Lesson 1

LESSON OVERVIEW

CONTENT GOAL:

- Students will count groups to connect number words with quantities.

TRANSFERABLE TAKEAWAY:

- N/A

KEY VOCABULARY:

- count
- curious
- math/mathematician
- number

MATERIALS:

- Vocabulary Picture Cards
- Hundreds chart
- Collection of 5 spoons
- The Very Hungry Caterpillar Eats Breakfast
- "Story Mat: Lesson 1" (1 copy)
- "Story Mat: Lessons 2–5" (1 copy)
- Unifix cubes (for teacher modeling)

LESSON PREPARATION:

- Designate a space for the Math Word Wall.
- Post the Essential Question.
- Display a large hundreds chart in the classroom where it can be easily seen.
- Prepare a collection of 5 spoons.
- Grouping: Pairs for Partner Talk

SAMPLE

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SUGGESTED AGENDA

45 min.

3 min.	**Engage**
6 min.	**Count Together**
6 min.	**Counting Collections**
	MOVEMENT BREAK (OPTIONAL)
3 min.	**Launch**
12 min.	**Read Aloud**
5 min.	**Partner Talk**
8 min.	**Build the Story Together**
2 min.	**Closing**

SAMPLE

Notes for Lesson Differentiation

TO SUPPORT:

- Counting Collections: If a student would benefit from additional support keeping track of the count, then pause periodically and ask, "How many have we counted so far?" before continuing the count.
- Read Aloud: If a student has difficulty connecting the spoken number words to the objects being counted, then have them show the number of objects on their fingers as the teacher points to and counts the objects in the illustration.
- Build the Story Together: If students have difficulty understanding how cubes can represent objects from the story, then return to the picture-based story mat and count the pictures again before moving to the blank story mat. As you place each cube, name the representation: "This cube stands for 1 egg."

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TO ADVANCE:

- Read Aloud: If students accurately count groups with confidence, then ask, "How do you know that you counted correctly?" Students may respond in a variety of ways, such as, "I counted each object one time," "I pointed to each one," or "I counted in order."
- Read Aloud/Build the Story Together: If students are ready for an additional challenge, then invite them to lead the count while you point to each object or cube. After counting, ask, "How many are there?" and "How do you know?"

LANGUAGE AND MLL SUPPORTS:

- Reading Support: If students use another language at home, invite them to name the breakfast foods from the story in their home language when appropriate. For example, students may name foods such as yogurt, cereal, bagels, onions, toast, or eggs in their home language before or after counting the group in English. Affirm students' responses and connect them back to the English word and the math: "Yes, those are eggs. We counted 6 eggs."
- Speaking and Listening Support: If students need support with lesson vocabulary, then pair key words with gestures as they arise. For example, count on your fingers when saying "count," point to the story mat when saying "story mat," and hold up a cube when saying "cube."
- Speaking and Listening Support: If students need support explaining their thinking, then provide sentence frames, such as "There are [number] objects. I know there are [number] objects because ..."

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Lesson 1

Content Goal: Students will count groups to connect number words with quantities.

Engage (3 min.)

Throughout the lesson, use the "Multisensory Engagement Moves" resource to help students actively process key concepts. Choose brief moves to incorporate throughout the lesson that support the lesson focus and pacing.

[DESIGN: Start text box - place to start on the right of the below content]

Teacher's Note:

In advance of this lesson, designate a space in your classroom for a Math Word Wall. As you introduce vocabulary words, add the Vocabulary Picture Cards to the wall or board and refer to the cards as the words authentically arise.

[DESIGN: End text box]

> **Say:** *Today, we are starting a new math unit! In this unit, we will learn how math helps us learn, play, and solve problems together.* ***Math*** *is a way we think about numbers, shapes, patterns, and groups. We use math all the time, even without realizing it. We use math when we count how many friends are at our table, when we see that one block tower is taller than another, and when we share snacks or toys and think about whether everyone has enough. A person who does math is called a* ***mathematician****. Today, you are all mathematicians.*

[DESIGN: Global note: Like the vocabulary card thumbnails in the Rising K Knowledge Teacher Guide, this Rising K Math Teacher Guide also requests thumbnails from a vocab card PDF to be inserted. Please format and size these like the thumbnails in the Knowledge unit. The PDF of vocab cards is in the Teacher Guide handover folder with the manuscripts.]

[DESIGN: Insert thumbnail of the "math/mathematician" vocabulary picture card to the right of the content below.]

