

# Math 

(Last updated 9/1/2023)

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\begin{gathered}
\text { Math } \\
\text { Implementation } \\
\text { Guide }
\end{gathered}
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# Ohio Early Learning Standards Symbol Guide 

Student work within the lessons (warm-up and student practice) are labelled using the following symbols:


Approaching state standard

Students are learning and practicing prerequisite skills for the preschool standards.


Targets<br>state standard

Students are
learning and
practicing grade level skills that
relate directly to preschool
standards.


## Exceeds

 state standardStudents are learning and practicing advanced skills beyond preschool standards.

## Skill Progress Guide

Do CBA individually to determine initial starting point in skills.

Note- Everyone will start with Counting and Number Recognition


Do lesson for current skill 4-8 times

Complete Post Check in small group to determine readiness to advance to next skill:


## Repeat lesson on current skill 4-8 times

Repeat Post Check in small group to determine readiness to advance to next skill:


Intervention = Continue working on current skill one-on-one, but move on to next skill in small group

## Lesson Order by Skill



Targets state standard

Exceeds state standard

| 1. Counting and Number Recognition |  |  |  |
| :---: | :---: | :---: | :---: |
| 1-5 | Number Recognition without Counting 1-5 | 6-10 | 11-20 |
| 2. More Than, Less Than, Same |  |  |  |
| Same/Different |  |  | Less Than |

## 3. Addition

Sums of 2-4
Sums of 4-6
Sums of 6-10

## 4. Subtraction

Starting with 2-4
Starting with 4-6
Starting with 6-10

## 5. Patterning

Copy the Pattern
Extend the Pattern

## Create a Pattern

## Directions

1. Progress moves both vertically by skill (top to bottom) and horizontally by subskill (left to right).
2. Everyone begins at step 1-Counting and Number Recognition. Results of the CBA determine where to begin in subskills.
3. Complete all skills and subskills in order (top to bottom and left to right) with the exception of subskills that exceed state standards (noted in red).
4. Subskills that exceed state standards are considered enrichment and are noted in red above. Once all other skills and subskills within state standards have been completed, you may move to the enrichment lessons.
5. Pre and Post Checks (both done in small groups) direct each student's lesson progression.

# Curriculum 

 BasedAssessment
(print 1 for each student)
P R O J E C T R E
A D Y
C U R R I C U L U M - B A S E D
A S S E S S M E N T

## Part 1: Colors

Materials: Stuffed Animal, Colored Blocks: red, blue, yellow, green, black, purple, brown
Directions:

- Lay out the 7 blocks in a row in front of the stuffed animal.
- Say "We are going to play a game called, 'Give the Animal a Block.' This animal loves colorful blocks. He is going to ask you for a block and you will give it to him."
- The examiner then talks for the animal, asking for different colored blocks. Example- "Please give me a red block".
- Place the block back in front of the animal before asking for the next color.
- Continue until you have asked for all colors. (Record results below)



## Results:

# P R O J E C T REA D Y C U R R I C U L M - B A S E D <br> A S S E S S M E N T 

## Part 1: Colors

Interpreting the results
$\square$ If the student identifies none, or just a few, of the colors correctly:
$\square$ Engage child in Basic Concepts- Colors activities but also begin math sequence.
$\square$ If the student identifies almost all of the colors correctly:
$\square$ Engage child in Basic Concepts- Colors activities but also begin math sequence.
$\square$ If the student identifies all of the colors correctly:
$\square$ No need to engage child in Basic Concepts-Colors activities. Begin math sequence.

- Including a student who doesn't show a need for Basic Concepts- Colors work, but who does want to participate, is not harmful to that student or others in the small group.
- Consider using the Basic Concepts materials to teach the related standards below.


## Related Ohio Early Learning Standards

- 3B. Sorts and classifies objects by one or more attributes (e.g. color, size, shape).
- 3C. Recognizes, duplicates, and extends simple patterns (e.g. ABAB) using attributes such as color, shape, or size.

