

Math Book 1



Joyful Discoveries Preschool Curriculum

Revised, Warburg 2024

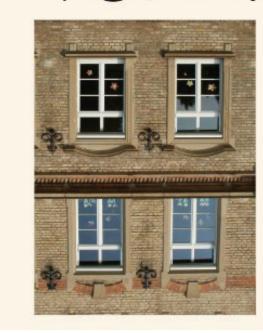


Created by: Dr. Amy Murdoch, Ms. Rosie Warburg, and Dr. Maria Aielli

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Counting at School

Text by The Project Ready! Team

Materials Needed:

Counting at School book



Overview: We recommend doing this lesson in the first or second week of school to get students excited about numbers!

Materials: Counting at School by The Project Ready! Team

Explain: I am going to read this book about a child on their first day of preschool. This child LOVES counting. Have you ever counted before? Let's read this book together.

Model: Point to pictures in the book as you count. Ask children to identify where the items pictured in the book are at your school. For example, *The child walked up stairs. Do we have stairs? Where are they?*

Practice: Read the story with excitement and fluency. Pause to count items in pictures. Encourage children to count with you.



Error Correction Procedure

Let's try it again. Count with me." Model counting clearly and slowly while pointing at picture . "How many (item in pictures)? Yes! There were (number of items).





Counting at School

Text by The Project Ready! Team

Materials Needed:

- Counting at School book
- Items depicted in book in your own school
- Other items around your school that can be counted

Lesson 2 Counting at Our School

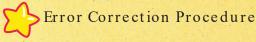
Overview: We recommend doing this activity multiple times in the first week or two of school. You can even do these activities during normal transitions in your day.

Explain: Show students the book. Review the title. Ask, *Do you remember what this book was about?*

Model: Show a few pages from the book and count the items. Generate excitement. We're going to find things we can count in our school!

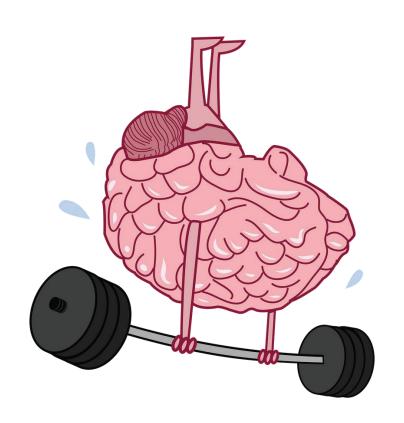
Group Practice: Count items from book, items on the suggested list at the end of the story, and any other items that are unique to your school.

- *This activity can be done in the classroom or while transitioning around the school.
- *Revisit this activity as many times as possible in the first week or two of school.



Let's try it again. Count with me. Model counting clearly and slowly. How many (item in pictures)? Yes! There were (number of items).





Materials Needed:

- Most recently read math book
- Small, identical materials for counting (For example: unifix cubes of the same color)
- Work mat for each student.



Overview: This lesson introduces students to the idea that numbers tell how many. When we count, the last number we say tells us how many there are.

Warm Up

Explain:

Do you remember when we counted things around our school? We can count so many things! When we count, we say numbers. Let's get our brains strong and ready to learn. Let's count together. One, two, three, four, five. Great. Let's do it one more time. One, two, three, four, five.

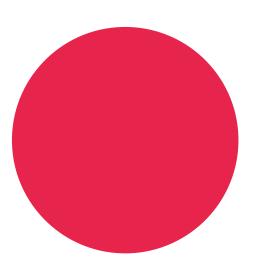


CONNECT TO MATH BOOK

- Show students the cover of the most recently read math book.
- Ask if students remember this book.
- Ask if they remember what we counted in this book.
- Connect the book to background knowledge of unit theme.
- Review title, author, and illustrator of the book.
- Spend 2-3 minutes reviewing parts of the book. Count some items in the book. Review the vocabulary of the book.



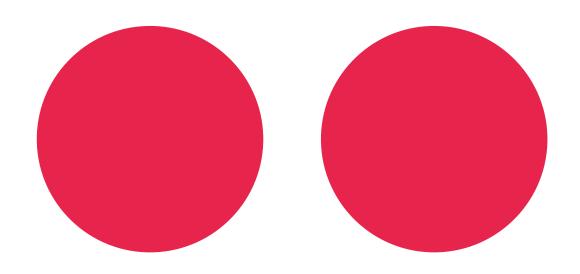
3-4 minutes TOTAL



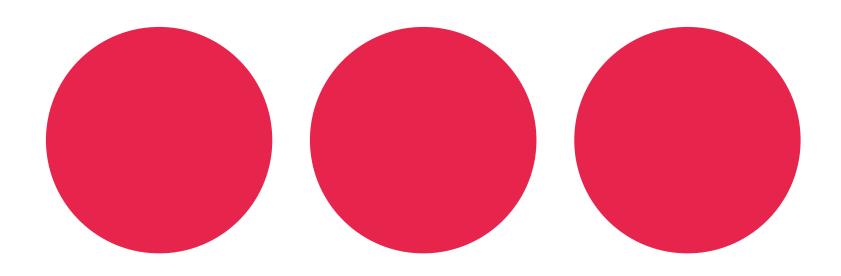
Introduce New Concept

Explain: Numbers tell us how many. When we count, the last number we say tells us how many.

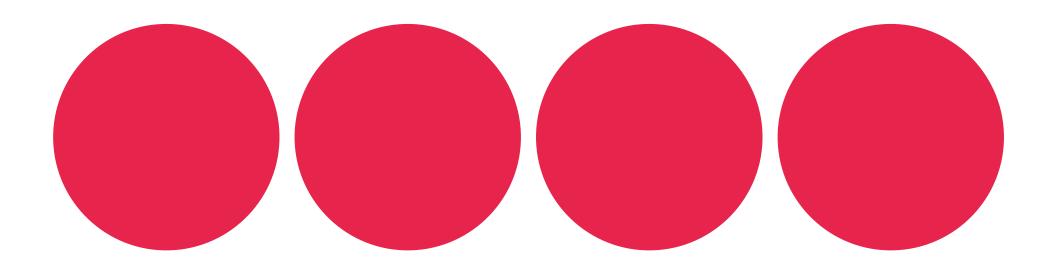
Model: Point to red circle. One. There is one red circle. Draw a circle around the dot with finger. This is one.



