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

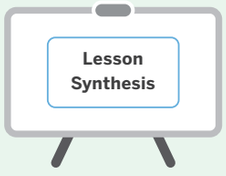
Students discuss how using one-to-one correspondence helps them determine the quantity of a group of objects. Formative data from previous lessons can inform the quantity to place in each student's bag.

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.

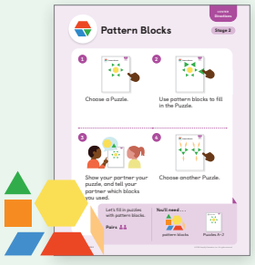


Center Choice Time

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 ✓Sentence frames and word bank
✓Visuals

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

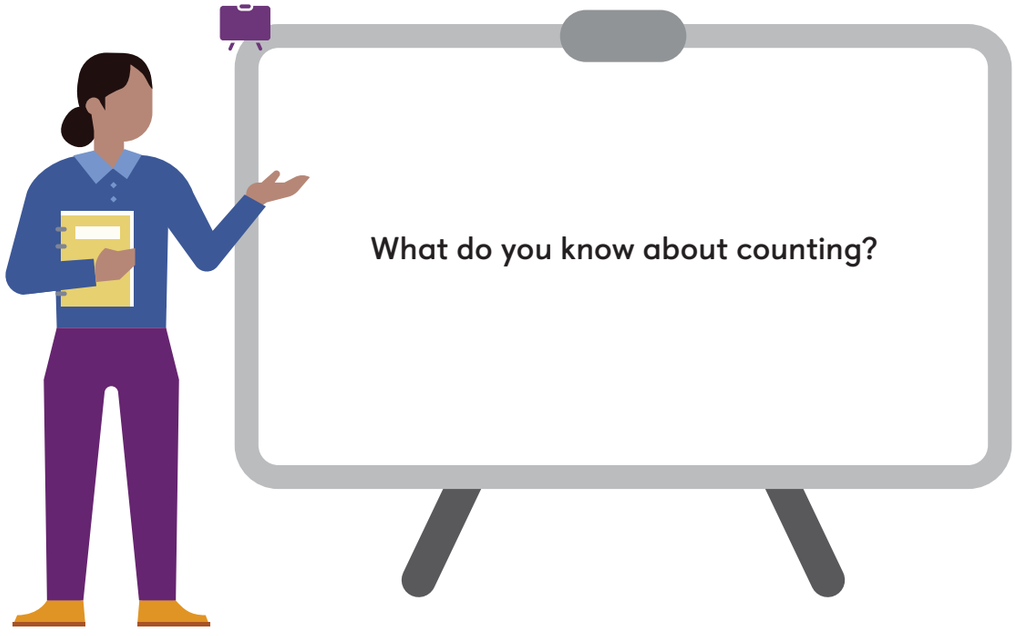
Pre-Production	Beginning	Intermediate	High Intermediate	Advanced
Students **listen** to spoken English and **respond** using their primary languages and gestures.	Students **listen** to spoken English and **speak** using their primary languages, gestures, and single words or short phrases.	Students **listen**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

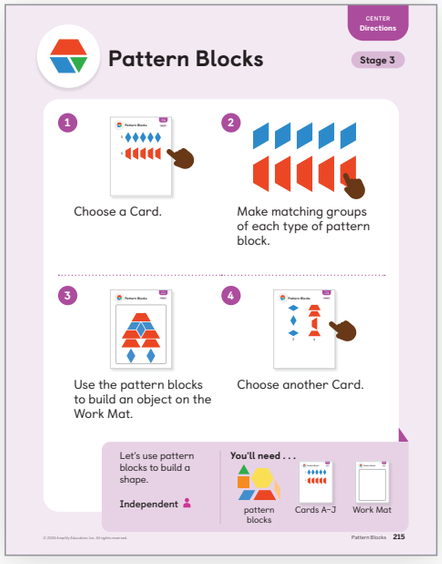
Students might say . . .

Sample responses:

- I have 7 pattern blocks.
- I counted 5 blue pattern blocks.
- I counted 4 orange squares.