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P R O J E C T R E A D Y C U R R I C U L U M - B A S E D
    A S S E S S M E N T
```


## Part 2: Counting

Materials: 10 blocks
Directions:

- Put blocks in a row in front of the child and ask the child to count the blocks.
- Discontinue once the child is incorrect (i.e. Don't go on to 8 blocks if the child does not correctly count 5 .


## Records:



Starting with two blocks, place them in front of the child and ask them to count.

- Was the child able to count 2 blocks correctly?

If the child is unable to count the blocks, provide a model of the activity. "I am going to count the blocks (touch and count) 1, 2. 2 blocks." Next, ask the child to count the blocks.

- Was the child able to count 2 blocks correctly?
*If the child was not able to count 2 blocks after the model was given, discontinue Part 2: Counting. If the child was able to count 2 blocks, continue with the assessment.
*Do not continue to model counting the blocks.

- Was the child able to count 3 blocks correctly?



Was the child able to count 5 blocks correctly?


Was the child able to count 8 blocks correctly?


- Was the child able to count 10 blocks correctly?

Yes
No

Yes


## Results:

## Part 2: Counting

 Interpreting the results$\square$ If the student does not correctly count groups of 2,3 , and 5 blocks:
Begin math sequence at Lesson 1: Counting and Number Recognition 1-5, regardless of success with Part 3: Number Recognition
$\square$ If the student correctly counts groups of 2, 3, and 5 blocks:
U Use results of Part 3: Number Recognition to determine starting point in math sequence.
$\square$ If the student correctly counts groups of $2,3,5,8$, and 10 blocks:
U Use results of Part 3: Number Recognition to determine starting point in math sequence.

## Related Ohio Early Learning Standards

- 1A. Recognizes and communicates some number words.
- 1A. Recites the counting sequence to 20 by ones in order accurately.
- 1B. Uses number words or signs to count up to 10 objects, people, or events to determine how many.
- 1B. Understands that the last number spoken tells the number of objects counted.
P R O J E C T R E A D Y
C U R R I C U
L U M - B A S E D
A S S E S S M E N T


## Part 3: Number Recognition

Materials: Number cards: 1-10, little car
Directions:

- Line up number cards 1-5 in random order.
- Say "We are going to park the car on different numbers." Model driving and parking the car onto different cards without saying number names.
- Give the student the car. Say "Please park your car on the number 2." Record the results. Hand the car back to the child. Ask the child to park the car on the next number. Continue until you have asked the child to park the car on all 5 cards.
- If the child correctly identifies 3 or more of the numbers 1-5, reset the activity using number cards 6-10 and continue in the same way until you have asked the child to identify all numbers.



## Results:

$\qquad$ out of $\mathbf{1 0}$ numbers.

## Part 3: Number Recognition

## Interpreting the results

$\square$ If the student does not identify all numbers 1-5 correctly:
$\square$ Begin math sequence at Lesson 1: Counting and Number Recognition 1-5
$\square$ If the student identifies all numbers 1-5 correctly:
Begin math sequence at Lesson 2: Small Number Recognition without
Counting 1-5
$\square$ If the student identifies all numbers 6-10 correctly:
$\square$ Begin math sequence at Lesson 2: Small Number Recognition without Counting 1-5

Related Ohio Early Learning Standards

- 1D. Names some written numerals one to 10.

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P R O J E C T R E A D Y
C U R R I C U L U M - B A S E D
    A S S E S S M E N T
```


## Part 4: Subitize Small Quantities

Materials: 5 blocks

Directions:
*Subitizing is the ability to recognize small quantities fluently and accurately without counting aloud.

- Say "We are going to tell how many."
- Model identifying a quantity quickly without counting by setting out 5 blocks. Say "This is 5. Your turn to tell me how many."
- Set out 2 blocks. Ask "How many?"


## Records:

Place the group of block in front of the child and ask "How many?"


- Was the child able to identify 2 blocks without counting?

- Was the child able to identify 5 blocks without counting?

- Was the child able to identify 3 blocks without counting?


- Was the child able to identify 4 blocks without counting?
- Was the child able to identify 1 block without counting?


## Results:

This student was able to correctly subitize (identify the quantity quickly and without counting aloud)
$\qquad$

## Part 4: Subitize Small Quantities

## Interpreting the results

$\square$ If the student does not subitize all groups correctly:
$\square$ Begin math sequence at Lesson 2: Small Number Recognition without Counting 1-5
$\square$ If student does subitize all groups correctly:
$\square$ Begin math sequence at Lesson 3: Counting and Number Recognition 6-10

Related Ohio Early Learning Standards

- 1C. Identifies without counting small quantities of up to five items.