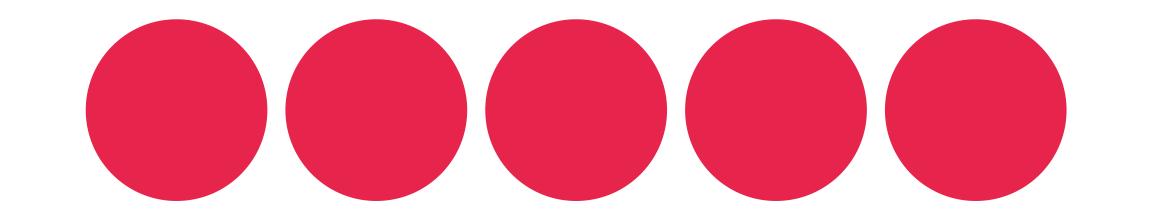
Model: Point to red circles. One. Two. There are two red circles. Draw a circle around the dots with finger. This is two.



Model: Point to red circles. One. Two. Three. There are three red circles. Draw a circle around the dots with finger. This is three.



Model: Point to red circles. *One. Two. Three. Four. There are four red circles*. Draw a circle around the dots with finger. *This is four.*



Model: Point to red circles. *One. Two. Three. Four. Five. There are five red circles.* Draw a circle around the dots with your finger. *This is five.*

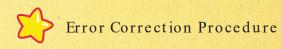
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Explain: Place 2 identical manipulatives on the white page facing students. I'm going to count these blocks.

Model: Listen and watch as I point and count. One, two. There are two blocks.

Group Practice: Now it's your turn to count the blocks. Everyone point to the blocks as you count. One, two. Good. How many blocks are there? Two.

*Repeat with groups of 5, 3, 1, and 4. First model counting then support students as they all point and count.



Let's count together. How many?

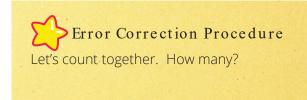


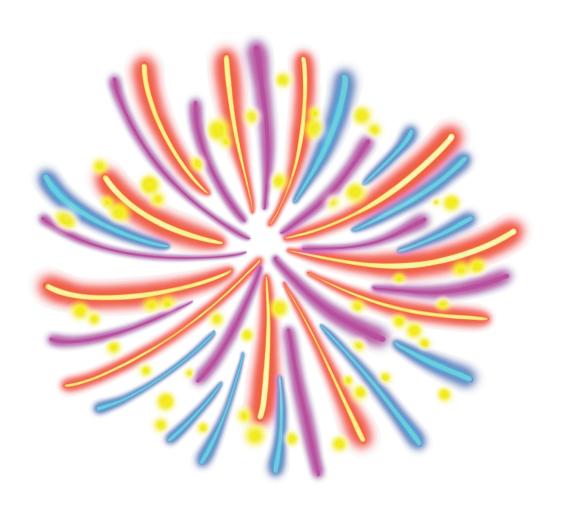
Individual Practice:

Give each student a work mat. Place a group of identical manipulatives on each student's work mat.

Encourage students to independently count their manipulatives. Continue giving groups of manipulatives until each student has counted groups of 1-5.

Expand (optional): For students ready for a challenge, allow them to create groups and tell you how many in each group.





Lesson 3

Counting Groups of 1-5

Wrap Up

Explain: Today we practiced counting. Thank you for helping me count!

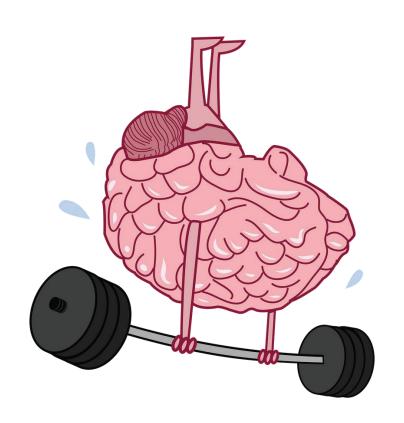


Celebrate success:

Let's make fireworks to celebrate our hard work. Let's put our pointer fingers together and make our fireworks go up, up, up.

At the top, pull fingers apart and wiggle them as your drop them down to create "sparkle." Add sound effects for extra fun.





Materials Needed:

- Most recently read math book
- Small, identical materials for counting (For example: unifix cubes of the same color)
- Work mat for each student.



Overview: This lesson introduces students to the idea that numbers tell how many. When we count, the last number we say tells us how many there are.

Warm Up

Explain:

Do you remember when we counted things around our school? We can count so many things! When we count, we say numbers.

Let's get our brains strong and ready to learn. Let's count together. One, two, three, four, five. Great. Let's do it one more time.

One, two, three, four, five.



Lesson 3A

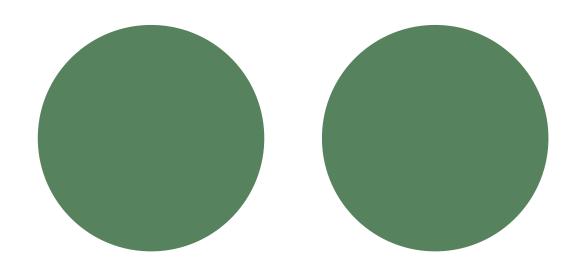
Counting Groups of 1-5

CONNECT TO MATH BOOK

- Show students the cover of the most recently read math book.
- Ask if students remember this book.
- Ask if they remember what we counted in this book.
- Connect the book to background knowledge of unit theme.
- Review title, author, and illustrator of the book.
- Spend 2-3 minutes reviewing parts of the book. Count some items in the book. Review the vocabulary of the book.



3-4 minutes TOTAL



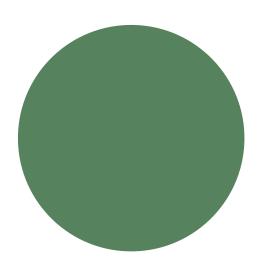
Lesson 3A

Counting Groups of 1-5

REVIEW NEW CONCEPT

Explain: Numbers tell us how many. When we count, the last number we say tells us how many.

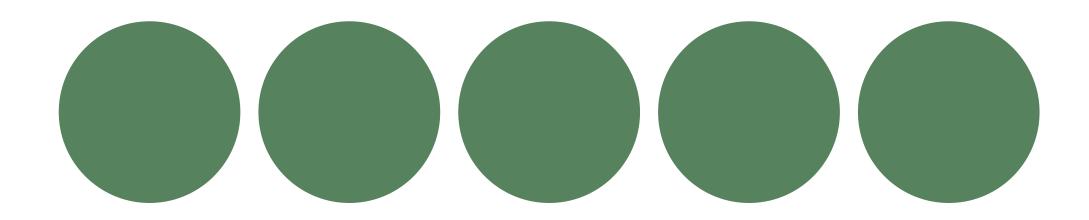
Model: Point to green circles. One. Two. There are two green circles. Draw a circle around the dots with fingers. This is two.



