = 5 + 1
○ ○ ● ● ● ● ●	7 = 2 + 5
● ● ● ● ● ○	4 = 1 + 3

4 Circle the rectangle that is *longer*.

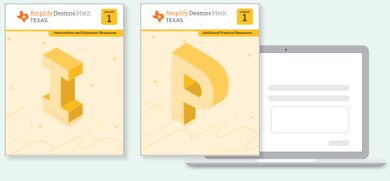
5 Circle the rectangle that is *shorter*.

Grade 1 Unit 2 Lesson 13 171 Practice

Practice Problem Item Analysis

	Problem(s)	DOK	TEKS
On-Lesson			
	1, 2	2	1.3.B
Spiral Review			
Fluency	**3**	1	K.2.I
	4, 5	1	K.7.B

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

Fluency

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

Presentation Screen

Short on time? Consider omitting the Center Choice Time.

Check It Off

Add or Subtract Within 10

Pairs | 15 min | 1.3.D

Students choose 2 number cards and add or subtract to make given numbers within 10.

Materials

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

Corresponds with the checklist from Unit 2, Sub-Unit 3.

Cover Up

Make 10

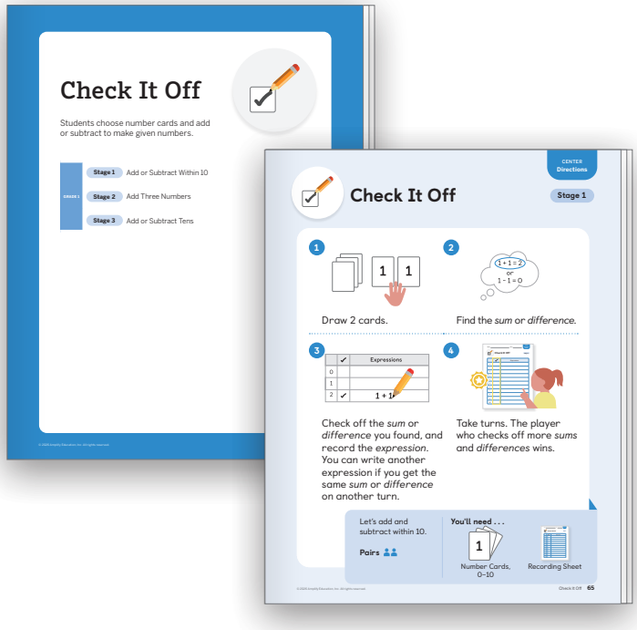
Pairs | 15 min | 1.3.C, 1.3.D

Students choose a number card and cover the number they can add to make 10.

Materials

- number cards (0–10), two-color counters **(Manipulative Kit)**
- Directions, Gameboards (A, B) **(Centers Resources)**

Corresponds with the checklist from Unit 2, Sub-Unit 3.



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

GAMES

Shake and Spill

Cover (Up to 10)

Pairs | 15 min | 1.3.C, 1.3.D

Students find how many counters are covered up when working with sets of up to 10 counters.

Materials

- two-color counters (10 per pair) **(Manipulative Kit)**
- cups (one per pair) **(Classroom materials)**
- Directions, Recording Sheet **(Centers Resources)**

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

D Differentiation | Teacher Moves

Work with students in their Centers by:

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

Consider pulling a small group of students for:

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

Differentiation Use after Lesson 13

Lesson Goal: Represent and solve a Compare, Difference Unknown story problem.

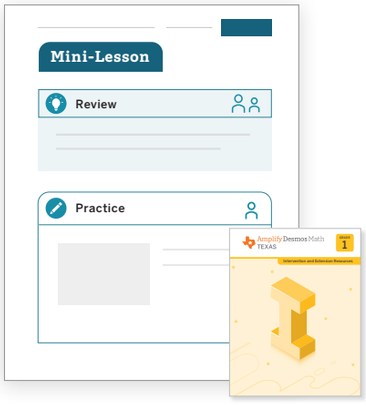
Support

Provide targeted intervention for students by using these resources.

If students: Represent the amounts with objects or a drawing and find the sum of the amounts:

Respond:

- Assign the *Title* Mini-Lesson *Representing and Solving Story Problems (Compare, Difference Unknown).* | 15 min
- Review the Support suggestions in the *Differentiation: Teacher Moves* table for Activity 2



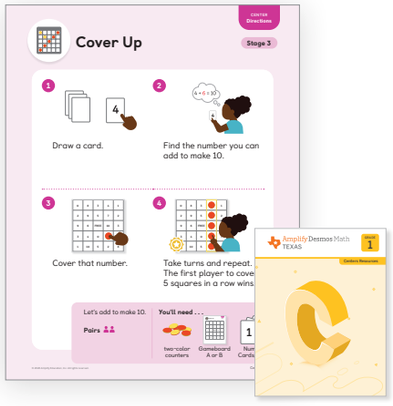
Strengthen

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

If students: Represent the amounts with objects or a drawing and find the difference between the amounts:

Respond:

- Invite students to play these **Centers.** | 15 min
  Cover Up: Make 10 and Doubles
  Equation Challenge: Within 10
  Math Stories: Add and Subtract
- Have students complete **Lesson 13 Practice.** | 15 min
- **Item Bank**



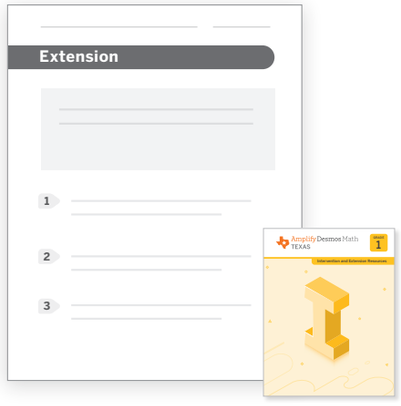
Stretch

Challenge students and extend their learning with these resources.

If students: Represent the amounts with an equation and find the difference between the amounts:

Respond:

- Invite students to explore the **Sub-Unit 3 Extension Activities** | 15 min
- Revisit Activity 2 and invite students to respond to the **Stretch** question from the *Differentiation: Teacher Moves* table. | 5 min



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

Math Language Development

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

- English/Spanish cognates e.g., *difference/diferencia*
- Frayer Model templates
- Vocabulary routines

Professional Learning

In what ways were you able to support students' language development during this lesson? How could you continue to support students as they use mathematical language to describe story problems?