Display the "math/mathematician" Vocabulary Picture Card and add it to the Math Word Wall.

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Say: *We will use Vocabulary Picture Cards to show us what words mean. For example, this Vocabulary Picture Card shows a girl working with shapes and numbers to represent a mathematician doing math. We can look at this card to remember what the words "math" and "mathematician" mean.*

*Mathematicians are **curious**, which means they notice, ask questions, and use math to figure things out.*

[DESIGN: Insert thumbnail of the "curious" vocabulary picture card to the right of the content below.]

Display the "curious" Vocabulary Picture Card and add it to the Math Word Wall.

Say: *Throughout this unit, we'll also think about our big question:*

Introduce the unit's Essential Question. Keep it posted on an anchor chart throughout the unit.

Essential Question
How can we use math to learn, play, and solve problems together?

Say: *Every day, we will start by doing some fun math routines together. Let's try those routines now.*

Routine: Count Together (6 min.)

Purpose: Students will count forward by 1s, starting at 1 and stopping at 10, in order to develop fluency with the verbal count sequence.

Say: *The first routine that we will do every day is called "Count Together." "**Count**" means "to say the numbers in order." For example, when I point to each chair at this table and say "1 ... 2 ... 3 ... 4," I am counting. Counting helps me know how many chairs there are.*

[DESIGN: Insert thumbnail of the "count" vocabulary picture card to the right of the content below.]

Display the "count" Vocabulary Picture Card and add it to the Math Word Wall.

Point to the numbers "1," "2," and "3" as you say their names aloud.

Say: *Sometimes, we say numbers with words, like "one," "two," "three." Sometimes we see numbers written with symbols, like "1," "2," "3."*

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Display the hundreds chart.

> **Say:** *This is a hundreds chart. A hundreds chart shows written numbers in order from 1 to 100. The hundreds chart helps us remember what number comes next. We can point to each number as we count. A* ***number*** *is a word or symbol that we use to count or tell how many.*

[DESIGN: Insert thumbnail of the "number" vocabulary picture card to the right of the content below.]

Display the "number" Vocabulary Picture Card and add it to the Math Word Wall.

> **Say:** *Watch how I use the hundreds chart. I will start at 1. Each time I say a number, I will point to that number on the path. Then, I will move to the next number. Today, we are going to count forward by 1s, starting at 1 and stopping at 10.*

Model counting from 1 to 10, pointing at the numbers on the hundreds chart as you count. Then, prompt students to count chorally from 1 to 10 with you, pointing to each corresponding number on the hundreds chart as you count.

Have students repeat the count two more times, incorporating an additional component with the count each time, such as:

- Clap once each time a number is said.
- Tap their knees each time a number is said.
- Stomp once each time a number is said.
- Say the count in a monster voice.
- Whisper the count.

After Completing the Counts

> **Ask:** *What did you notice about the numbers each time we counted forward to 10?*

Key Ideas To Listen For:

- We counted forward in order: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- The numbers were in the same order each time we counted.

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> **Say:** *Every time we counted, the numbers stayed in the same order. We said the number words while I pointed to the written numbers on the hundreds chart. Mathematicians practice counting because it helps them find out how many things there are.*

Tell students about a few times people use number words in the counting sequence during everyday activities, such as counting each repetition of an exercise, counting pages you print for the class, and counting ingredients in a recipe.

Routine: Counting Collections (6 min.)

Purpose: Students will count the total number of spoons in a collection and keep track of the count by moving each spoon as it is counted.

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Teacher's Note:

This routine develops students' understanding of one-to-one correspondence and cardinality. One-to-one correspondence is the understanding that each object in a group is counted once, with one number word matched to one object. Cardinality is the understanding that the last number said when counting a group tells how many objects are in the group altogether. In this unit, students are not expected to learn or use the words "one-to-one correspondence" or "cardinality," but they should hear and practice these ideas as they count: count each object one time, and use the last number counted to tell how many are in the group.

[DESIGN: End text box]

Collection and Total:

- Spoons (5)

Ensure you have prepared your collection of spoons before beginning the routine.

> **Say:** *Now, we are going to use numbers to count a collection, or group, of things. I have a collection of spoons. I'm curious about how many spoons I have in my collection. We can count the spoons to find out.*

Display the collection of 5 spoons. Tell students that the class will keep track of how many have been counted by moving or lining up each object to be sure every object has been counted only once.

Begin the count by removing one spoon from the collection and lining it up where students can see it as you count it. Have students echo count as you count each item in the collection.