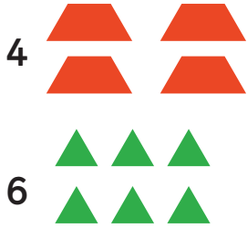
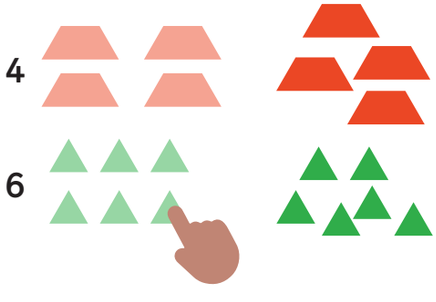
Hands-On

PDF 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.

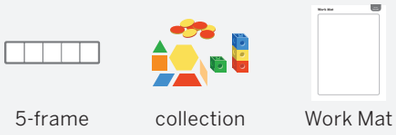
Oral activity: No writing expected.

Students might say . . .

Sample responses:

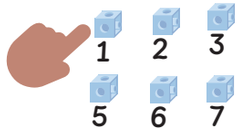
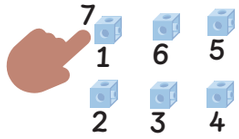
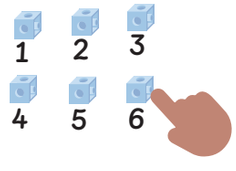
- *I have 6 crayons. I know because I counted each cube in my bag.*
- *I have 4 crayons. I know because I counted each cube only 1 time.*
- *I have 5 crayons. I know because I put 1 object in each box of the 5-frame.*

Hands-On



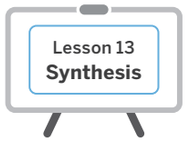
Presentation Screens

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?"

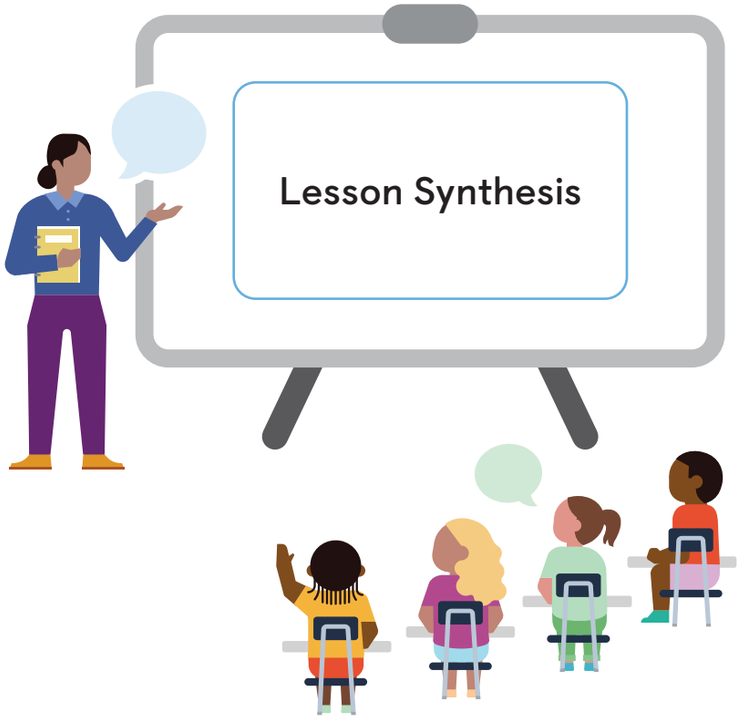
Whole Class | 10 min

Presentation Screen



Synthesis

Lesson Takeaway: Counting can be used to determine the quantity of objects in a group. When counting, say 1 number for each object.



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:

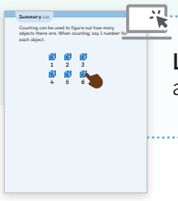
- "We said 1 number as I pointed to each dot."
- "In the next lesson, you will continue to figure out how many are in a group."