# P R O JE C T R E A D Y <br> C U R R I C U L U M - B A S E D <br> A S S E S S M E N T 

## Part 5: Shapes

Materials: Basic Shapes Puzzle: circle, square, triangle, rectangle, oval

Directions:

- Lay out the puzzle with all shapes out of their spots.
- Say "We are going to put this puzzle together. Which piece should we do first?"
- When child selects the first piece, ask "What is the name of that shape?"
- Continue asking the child to put a shape in the puzzle and name the shape.
- If the child has difficulty putting the puzzle together, ask them to name the shapes as you put them into place.


## Records:

CIRCLE

SQUARE


TRIANGLE


- = incorrect

RECTANGLE


## OVAL



## Results:

$\qquad$ out of 5 shapes.

## Part 5: Shapes

## Interpreting the results

$\square$ If the student identifies none, or just a few, of the shapes correctly:
$\square$ Engage child in Basic Concepts- Shapes activities but also begin math sequence.
$\square$ If the student identifies almost all of the shapes correctly:
$\square$ Engage child in Basic Concepts- Shapes activities but also begin math sequence.
$\square$ If the student identifies all of the shapes correctly:
$\square$ No need to engage child in Basic Concepts- Shapes activities. Begin math sequence.

- Including a student who doesn't show a need for Basic Concepts- Shapes work, but who does want to participate, is not harmful to that student or others in the small group.
- Consider using the Basic Concepts materials to teach the related standards below.


## Related Ohio Early Learning Standards

- 3B. Sorts and classifies objects by one or more attributes (e.g. color, size, shape).
- 3C. Recognizes, duplicates, and extends simple patterns (e.g. ABAB) using attributes such as color, shape, or size.
- 4A. Understands and uses names of shapes when identifying objects.
- 4A. Uses 2D and 3D shapes to represent real-world objects.
- 4A. Recognizes and compares shapes of different sizes and orientations.
- 4A. Uses shapes to create objects or pictures.
P R O J E C T R E A D Y
C U R R I C U L U M - B A S E D
A S S E S S M E N T


## Part 6: Name Recognition

Materials: 5 nametags: child's name, 1 name with same first letter, 3 other random names

Directions:

- Set out all 5 name tags so child can see them.
- Say "These are names of people in our class. Which name is yours?"


## Records:

- Was this child able to identify their name?

Yes
No

Notes:

## Part 7: Name Writing

Materials: Paper, pencil or crayon
Directions:

- Set the paper and pencil or crayon in front of the child.
- Say "Show me how you write your name."


## Records:

Notes:

```
P R O J E C T R E A D Y
C U R R I C U L U M - B A S E D
    A S S E S S M E N T
```


## Part 8: Alphabet Song

Materials: Stuffed Animal

Directions:

- Hand the stuffed animal to the child.
- Say "This Animal's favorite song is the ABC song. Please sing the ABC song for Animal."

Records:

- Was this child able to sing the alphabet song?

Notes:

## Part 6, 7, and 8 Interpreting the results

- Ability to perform these tasks indicates that a student has some understanding of these early preschool skills.
- All skills will be taught throughout the curriculum.


## Counting and Number Recognition (1-5)

## Directions:

- Administer the CBA individually for each student
- Assess results of Part 2: Counting and Part 3: Number recognition to determine where to start each student in the math sequence.

$$
\begin{gathered}
\text { Pre and Post } \\
\text { Checks } \\
\text { with } \\
\text { Lesson Plans } \\
\text { by Skill }
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# Counting and Number Recognition 

1. COUNTING\&NUMBERRECOGNITION

## Materials

- book, number line (1-10), number cards 1-5, 5 manipulatives (specific to the book) for each student, paper number cards 1-5 for each student


## Warm Up (30 seconds)

- "Let's count together!"

- Point to number line as you count 1-10. Encourage students to count with you.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on the pages that highlight 1-5. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat.
- "I'm going to count these (manipulatives)."
- Count 1. "I have 1(manipulative). This is the number 1" (put the number card under the manipulative to show how many). "What number? "
- I do: Continue modeling numbers 2, 3, 4, and 5 before moving on to student practice.
- We do: After counting and showing the numeral card for each group, say "Your turn. Count with me. Great! Now point to the number $\qquad$ ."