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Say: *"5" is the number we said as we counted the last spoon. That tells me that there are 5 spoons in my collection. The last number we say when we count a group tells us how many are in the group.*

Ask: *How many spoons are in my collection?*

Key Ideas To Listen For:

- There are 1, 2, 3, 4, 5 spoons.
- There are 5 spoons.

[DESIGN: Start text box - format as a long rectangle]

Teacher's Note:

Students may repeat the full counting sequence when asked, "How many spoons are in my collection?" This is developmentally appropriate. To support cardinality, affirm the count, then model naming the total: "Yes, we counted 1, 2, 3, 4, 5. That means there are 5 spoons altogether. When we answer 'How many?', we only need to say the last number we counted." Over time, students should begin to answer "How many?" by naming the last number counted.

[DESIGN: End text box]

After Counting the Collection

Ask: *What did we do to figure out how many spoons are in my collection?*

Key Ideas To Listen For:

- You moved each spoon as we counted it.
- We counted each spoon one time.
- We said the numbers in order.
- We stopped after we counted the last spoon.
- We knew there were 5 spoons because 5 is the last number we said.

Say: *Today, we used counting to find out how many spoons are in a group. That's what mathematicians do! They use math to learn new things.*

MOVEMENT BREAK (OPTIONAL)

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You may want to give students a brief movement break before continuing the lesson. Suggestions are provided in the "Movement Breaks" resource.

Launch (3 min.)

> **Say:** *Now, we will read a book and think about what is happening in the story. This book will give us a chance to put on our mathematician hats and be curious about the math in the story.*

Display The Very Hungry Caterpillar Eats Breakfast by Eric Carle and preview the front and back covers. Read the title and the author, and notice the illustrations.

> **Ask:** *Based on the front cover and the title, what do you think will happen in this story?*

Key Ideas To Listen For: Responses will vary but may include:

- I think the caterpillar will eat breakfast.
- I think the caterpillar will eat pancakes, bacon, and eggs.
- I think the caterpillar is hungry.

> **Say:** *As we read the book, pay attention to what happens in the story.*

Read Aloud (12 min.)

[DESIGN: Start text box - place to start on the right of the below content]

Teacher's Note:

If available, display the book's pages under a document camera so that students can easily see the illustrations and participate in counting.

[DESIGN: End text box]

In this part of the lesson, you will read The Very Hungry Caterpillar Eats Breakfast.

Read from the beginning of the book to "What's your favorite sweet morning treat?"

> **Say:** *I suggested we should put on our mathematician hats while reading this book. What do you think? Are you noticing math in this story?*

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Ask: *What math are you noticing?*

Key Ideas To Listen For: Responses will vary but may include:

- There are numbers in this story.
- The caterpillar eats 1, 2, 3 things for breakfast.
- The story is counting what the caterpillar eats for breakfast.

[DESIGN: Start think aloud formatting]

Think Aloud: *There are numbers and counting in this book. When we talk about numbers or counting, we are using math and being mathematicians! As a mathematician, I'm feeling curious. I want to know how many things the caterpillar eats for breakfast. Let's count what we see the caterpillar eat in the story.*

On the first page, the caterpillar eats yogurt. Watch me point to and count how many yogurts the caterpillar eats. I'm going to point to and count each yogurt one time: 1. The caterpillar eats 1 yogurt.

On the next page, the caterpillar eats bowls of cereal. Watch me point to and count how many bowls of cereal the caterpillar eats: 1, 2. The caterpillar eats 2 bowls of cereal.

On the next page, the caterpillar eats pastries. Watch me point to and count how many pastries the caterpillar eats: 1, 2, 3. The caterpillar eats 3 pastries.

Keep your mathematician hats on while we keep reading. Aren't you curious about what the caterpillar might eat next and how much of it he will eat?

[DESIGN: End think aloud formatting]

Read to "Can you guess his favorite?"

Say: *Let's count this group of bagels together. First, watch me point to each bagel and count each one. Then, you will count with me as I point again.*

Point to and count each bagel. Tell students there are 4 bagels. Then, prompt students to count chorally as you point to each bagel.

Ask: *How many bagels are there?*

Key Ideas To Listen For:

- There are 1, 2, 3, 4 bagels.

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- There are 4 bagels.

Read to "Anything can be breakfast when you're The Very Hungry Caterpillar!"

Say: *Let's count these onions together. I'll point at each onion, and you count with me as I point.*

Prompt students to echo count or count chorally as you point to and count each onion.