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

Practice

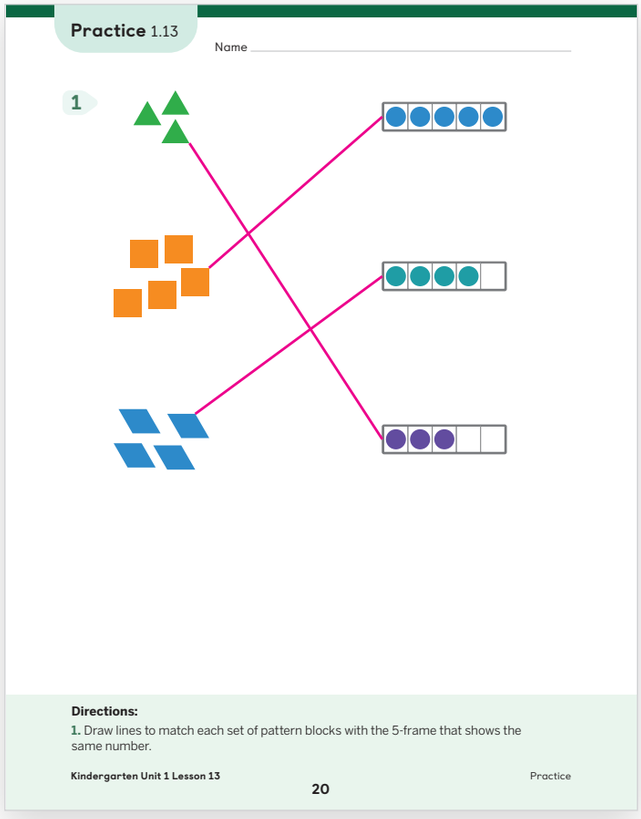
Independent

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 1.13

Name

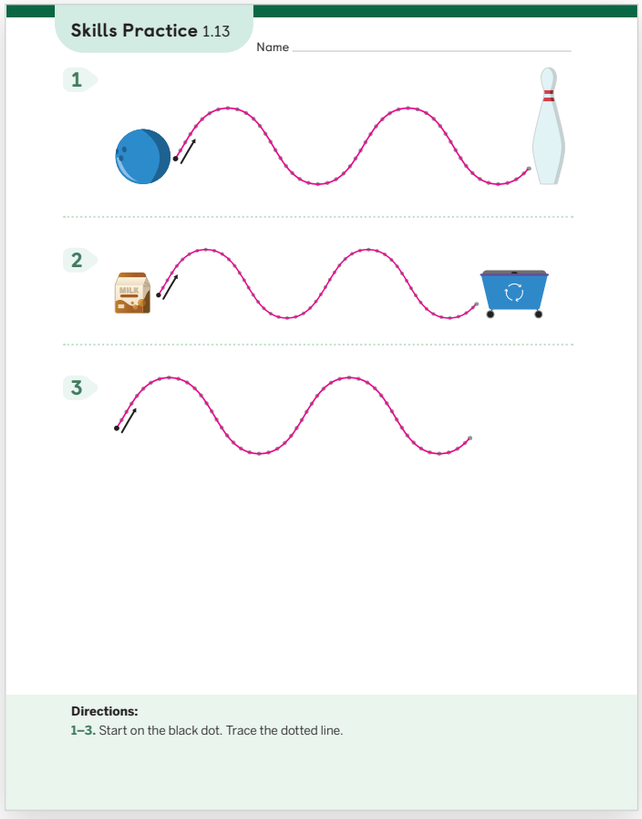
1

Directions:

1. Draw lines to match each set of pattern blocks with the 5-frame that shows the same number.

Kindergarten Unit 1 Lesson 13 Practice

20



Skills Practice 1.13

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	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.

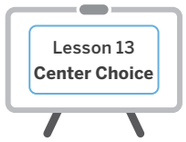
Need more Practice?