Lesson 3A

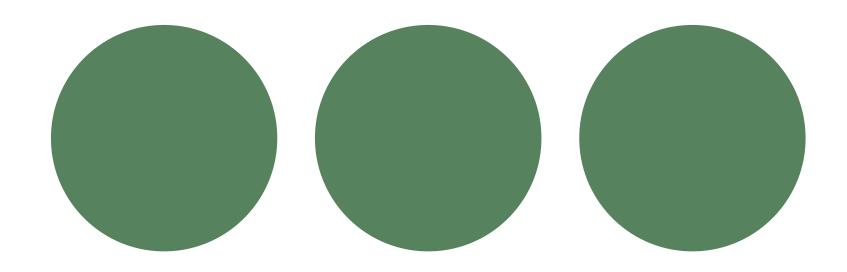
Counting Groups of 1-5

Model: Point to the green circle. One. There is one green circle. Draw a circle around the dots with finger. This is one.



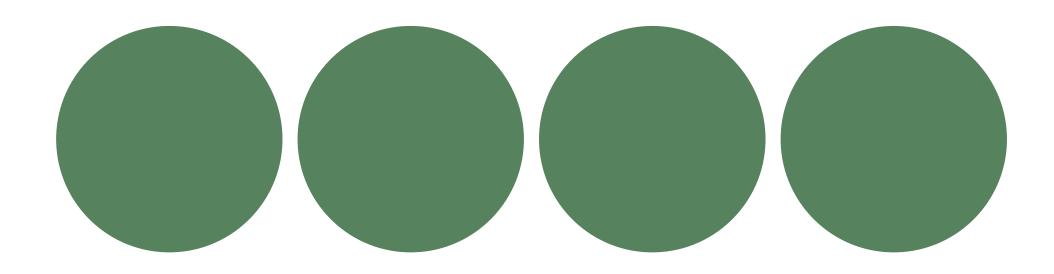
Counting Groups of 1-5

Model: Point to the green circles. *One. Two. Three. Four, Five There are five green circles*. Draw a circle around the dots with finger. *This is five.*



Counting Groups of 1-5

Model: Point to green circles. One. Two. Three. There are three green circles. Draw a circle around the dots with finger. This is three.



Counting Groups of 1-5

Model: Point to red circles. *One. Two. Three. Four. There are four green circles*. Draw a circle around the dots with finger. *This is four.*

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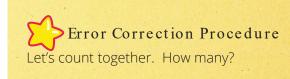
Counting Groups of 1-5

Explain: Place 3 identical manipulatives on white page facing students. I'm going to count these blocks.

Model: Listen and watch as I point and count. One, two, three. There are three blocks.

Group Practice: Now it's your turn to count the blocks. Everyone point to the blocks as you count. One, two, three. Good. How many blocks are there? Three.

*Repeat with groups of 4, 2, 1, and 5. First model counting then support students as they all point and count.



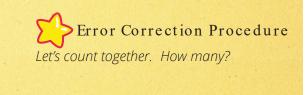


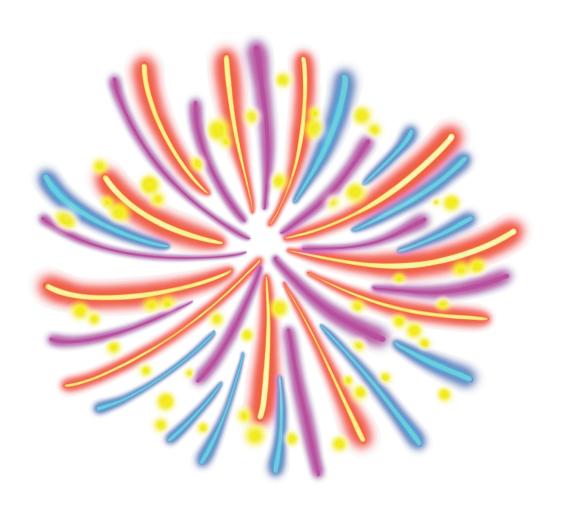
Counting Groups of 1-5

Individual Practice:

Give each student a work mat. Place a group of identical manipulatives on each student's work mat. Encourage students to independently count their manipulatives. Continue giving groups of manipulatives until each student has counted groups of 1-5.

Expand (optional): For students ready for a challenge, allow them to create groups and tell you how many in each group.





Counting Groups of 1-5

Wrap Up

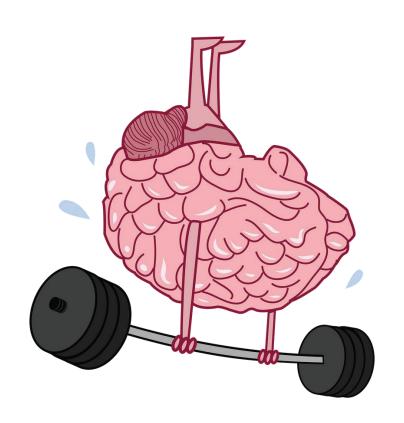
Explain: Today we practiced counting. Thank you for helping me count!



Celebrate success:

Let's make fireworks to celebrate our hard work. Let's put our pointer fingers together and make our fireworks go up, up, up. At the top, pull fingers apart and wiggle them as your drop them down to create "sparkle." Add sound effects for extra fun.





Materials Needed:

- Most recently read math book
- Small, identical materials for counting (For example: unifix cubes of the same color)
- Work mat for each student.



Overview: This lesson introduces students to the idea that numbers tell how many. When we count, the last number we say tells us how many there are.

Warm Up

Explain:

Do you remember when we counted things around our school? We can count so many things! When we count, we say numbers.

Let's get our brains strong and ready to learn. Let's count together. One, two, three, four, five. Great. Let's do it one more time.

One, two, three, four, five.



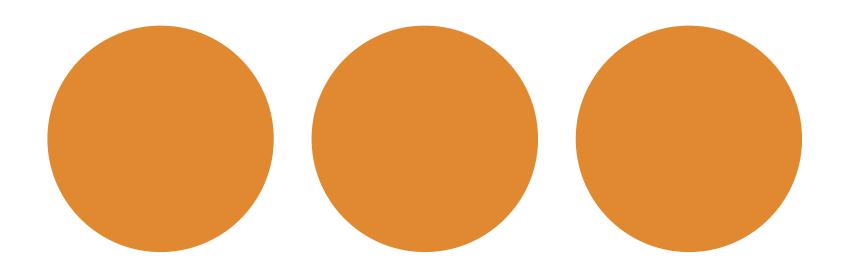
Counting Groups of 1-5

CONNECT TO MATH BOOK

- Show students the cover of the most recently read math book.
- Ask if students remember this book.
- Ask if they remember what we counted in this book.
- Connect the book to background knowledge of unit theme.
- Review title, author, and illustrator of the book.
- Spend 2-3 minutes reviewing parts of the book. Count some items in the book. Review the vocabulary of the book.