Ask: *How many onions are there?*

Key Ideas To Listen For:

- There are 1, 2, 3, 4, 5 onions.
- There are 5 onions.

Say: *To answer how many onions there are, we say the last number we counted: 5. There are 5 onions.*

Ask: *How did we count this group of onions so we could find out how many?*

Key Ideas To Listen For:

- We pointed to each onion and counted as we pointed.
- We counted each onion only one time.

Read to "What do you put on your toast?"

Say: *Let's count these pieces of toast together. I'll point to each piece of toast, and you count with me as I point.*

Prompt students to echo count or count chorally as you point to and count each piece of toast.

Ask: *How many pieces of toast are there?*

Key Ideas To Listen For:

- There are 1, 2, 3, 4, 5, 6, 7 pieces of toast.
- There are 7 pieces of toast.

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Say: *To answer how many pieces of toast there are, we say the last number that we counted: 7. There are 7 pieces of toast.*

Briefly invite a student to come to the hundreds chart and point to the written number that shows how many pieces of toast.

Say: *Yes, this is the written number 7. We can say the number "seven," and we can also point to or write the number "7" to show how many are in the group.*

Read to the end of the story.

Say: *I loved reading that story about The Very Hungry Caterpillar. It got me so curious about math and counting.*

Partner Talk (5 min.)

Say: *Now, you will talk with a partner about the story. I'll ask a question, and each of you will think about it and how you might answer it. Then, you will talk with your partner about the question before sharing with the whole group. One partner will share their ideas in response to the question while the other partner listens closely. Then, the next partner will share while the first partner listens.*

Ask the following questions, one at a time.

Ask: *What happens in this story? What math did we do while we read?*

Key Ideas To Listen For:

- The caterpillar eats a lot of food for breakfast.
- We counted what the caterpillar eats for breakfast.
- We found out how many foods were on each page.

Select a pair to share their partner discussion with the whole class.

Say: *I have one more question for you to talk about with your partner now that you might be feeling curious about counting in the world around you.*

Ask: *What is something you would like to count to find out how many?*

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Key Ideas To Listen For: Responses will vary but may include:

- I want to count how many people live at my house.
- I want to count my fingers.
- I want to count what I eat for breakfast.

Build the Story Together (8 min.)

[DESIGN: Start text box - format as a long rectangle]

Teacher's Note:

In this part of the lesson, you will introduce students to story mats and cubes, which they will use throughout the unit. Students may not yet understand that a cube can stand for something from a story. To support this understanding, you will first use a story mat that shows pictures of the objects from the story. Students will count the pictures. Then, you will transition to a blank story mat and use cubes to represent those same objects. This process helps students understand that each cube can stand for one object in the story.

[DESIGN: End text box]

Display the "Story Mat: Lesson 1" where all students can see it.

> **Say:** *In this unit, we will use story mats to count or build parts of the stories we read. Today, we will use a shared story mat. In another lesson, you will get your own story mat to build your own math stories.*

Display the "6" page from The Very Hungry Caterpillar Eats Breakfast.

> **Say:** *On this page in the book, the caterpillar is eating some eggs for breakfast.*

Point back to the "Story Mat: Lesson 1."

[DESIGN: Start think aloud formatting]

> **Think Aloud:** *Our story mat shows a new part of the caterpillar's story that we can explore together. There is a caterpillar on the mat and a plate with eggs. I'm curious to know how many eggs are on the caterpillar's plate. Let's count the eggs on the caterpillar's plate on our shared story mat.*

[DESIGN: End think aloud formatting]

> **Ask:** *What can we do to find out how many eggs are on the caterpillar's plate?*

Key Ideas To Listen For:

- We can count each egg.

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- We can point to each egg and say a number in order.
- We know that the last number we say tells us how many eggs are on the caterpillar's plate.

[DESIGN: Start think aloud formatting]

Think Aloud: *Let's count the eggs to find out how many are on the caterpillar's plate. I will point to each egg as I count it so I only count each egg one time. Watch me as I point to the eggs and count them: "1 … 2 … 3 … 4 … 5 … 6." There are 6 eggs on the caterpillar's plate. I know there are 6 eggs on the caterpillar's plate because 6 is the last number I said when I counted.*

Now, I want you to count with me as I count the eggs again. I will point to each egg, and as I point, you can chorally count along with me to find out how many eggs are on the caterpillar's plate: "1 … 2 … 3 … 4 … 5 … 6."