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

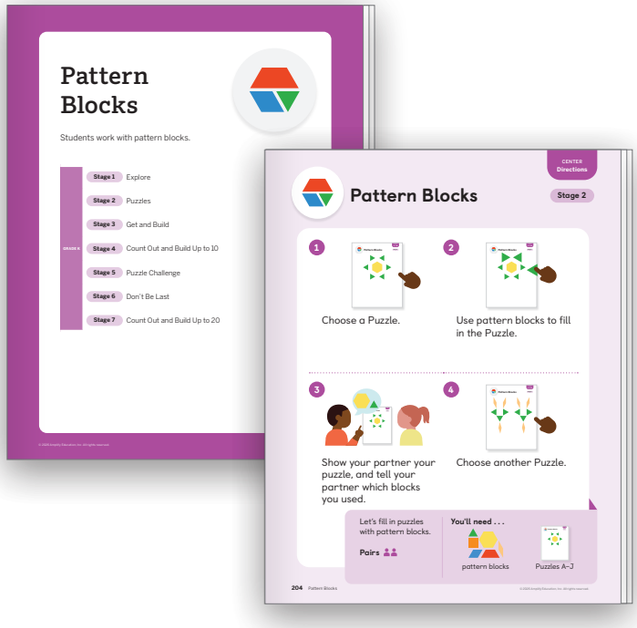
Pairs | 15 min | Building Toward K.6.A

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

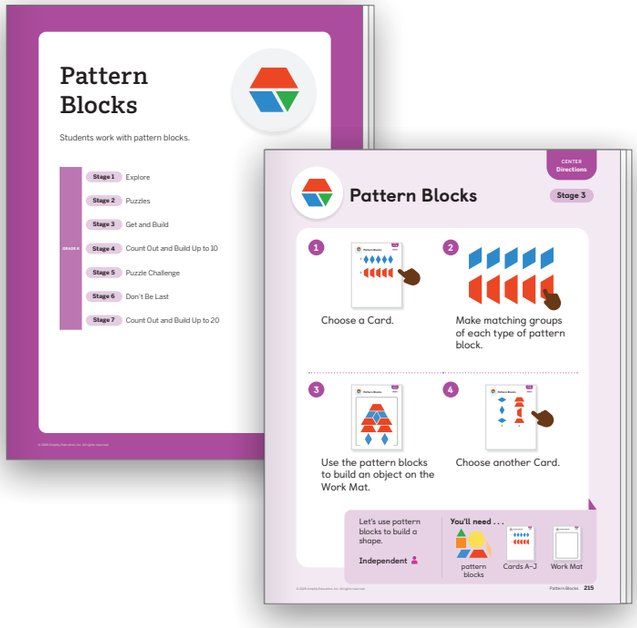
Pairs | 15 min | K.2.B, K.2.E

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:

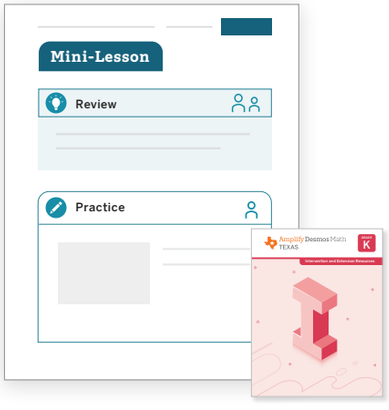
Respond:

- 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.



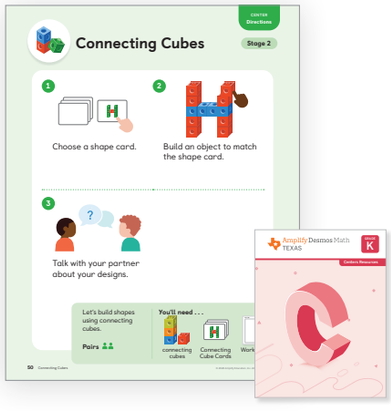
Strengthen

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**



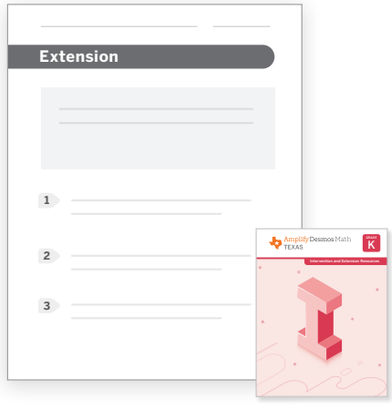
Stretch

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?