3-4 minutes TOTAL

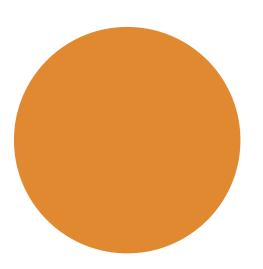


Counting Groups of 1-5

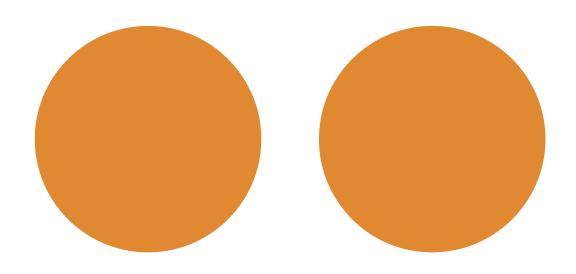
Review New Concept

Explain: Numbers tell us how many. When we count, the last number we say tells us how many.

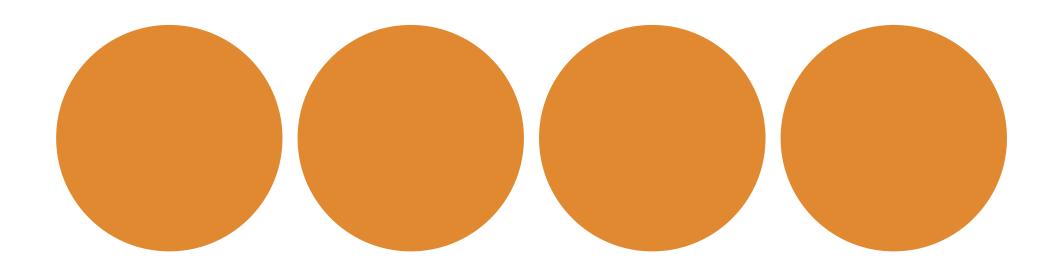
Model: Point to orange circles. One. Two. Three. There are three orange circles. Draw a circle around the dots with finger. This is three.



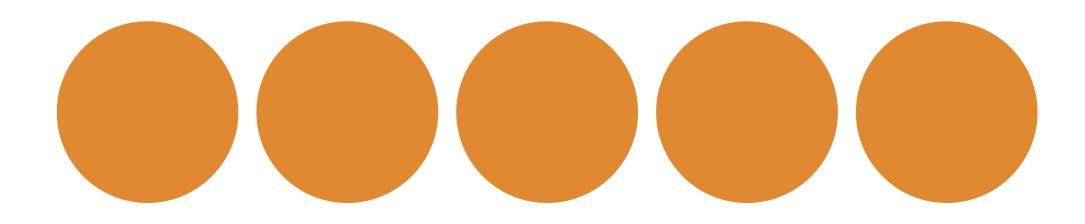
Model: Point to the orange circle. One. There is one orange circle. Draw a circle around the dot with finger. This is one.



Model: Point to the orange circle. One. Two. There are two orange circles. Draw a circle around the dots with finger. This is two.



Model: Point to the orange circles. *One. Two. Three. Four. There are four orange circles.* Draw a circle around the dots with finger. *This is four.*



Counting Groups of 1-5

Model: Point to the orange circles. *One. Two. Three. Four. Five. There are five orange circles*. Draw a circle around the dot with finger. *This is five.*

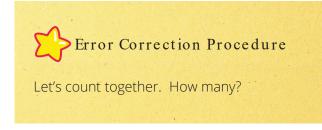
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Explain: Place 4 identical manipulatives on white page facing students. I'm going to count these blocks.

Model: Listen and watch as I point and count. One, two, three, four. There are four blocks.

Group Practice: Now it's your turn to count the blocks. Everyone point to the blocks as you count. One, two, three, four. Good. How many blocks are there? Four.

*Repeat with groups of 2, 1, 5, and 3. First model counting then support students as they all point and count.



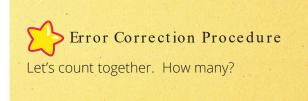


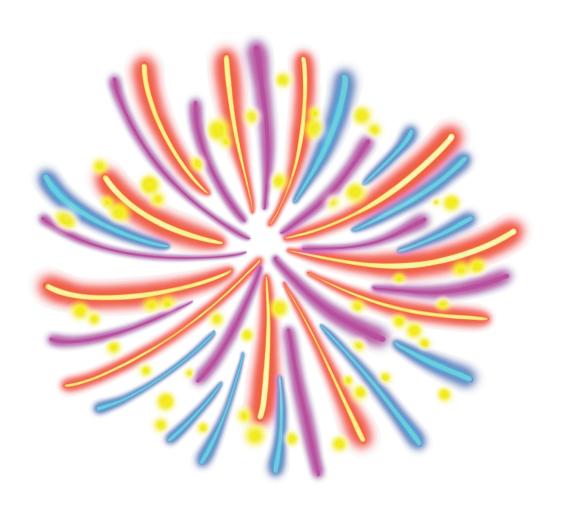
Counting Groups of 1-5

Individual Practice:

Give each student a work mat. Place a group of identical manipulatives on each student's work mat. Encourage students to independently count their manipulatives. Continue giving groups of manipulatives until each student has counted groups of 1-5.

Expand (optional): For students ready for a challenge, allow them to create groups and tell you how many in each group.





Counting Groups of 1-5

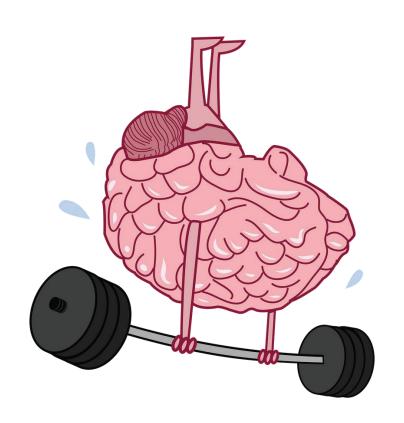
Wrap Up

Explain: Today we practiced counting. Thank you for helping me count!



Celebrate success: Let's make fireworks to celebrate our hard work. Let's put our pointer fingers together and make our fireworks go up, up, up. At the top, pull fingers apart and wiggle them as your drop them down to create "sparkle." Add sound effects for extra fun.