[DESIGN: End think aloud formatting]

Ask: *How many eggs are on the caterpillar's plate?*

Key Ideas To Listen For:

- 1, 2, 3, 4, 5, 6 eggs.
- There are 6 eggs on the caterpillar's plate.

Display the "Story Mat: Lessons 2–5" where all students can see it.

Say: *This story mat has an empty plate. I can use cubes to show the eggs from the story.*

Hold up a Unifix cube.

Say: *This cube can stand for 1 egg. When I put a cube on the plate, we will pretend it is 1 egg from the story.*

Place 6 Unifix cubes on the "Story Mat: Lessons 2–5."

[DESIGN: Start think aloud formatting]

Think Aloud: *The cubes stand for the eggs on the caterpillar's plate. I'm curious to know how many eggs are on the plate. I can count the cubes the same way I count the pictures. I will touch each cube one time and say one number for each cube: "1 … 2 … 3 … 4 … 5 … 6." There are 6 eggs on the plate. I know there are 6 eggs on the plate because 6 is the last number I said when I counted. I'm curious to know how many eggs are on the caterpillar's plate.*

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[DESIGN: End think aloud formatting]

> **Ask:** *What did you notice was the same when we counted the pictures of eggs and the cubes that we pretended were eggs?*

Key Ideas To Listen For: Responses will vary but may include:

- Both times, we said the numbers in the same order.
- Both times, we said only one number when we touched an egg or cube.
- We kept track of the eggs and cubes so that we didn't count an egg or cube twice.
- The last number we said when we counted tells us how many eggs there are.
- There are 6 eggs on the plate.

Briefly invite a student to come to the hundreds chart and point to the written number that shows how many eggs are on the plate.

> **Say:** *Yes, this is the written number 6. We can say the number, "six," and we can also point to or write the number, "6," to show how many are in the group.*

Closing (2 min.)

> **Say:** *Today, we read a story that helped us become curious about counting and numbers. We used a story mat to show what happened in the story by counting the eggs on the caterpillar's plate to find out how many. We counted by pointing to or touching each picture or cube to make sure we counted carefully. We learned that the last number we say when we count answers "How many?"*
>
> *Today, we began thinking like mathematicians by using math to help us answer questions about a story. In a future lesson, you will get your own story mats and cubes. You will count and build a group from a math story to find out how many.*

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Lesson 2

LESSON OVERVIEW

CONTENT GOAL:

- Students will count a group from a story to determine how many objects are in the group.

TRANSFERABLE TAKEAWAY:

- We understand that the last number we say when we count means how many.

KEY VOCABULARY:

- N/A

MATERIALS:

- Hundreds chart
- "Story Mat: Lessons 2–5" (1 per student)
- Unifix cubes (8 per student)
- Chart paper for Share Time
- Appendix: "Lesson 2 Materials"

LESSON PREPARATION:

- Place 8 Unifix cubes on each student's story mat before Build the Story begins.
- Prepare the "Quick Images" for display during the "Quick Images" routine.

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SUGGESTED AGENDA

45 min.

3 min.	**Engage**
6 min.	**Count Together**
6 min.	**Quick Images**
	MOVEMENT BREAK (OPTIONAL)
5 min.	**Launch**
6 min.	**Act It Out**
6 min.	**Build the Story**
12 min.	**Share Time**
1 min.	**Closing**

SAMPLE

Notes for Lesson Differentiation

TO SUPPORT:

- Build the Story: If students skip cubes or count a cube more than once, then encourage them to choose a starting cube and touch or move each cube as they count to keep track and count each cube once.
- Share Time: If students recount the entire group when asked "How many?" then ask, "What was the last number you said?" to reinforce that the last number tells the total.

TO ADVANCE:

- Quick Images: If students instantly recognize the quantities without counting, then ask them to explain how they saw the amount. For example, students may say, "I just saw it" or "I saw 1 dot on top and 2 dots below."
- Share Time: If students accurately count and identify 8 as the total, then ask them to explain how they know that 8 tells how many banana slices there are.

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LANGUAGE AND MLL SUPPORTS:

- Speaking and Listening Support: If students have difficulty understanding the math story, then briefly restate the key story action before students go to their story mats: "Grandma Caterpillar puts the banana slices on the plate. The cubes stand for the banana slices."
- Speaking and Listening Support: If students need support explaining how they found the total, then provide sentence frames, such as "I know there are [number] banana slices because [number] was the last number I counted."

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Lesson 2

Content Goal: Students will count a group from a story to determine how many objects are in the group.

Engage (3 min.)