## 3. You do: Student Practice (3-5 minutes)

- Give each student one number (1-5) and a pile of 5 manipulatives.

- "Now you are going to count the number of (manipulatives) on the number card that I give you."
- Continuously provide number cards so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully name, count, and identify numbers $1,2,3,4$, and 5 .
- Wrap up: "Today we counted groups of 1, 2, 3, 4, and 5." Point to each number card as you say the number. "Thanks for helping me count and find those numbers."


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Counting and Number Recognition (1-5)

## Materials:

- 5 blocks for each student, number cards 1-5 for each student


## Directions:

- After administering Lesson 1: Counting and Number Recognition (1-5) 4-8 times, gather students within their regular small group for a post check assessment.
- Say, "We have been practicing counting and using numbers to tell how many. Today, you are going to show me what you have learned."
- Model by counting a group of 4 blocks and selecting the number card 4. Say, "I counted the blocks. There were 4 so I found the number $4 . "$
- "It's your turn now. I'm going to give you a group of blocks. You count them and then use the number cards to show me how many."
- Hand each student a small group of 1-5 blocks and paper number cards 1-5.
- Encourage students to count and find the correct number card so that everyone is working at the same time. Give each student 5 small groups so that each child has a turn to identify groups of $1,2,3,4$, and 5 blocks. Take note when students demonstrate an error.
- Record results for each student.
- Assess results to determine how each student should proceed.


## Counting and Number Recognition (1-5)

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No | Student Name Yes No  <br>     |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 2: Small Number Recognition without Counting 1-5.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Engage student in 4-8 more Lesson 1: Counting and Number Recognition 1-5 before reassessing with post check 2.

## Counting and Number Recognition (1-5)

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 2: Small Number Recognition without Counting 1-5.
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Move to one-on-one intervention in Lesson 1: Counting and Number
Recognition 1-5 and continue on to Lesson 2: Small Number Recognition without
Counting 1-5 in small group.

## Small Number Recognition without Counting (1-5)

## Directions:

- Administer the CBA individually for each student
- Assess results of Part 4: Subitize Small Quantities to determine where to start each student in the math sequence.

2. SM AL L NU M B ER RECOGNITION WI TH OUT

C OUNTING(1-5)

## Materials

- book, number line (1-10), 5 manipulative (specific to the book)


## Warm Up (30 seconds)

- "Let's count together!"

- Point to number line as you count 1-10. Encourage students to count with you.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages. Display the number cards as you read. Point out the numbers as they appear in the book.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives.
- Set out 2 manipulatives.
- "Sometimes when there is a really small group of things, I don't even need to count them to know how many are there. I can just look and tell how many."
- Point to manipulative. This is 2. "I have 2 (manipulatives). I didn't even count."
- I do: Continue modeling with groups 1, 2, 3, 4, and 5 (but not in order) before moving on to student practice.
- We do: After modeling each group, encourage students to say the number of items with you. For example- "Four! There are four (manipulatives.)"


## 3. You do: Student Practice (3-5 minutes)

- "Now it is your turn to tell me how many without counting."

- Set out groups of 1-5 (not in order). Encourage students to identify the number of objects Take note of which students could quickly identify groups of $1,2,3,4$, and 5 . Focus on 1-3 if this is hard.
- Wrap up: Today we learned how to recognize groups of objects quickly. We told how many without counting out loud. Great job!


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Small Number Recognition without Counting (1-5)

## Materials:

- 5 blocks, number cards 1-5 for each student


## Directions:

- After administering Lesson 2: Small Number Recognition without Counting (1-5) 4-8 times, gather students within their regular small group for a post check assessment.
- Say, "We have been practicing telling how many quickly."
- Model by setting out a group of 3 blocks and selecting the number card 3. Say, "I saw that there were 3 so I found the number card 3."
- Set out number cards 1-5 in front of each child. "It's your turn now. I'm going to set out a group of blocks. You will look and then quickly show me how many by pointing to the right number card. Remember, you aren't going to count aloud."
- Set out a group of blocks (1-5) and ask students to use their number cards to quickly show you how many.
- Set out different number groups until you have asked students to quickly identify how many in small groups of $1,2,3,4$, and 5 manipulatives. Take note when students demonstrate an error.
- Record results for each student.
- Assess results to determine how each student should proceed.