Materials Needed:

- Most recently read math book
- Small, identical materials for counting (For example: unifix cubes of the same color)
- Work mat for each student.



Overview: This lesson teaches subitization, or counting that is so quick and fluent it appears to be automatic. This skill comes naturally to some students. Other students will not master this skill until later in their schooling careers. Do not spend a lot of time trying to perfect this skill in preschool.

Warm Up

Explain:

We have been practicing counting. We can count so many things! When we count, we say numbers. Let's get our brains strong and ready to learn. Let's count together. One, two, three, four, five. Great. Let's do it one more time. One, two, three, four, five.



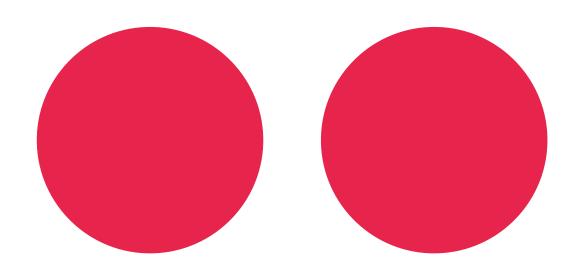
Lesson 4 Quick Identification of Quantities, 1-5

CONNECT TO MATH BOOK

- Show students the cover of the most recently read math book.
- Ask if students remember this book.
- Ask if they remember what we counted in this book.
- Connect the book to background knowledge of unit theme.
- Review title, author, and illustrator of the book.
- Spend 2-3 minutes reviewing parts of the book. Count some items in the book. Review the vocabulary of the book.



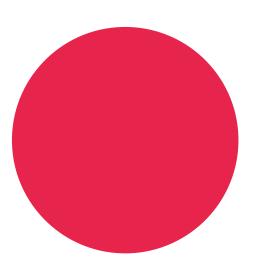
3-4 minutes TOTAL



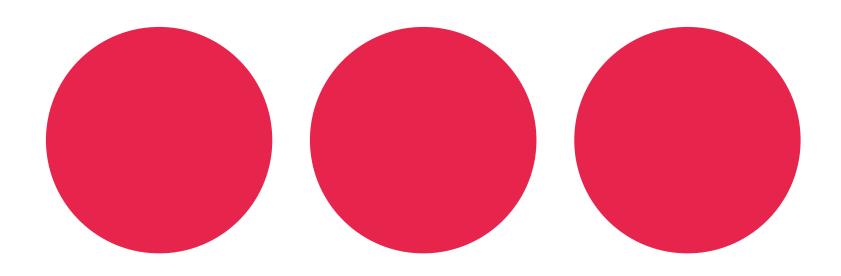
Introduce New Concept

Explain: We have been practicing counting. We know that when we count, the number we say last tells us how many. Did you know that you can tell how many there is without even counting? You can count very quickly in your brain without saying the numbers out loud.

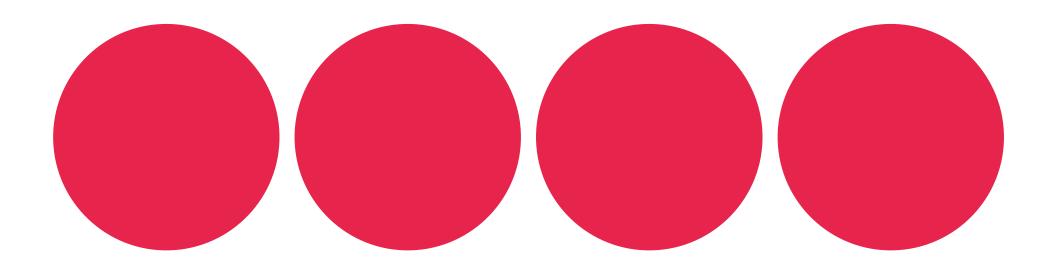
Model: Point to red circles. *This is two. I can look and without counting out loud, I know this is two.*



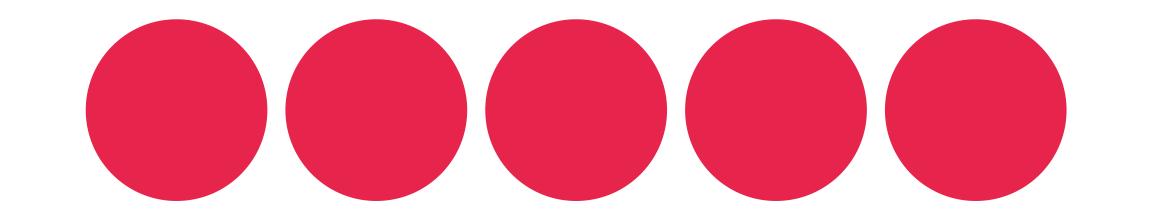
Model: Point to red circle. Without counting, I can tell you very quickly this is one.



Model: Point to red circles. This is thee. I didn't have to count. I just looked and saw three.



Model: Point to four circles. There are four circles here. I didn't count. I just saw four.



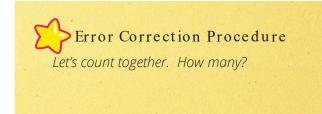
Model: Point to orange circles. This is five. How many? Five! I didn't count. I just knew there were five.

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Model: Place 2 identical manipulatives on white page facing students. *I see there are two blocks here. I didn't have to count. I just knew there were two.*

Group Practice: How many blocks? Two. Did you count or did you just know that? You just knew it!

*Repeat with groups of 3, 1, 5, and 4. First model quickly identifying the quantity then support students as they do the same.

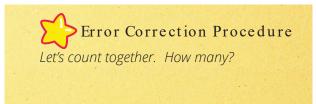


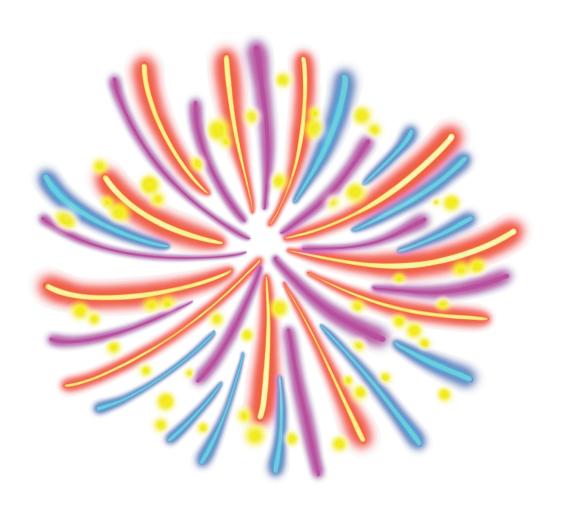


Individual Practice:

Give each student a work mat. Place a group of identical manipulatives on each student's work mat. Encourage students to quickly identify the quantity of manipulatives on their mat. Continue giving groups of manipulatives until each student has identified groups of 1-5.