Throughout the lesson, use the "Multisensory Engagement Moves" resource to help students actively process key concepts. Choose brief moves to incorporate throughout the lesson that support the lesson focus and pacing.

> **Say:** *Mathematicians, in our previous lesson, we got curious about math. We learned that we use math all the time, especially when we want to find out how many are in a group.*
>
> *We read The Very Hungry Caterpillar Eats Breakfast and found math in the story. We counted the foods the caterpillar eats for breakfast, and we used cubes to show eggs on a story mat.*
>
> *Today, we will use our own story mats to represent another story about the caterpillar. Before that, we'll warm up by doing two math routines together.*

Routine: Count Together (6 min.)

Purpose: Students will count forward by 1s, starting at 1 and stopping at 10, in order to develop fluency with the verbal count sequence.

Display the hundreds chart.

Tell students they will be chorally counting forward by 1s, starting at 1 and stopping at 10.

[DESIGN: Start text box - place to start on the right of the below content]

Teacher's Note:

As students count, continue pointing to each numeral on the hundreds chart so that students begin connecting the number words they say to the written numbers they see. This connection should be brief and supportive, not the main focus of the routine. Students may also begin attempting to write numerals during this unit. Early numeral writing may be reversed, uneven, incomplete, or difficult to read. This is developmentally appropriate. Affirm students' attempts and continue modeling standard numeral formation over time.

[DESIGN: End text box]

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Model counting from 1 to 10, pointing at the numbers on the hundreds chart as you count. Then, prompt students to count chorally from 1 to 10 with you, pointing to each corresponding number on the hundreds chart as you count.

Have students repeat the count two more times, incorporating an additional component with the count each time, such as:

- Clap once each time a number is said.
- Tap their knees each time a number is said.
- Stomp once each time a number is said.
- Say the count in a monster voice.
- Whisper the count.

After Completing the Counts

> **Ask:** *What did you notice about the numbers each time we counted forward?*

Key Ideas To Listen For:

- We counted forward in order: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
- We stopped at 10.
- The numbers were in the same order each time we counted.
- The numbers went up by one each time.

Briefly invite a student to come to the hundreds chart and point to the written number 10.

> **Say:** *Yes, this is the written number 10. We can say the number "ten," and we can also point to or write the number "10."*

Routine: Quick Images (6 min.)

Purpose: Students will determine the number of dots shown in a series of quick images in order to begin recognizing small groups without counting each dot one by one.

[DESIGN: Start text box - format as a long rectangle]

Teacher's Note:

This routine begins to develop students' ability to subitize. Subitizing is the ability to recognize how many objects are in a small group without counting each object individually. In this unit, students are not expected to learn or use the word "subitize." Because this is students' first time

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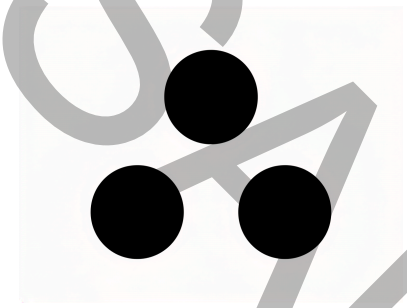
doing the "Quick Images" routine, keep it simple and affirm the different ways students determine the number of dots they see. Some students may recognize the number quickly, while others may count when the image is shown again. Both are developmentally appropriate.

[DESIGN: End text box]

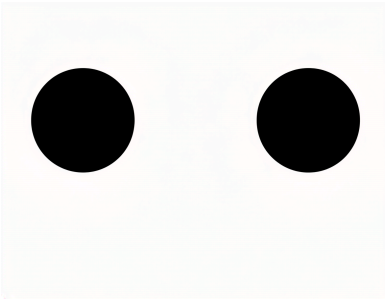
> **Say:** *I'm going to show you an image of some dots. I'll only show it for a few seconds. Look carefully and think about how many dots you see.*

QUICK IMAGES

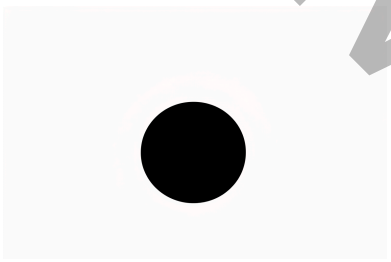
A



B



C



[DESIGN: Above chart should be resized and included on the right of the content below.]

[IMAGE: Reuse the Routine images included in this lesson's Appendix in the table above.]

Show Image A for 3 to 5 seconds. Then, cover or take down the image.