## Small Number Recognition without Counting (1-5)

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 3: Counting and Number Recognition 6-10 in small group.
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 2: Small Number Recognition
without Counting 1-5 before reassessing with post check 2.

## Small Number Recognition without Counting (1-5)

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:

- If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 3: Counting and Number Recognition 6-10.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
$\square$
Move to one-on-one intervention in Lesson 2: Small Number Recognition without Counting 1-5 and continue on to Lesson 3: Counting and Number Recognition 6-10 in small group.


## Counting and Number Recognition (6-10)

## Materials:

- 10 manipulatives for each student, number cards 6-10 for each student


## Directions:

- Note- Some students were already assessed on their knowledge of numerals 6-10 on the CBA. All students will do this pre check in their small group regardless.
- Say, "We know that numbers tell us how many. We can count and we can use numbers to show how many. Today, you are going to show me what you know about counting and numbers."
- Model by showing students a group of 6 manipulatives. Count the manipulatives and place the number card 6 near them. Say, "I counted how many. I saw that there were six so I put the number card for six right here."
- Say, "Now it's your turn." Hand each child a group of manipulatives and number cards for 6-10. Encourage students to count and find the corresponding number card.
- Keep handing out groups of manipulatives so that all students are working at the same time. Continue until all students have had a chance to demonstrate their ability to count and label with the correct number groups of 6, 7, 8, 9, and 10.
- Record results on the Pre Check form.
- Assess results to decide how to proceed.


## Counting and Number Recognition (6-10)

Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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| Student Name | Yes | No |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square A s s e s s$ student with pre check for Lesson 4: Same/Different.
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$
Engage child in 4-8 lessons of Lesson 3: Counting and Number
Recognition 6-10.
3. COUNTING \& NUMBER RECOGNITION
( $6-10$ )

## Materials

- book, number line (1-20), number cards 6-10, 10 manipulative (specific to the book) for each student, paper number cards 1-10 for each student


## Warm Up (30 seconds)

- "Let's count together!"
- Point to number line as you count 1-20. Encourage students to count with you.



## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author.
- "We have been learning all about (unit theme.)"
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages. Display the number cards as you read. Point out the numbers as they appear in the book.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives.
- "I'm going to count these (name of manipulatives.)" You count with me!
- Count 6. "I have 6 (manipulative.) This is the number 6" (put the number card under the manipulative to show how many). What number?
- Ido: Continue modeling numbers 7, 8, 9, and 10 before moving on to student practice.
- We do: After you counting and showing the numeral card for each group, say "Your turn. Count with me. Great! Now point to the number $\qquad$ ."


## 3. You do: Student Practice (3-5 minutes)

- Give each student one number (6-10) and a pile of 10 manipulatives.
- "Now you are going to count the number of (manipulatives) on the number card
 that I give you."
- Continuously provide number cards so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully name, count, and identify numbers $6,7,8,9$, and 10.
- Wrap up: "Today we counted up to ten manipulatives! That was a lot of counting. We can count really big groups!"


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Counting and Number Recognition (6-10)

## Materials:

- 10 blocks for each student, number cards 6-10 for each student


## Directions:

- After administering Lesson 3: Counting and Number Recognition (6-10) 4-8 times, gather students within their regular small group for a post check assessment.
- Say, "We have been practicing counting big groups! We've also been practicing finding big numbers, all the way up to 10 ! Today, you are going to show me what you know about counting and numbers."
- Model by showing students a group of 6 blocks. Count the blocks and place the number card 6 near them. Say, "I counted how many. I saw that there were six so I put the number card for six right here."
- Say, "Now it's your turn." Hand each child a group of blocks and number cards for 6-10. Encourage students to count and find the corresponding number card.
- Keep handing out groups of blocks so that all students are working at the same time. Continue until all students have had a chance to demonstrate their ability to count and label with the correct number groups of $6,7,8,9$ and 10 .
- Record results on the Post Check form.
- Assess results to decide how to proceed.


## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  | Student Name Yes No  <br>     |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Assess student with pre check for Lesson 4: Same/Different.
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 3: Counting and Number Recognition 6-10 before reassessing with post check 2 .