Expand (optional): For students ready for a challenge, allow them to create groups and tell you how many in each group.





Lesson 4

Quick Identification of Quantities, 1-5

Wrap Up

Explain: Today we practiced telling how many were in a group without counting.

Thank you for helping me!



Celebrate success:

Let's make fireworks to celebrate our hard work. Let's put our pointer fingers together and make our fireworks go up, up, up.

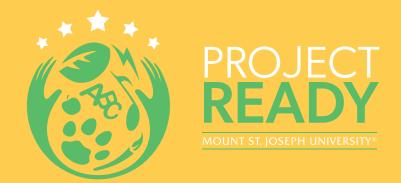
At the top, pull fingers apart and wiggle them as your drop them down to create "sparkle." Add sound effects for extra fun.



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Practice & Play Set 1



Joyful Discoveries
Preschool Curriculum







Skills: Counting groups of 1-5, Quick Identification of Quantities, 1-5

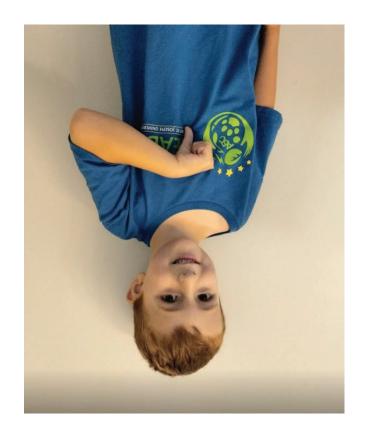
Materials: None

Review Game: Thumbs Up, Thumbs Down

Explain:

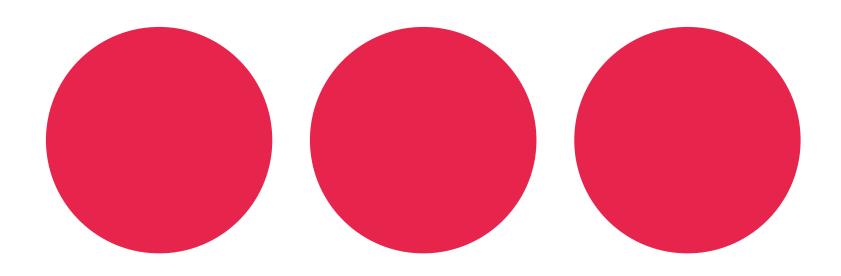
We have been practicing counting. You're so good at it! Today, you are going to show me what you know about counting. I'm going to ask a question. If the answer is yes, you will show me a thumbs up. First, you will hide your answer on your chest. (Point to first photo) Then, when I say, "Show me" you will hold your answer up high. (Point to second photo) Let's practice. (Practice putting a thumbs up on their chest then raising their hand high when you say, "Show me." Remind students that this sign means the answer is "yes.")





Explain:

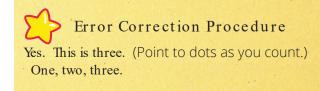
If the answer is no, you will show me a thumbs down. First, you will hide your answer on your chest. (Point to first photo) Then, when I say, "Show me" you will hold your answer up high. (Point to second photo) Let's practice. (Practice putting a thumbs down on their chest then raising their hand high when you say, "Show me." Remind students this sign means the answer is "No.")

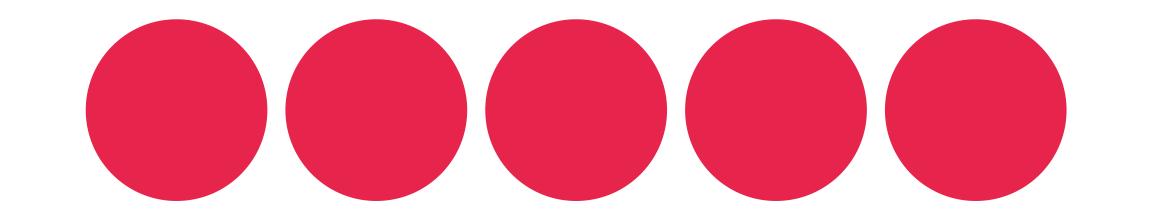


Group Practice: *Is this three? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

Show me.

Note: Pay careful attention to Student #1's responses as you progress through all pages with red dots. Note their mastery on Student Progress Sheet.





Group Practice: *Is this two? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

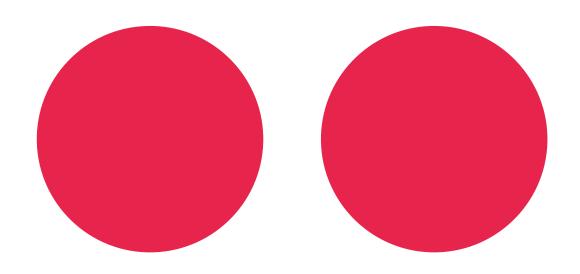
Show me.

Note: Pay careful attention to Student #1's responses as you progress through all pages with red dots. Note their mastery on Student Progress Sheet.

Error Correction Procedure

No. This is five. (Point to dots as you count.)

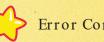
One, two, three, four, five.



Group Practice: *Is this five? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

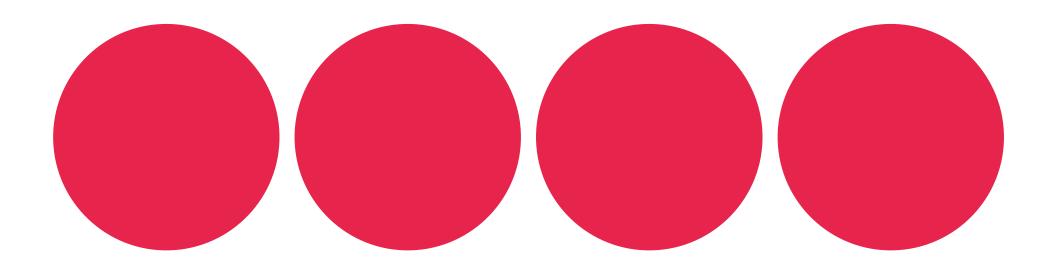
Show me.

Note: Pay careful attention to Student #1's responses as you progress through all pages with red dots. Note their mastery on Student Progress Sheet.



Error Correction Procedure

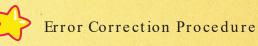
No. This is two. (Point to dots as you count.)
One, two..