> **Ask:** *How many dots did you see?*

Key Ideas To Listen For:

- I saw 3 dots.

After students share, display the image again. As you ask students questions, annotate the image with their thinking.

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> **Ask:** *How did you see the amount?*

Key Ideas To Listen For:

- I just saw 3 dots quickly.
- I counted the dots: "1 ... 2 ... 3."
- I saw 1 dot on top and saw 2 dots below.

Repeat this process with the remaining two images.

> **Say:** *Sometimes, mathematicians can see a small group quickly and know how many there are. Mathematicians can also look again to check how many they saw. The "Quick Images" routine helps us practice seeing and thinking about how many are in a group.*

MOVEMENT BREAK (OPTIONAL)

You may want to give students a brief movement break before continuing the lesson. Suggestions are provided in the "Movement Breaks" resource.

Launch (5 min.)

[DESIGN: Start text box - format as a long rectangle]

Teacher's Note:

Before you begin this portion of the lesson, ensure that you've set up students' work areas with a "Story Mat: Lessons 2–5." Place 8 unifix cubes placed on each story mat plate. When students return to their work areas for Build the Story, they will need to have the cubes already placed on their story mats to practice counting a given quantity.

[DESIGN: End text box]

Gather students in the meeting area.

> **Say:** *Now that we are warmed up, we are ready for math stories. Today, I will tell you a story. Listen as I tell the story, and try to picture it in your mind.*

Tell the story using an engaging voice and body language to help students visualize the context and the math. Then, retell the story using the simplified version to emphasize the key mathematical action.

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Tell the Story: *Grandma Caterpillar wakes up early to make a special breakfast for the caterpillar. She looks in the kitchen and finds some bright yellow banana slices. She thinks to herself, "The caterpillar will love to eat these banana slices for breakfast!" Grandma Caterpillar picks up the banana slices one by one and places them onto the caterpillar's plate. Grandma Caterpillar puts the plate on the table for the caterpillar. The caterpillar looks at the plate and thinks, "There are so many delicious banana slices on my plate! I wonder how many banana slices Grandma Caterpillar put there."*

Retell the Story: *Grandma Caterpillar makes a special breakfast for the caterpillar. She puts some banana slices on the plate for the caterpillar to eat. The caterpillar wonders how many banana slices are on the plate.*

Ask: *What happens in the story?*

Key Ideas To Listen For:

- Grandma Caterpillar makes a special breakfast for the caterpillar.
- She puts the banana slices on the caterpillar's plate.
- The caterpillar wonders how many banana slices are on the plate.

Back-Pocket Questions To Scaffold:

- Who makes breakfast for the caterpillar?
- What does Grandma Caterpillar do with the banana slices?
- What does the caterpillar wonder?

Act It Out (6 min.)

Say: *Now, let's act out this story together so we can see it come alive. To act out this story, we will pretend to be Grandma Caterpillar making breakfast for the caterpillar.*

Ask: *What happens?*

Key Ideas To Listen For:

- Grandma finds banana slices.
- Grandma puts the banana slices on the plate.

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> **Say:** *Let's all pretend to carefully put the banana slices on the plate.*

Model pretending to put the banana slices on the plate while students do the same.

> **Say:** *Remember, Grandma Caterpillar carefully puts the banana slices on the plate, one by one. Show me how you pick up each banana slice and carefully put it on the plate, one by one.*

Emphasize pretending to put banana slices on the plate one by one while students do the same.

> **Say:** *I'm really curious, just like the caterpillar. I'm wondering, "How many banana slices did Grandma Caterpillar put on the caterpillar's plate?" I wonder what we can do to find out how many banana slices Grandma Caterpillar put on the plate. I have an idea! At your work area, I made each of you the caterpillar's plate with the banana slices already on it. The plate is your story mat, and the cubes stand for the banana slices.*

Hold up a Unifix cube.

> **Say:** *We are going to pretend that each cube is 1 banana slice.*

> **Ask:** *How can we find out how many banana slices Grandma Caterpillar put on the caterpillar's plate?*

Key Ideas To Listen For:

- We can count each cube to see how many banana slices Grandma Caterpillar put on the plate.
- We can touch each cube as we count them, one at a time.

Build the Story (6 min.)

Direct students to return to their work area with their story mats and cubes already set out.

> **Say:** *On your story mat, the cubes stand for the banana slices Grandma Caterpillar put on the plate. Your job is to count the cubes to find out how many banana slices are on the plate. Count carefully. You can touch or move each cube as you count to make sure you count each cube only once.*

Allow students time to work independently.