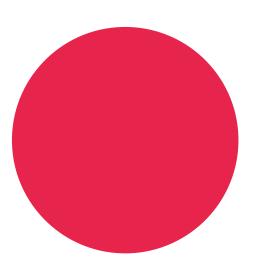
Group Practice: *Is this four? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

Show me.

Note: Pay careful attention to Student #1's responses as you progress through all pages with red dots. Note their mastery on Student Progress Sheet.

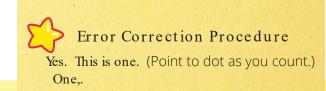


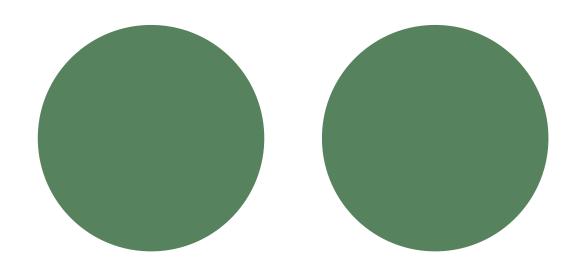
Yes. This is four. (Point to dots as you count.) One, two, three, four.



Group Practice: *Is this one? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

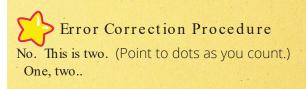
Note: Pay careful attention to Student #1's responses as you progress through all pages with red dots. Note their mastery on Student Progress Sheet.

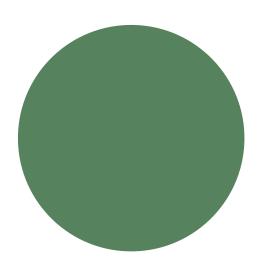




Group Practice: *Is this three? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

Note: Pay careful attention to Student #2's responses as you progress through all pages with green dots. Note their mastery on Student Progress Sheet.





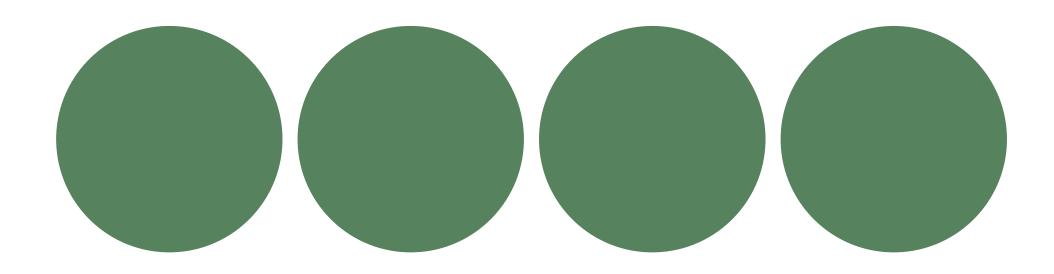
Group Practice: *Is this one? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

Note: Pay careful attention to Student #2's responses as you progress through all pages with green dots. Note their mastery on Student Progress Sheet.



Error Correction Procedure

Yes. This is one.. (Point to dot as you count.) One..



Grou[p Practice: *Is this two? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

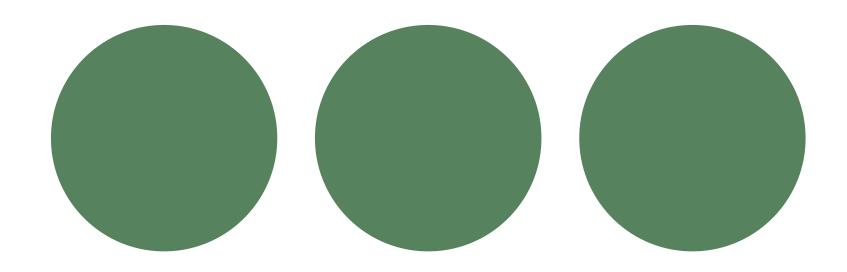
Show me.

Note: Pay careful attention to Student #2's responses as you progress through all pages with green dots. Note their mastery on Student Progress Sheet.



Error Correction Procedure

Yes. This is four. (Point to dots as you count.) One, two, three, four.



Group Practice: *Is this five? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

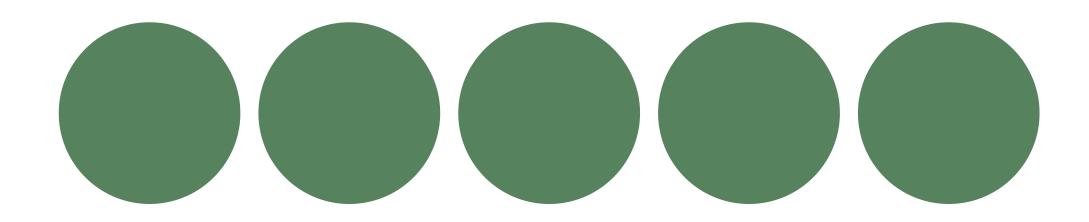
Show me.

Note: Pay careful attention to Student #2's responses as you progress through all pages with green dots. Note their mastery on Student Progress Sheet.



Error Correction Procedure

No. This is three. (Point to dots as you count.) One, two, three.



Group Practice: *Is this four? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

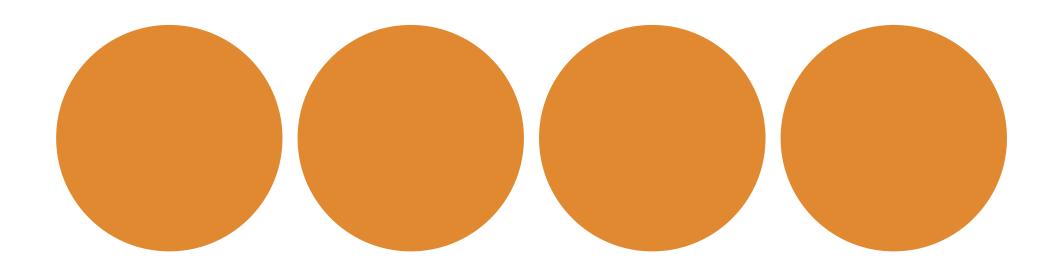
Show me.

Note: Pay careful attention to Student #2's responses as you progress through all pages with green dots. Note their mastery on Student Progress Sheet.



Error Correction Procedure

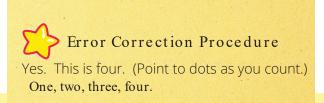
No. This is five. (Point to dots as you count.) One, two, three, four, five.

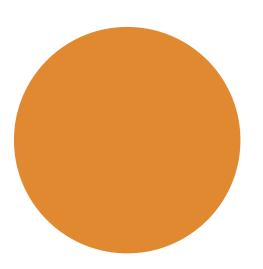


Group Practice: *Is this four? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

Show me.

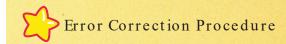
Note: Pay careful attention to Student #3's responses as you progress through all pages with orange dots. Note their mastery on Student Progress Sheet.



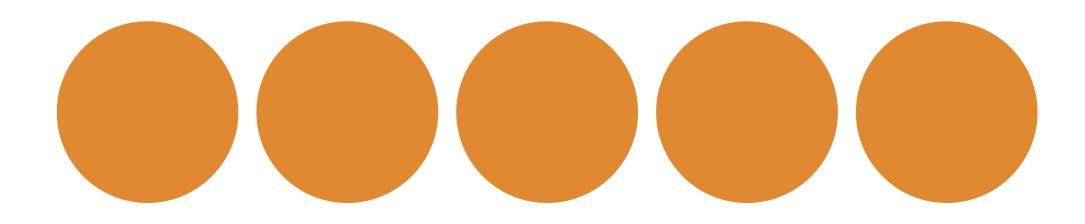


Group Practice: *Is this one? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

Note: Pay careful attention to Student #3's responses as you progress through all pages with orange dots. Note their mastery on Student Progress Sheet.

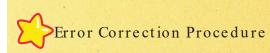


Yes. This is one. (Point to dot as you count.)
One.

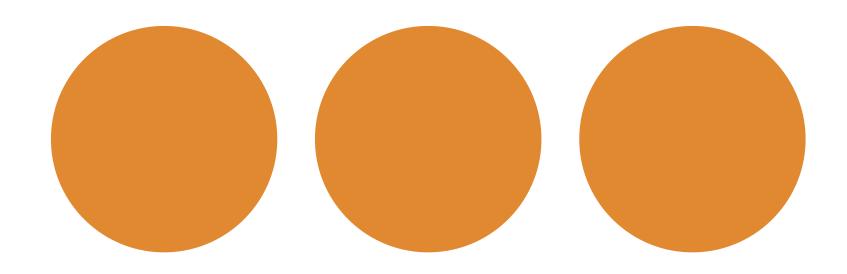


Group Practice: *Is this three? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

Note: Pay careful attention to Student #3's responses as you progress through all pages with orange dots. Note their mastery on Student Progress Sheet.

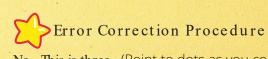


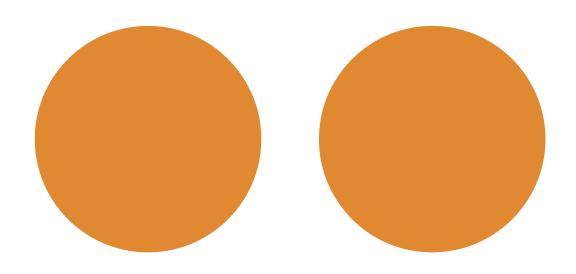
No. This is five. (Point to dots as you count.) One, two, three, four, five..



Group Practice: *Is this two? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.) *Show me.*

Note: Pay careful attention to Student #3's responses as you progress through all pages with orange dots. Note their mastery on Student Progress Sheet.

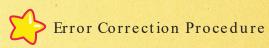




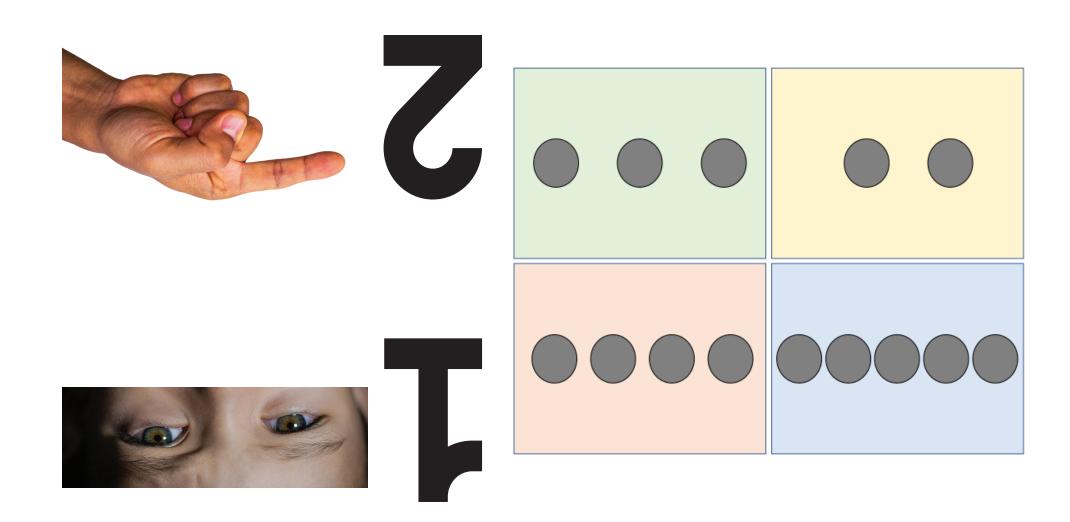
Group Practice: *Is this five? Thumbs up or thumbs down.* (Allow a few seconds for students to respond with hand on chest.)

Show me.

Note: Pay careful attention to Student #3's responses as you progress through all pages with orange dots. Note their mastery on Student Progress Sheet.



No. This is two. (Point to dots as you count.) One, two.



Skills: Counting groups of 1-5, Quick Identification of Quantities, 1-5 **Materials:** Eye Spy page with

quantities 1-5

Review Game: Eye Spy

Explain: We are going to play another counting game today. This is called Eye Spy. I'm going to say a number and you will find the group with that number of dots. First, you will find the group with just your eyes. Then, I will say, "Point to it" and you will point to the group with your finger. (Practice finding with their eyes then pointing when you give the cue "Point to it." Give each student one Eye Spy page.)









Group Practice:

Okay. Get ready to find the group with your eyes then point when I say, "Point to it."

- For the items below, pay close attention to Student 1's responses and mark them on the Student Progress Sheet: *Use your eyes to find 2. Point to it.* Continue with 4, 3, and 5.
- For the items below, pay close attention to Student 2's responses and mark them on the Student Progress Sheet: *Use your eyes to find 3. Point to it.* Continue with 5, 2, and 4.
- For the items below, pay close attention to Student 3's responses and mark them on the Student Progress Sheet: *Use your eyes to find 5.* Point to it. Continue with 4, 2, and 3.



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Joyful Discoveries Preschool Curriculum