As Students Work:

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- Circulate to notice how students count: Do they touch or move each cube? Do they count each cube once? Do they say the number names in order? Do they name 8 as the total after counting?
- If students need support, ask them to show how they counted, rather than telling them the total.
- Take note of which students are able to accurately count the cubes, which students need support keeping track of the count, and which students name 8 as the total after counting.
- Identify one or two students to share their strategies during Share Time.
- After students have had time to count on their own, coach selected students based on the trends you identify in their work.

COUNTING BEHAVIORS AND LANGUAGE TO LISTEN FOR	PROBING QUESTIONS
Misconception: Count a cube more than once or skip a cube. • E.g., Count "1, 2, 3, 3, 4 ..." or skip from one cube to another without counting each cube.	• How can you make sure you count each cube one time? • Which cube will you count first? • How can you keep track of the cubes you already counted?
Misconception: Count the cubes accurately but give a different total. • E.g., Count "1, 2, 3, 4, 5, 6, 7, 8" but say there are 6 banana slices.	• What numbers did you say when you counted? • What was the last number you said? • Which number tells how many banana slices there are?
Touch or move each cube while counting, and say the number names in order. When asked how many banana slices, say: "1, 2, 3, 4, 5, 6, 7, 8."	• Can you show me how you counted? • Which number tells how many banana slices there are?
Touch or move each cube while counting and say the number names in order. When asked how many banana slices, say "8."	• Can you show me how you counted? • Which number tells how many banana slices there are? • How do you know there are 8 banana slices?

Tips for Planning Share Time:

- Select students whose work will help the class understand the Transferable Takeaway. When possible, sequence shares from less complex to more complex thinking so that the first share surfaces an important idea and the next share builds toward the lesson's key understanding.

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    - If possible, sequence your sharers using this guidance:
        - First, select one student who accurately counted the cubes but needs support naming the total as 8.
        - Then, select one student who accurately counted and named the total as 8.
- Check in briefly with sharers to ensure they are ready to share their thinking.

Share Time (12 min.)

Before directing students to move back to the meeting area for Share Time, have partners turn and talk with each other at their work areas to explain their thinking.

Then, direct students to return to the meeting area and sit in a circle.

> **Say:** *We are going to learn from our sharers. As they share, listen for how they counted and how they figured out how many banana slices are on the plate.*

Prompt the first sharer to bring their cubes and story mat to the middle of the meeting area to show how they counted. While the sharer explains their strategy, visually chart their work on chart paper. Then, prompt the second sharer to show how they counted and visually chart their work on chart paper.

Back-Pocket Questions To Scaffold:

- How did you keep track of what you counted?
- What numbers did you say when you counted?
- Which number tells how many banana slices are on the plate?

After the Shares

> **Ask:** *What did our sharers do to find out how many banana slices are on the plate?*

Key Ideas To Listen For:

- They counted each cube, one at a time.
- They touched or moved each cube as they counted.
- They said the numbers in order.
- They stopped after counting all the cubes.

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- The last number they counted tells how many.

Back-Pocket Questions To Scaffold:

- How did they count their cubes?
- What did they do to be sure they counted each cube one time?
- How did they know how many banana slices are on the plate?

> **Ask:** *What was the same or different about how our sharers represented their story?*

Key Ideas To Listen For:

- They both counted each cube once, and they both counted in order.
- One sharer knew that the last number they said was how many banana slices Grandma Caterpillar put on the plate.

> **Say:** *Our sharers counted the cubes to find out how many banana slices are on the plate. They counted each cube once while they touched or moved the cubes, and they said the numbers in order. The last number they said was 8, so there are 8 banana slices on the plate. When we count a group, the last number we say tells us how many are in the group.*

Transferable Takeaway: We understand that the last number we say when we count means how many.

Briefly invite a student to come to the hundreds chart and point to the written number that shows how many banana slices are on the plate.

> **Say:** *Yes, this is the written number 8. We can say the number, "eight," and we can also point to or write the number, "8," to show how many are in the group.*

Closing (1 min.)

> **Say:** *Today, we were curious mathematicians! We heard a story about Grandma Caterpillar making breakfast, and the caterpillar wondering how many banana slices were on the plate. We used math to help the caterpillar find out!. You counted the cubes on your story mat to find out how many banana slices there were. We learned that when we count carefully, the last number we say tells how many are in the group. Next time, we'll use math to answer another question in a new story.*

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