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Assess student with pre check for Lesson 4: Same/Different.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 3: Counting and Number Recognition 6-10 and continue on to Lesson 4: Same/Different in small group.

$$
\begin{aligned}
& \text { More Than, } \\
& \text { Less Than, } \\
& \text { Same }
\end{aligned}
$$

Same/Different

## Materials:

- 20 blocks, paper $\triangle$ cards for each child


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can use other words to tell about groups, too. Today, you are going to show me what you know about the words same and different."
- Model by showing students two groups with 3 manipulatives in each group. Say, "These groups are the same. They both have three. I am going to hold up this sign to show that they are the same." Model holding up equals sign.
- Say, "Now it's your turn." Hand each child paper | = cards. "You are going to show me this sign (hold up |
| :---: | paper sign) if the groups are the same."
- Set out the following groups and encourage students to use paper signs to indicate when they are the same.
- 2 and 6
- 1 and 1
- 4 and 4
- 5 and 1
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Same/Different

Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess child with pre check for Lesson 5: More Than.
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Engage child in 4-8 lessons of Lesson 4: Same/Different.

## Materials

- book, 10 manipulatives (specific to the book)


## Warm Up (1 minute)



- Set out a group of four manipulatives. Say, "I'm going to do something to these (manipulatives). I want you to tell me if I the group is the same or different when I'm done."
- Take away a manipulative and ask students, "Is it the same or different?"
- "Yes. It's different. I took one away. I changed the group by taking one away. It is different now."
- Start again with another group of manipulatives (no more than 5). Repeat process. This time add one manipulative. Point out that the group is different now.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask something they remember.
- "We have been learning all about (unit theme.)"
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages. Point out numbers in book.


## 2. Model the Activity (4-5 minutes)

- Show students the manipulatives. Name the manipulatives. Have students say the name(s).
- Set out two groups with 3 manipulatives in each.
- "I made two groups of (manipulative). Let's count each group. 1,2,3. There are 3 (manipulatives) in this group. 1,2,3. There are three (manipulatives) in this group. They both have three. They have the SAME number of (manipulatives)."
- Continue modeling same quantity groups with 2 and 4 items, counting and emphasizing they are the SAME.
- Set out a group with 1 (manipulative) and a group with 5 (manipulatives). Count each group. "1. There is one (manipulative) in this group. 1,2,3,4,5. There are five (manipulatives) in this group. That is not the same. These groups are DIFFERENT.
- I do: Continue modeling different groups (1:4 and 2:5) before moving on to student practice.
- We do: After each model, encourage children to say "same" or "different."


## 3. You do: Student Practice (2-3 minutes)

- Set out two groups of manipulatives that are the same. Say, "Let's figure out if these groups are the same or different. Let's count to find out."
- Count both groups, encouraging students to count with you. Ask, "Are these the same or different?" Pause to allow students to answer. Emphasize that you counted the same number in both groups so they are the same.
- Continue setting out groups that are the same and groups that are different. Encourage all students to count together and identify the groups as same or different.
- Wrap up: Today we told if two groups were the same (alike) or different (not alike.) Thanks for doing that work with me.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Same/Different

## Materials:

- 20 manipulatives, paper $\square$ and 9 cards for each child


## Directions:

- Say, "We have been practicing telling if groups are the same or if they are different. Today, you are going to show me that you know if groups are the same or if they're different."
- Model by showing students two groups with 3 manipulatives in each group. Say, "These groups are the same. They both have three. I am going to hold up this sign to show that they are the same." Model holding up equals sign.
- Say, "Now it's your turn." Hand each child paper Same/Different cards. "You are going to show me this sign (hold up equals sign) if the groups are the same and this sign (hold up not equals sign) if they are different."
- Set out the following groups and encourage students to show whether they are Same or Different.
- 5 and 5
- 3 and 1
- 3 and 3
- 6 and 1
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.


## Same/Different

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  | Student Name Yes No  <br>     |  |  |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 5: More Than in small group.
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 4: Same/Different before reassessing with post check 2.

## Same/Different

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 5: More Than in small group.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 4: Same/Different and continue on to Lesson 5: More Than in small group.

## More Than

## Materials:

- 20 manipulatives, paper
more cards for each child


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can use other words to tell about groups, too. Today, you are going to show me what you know about the words more."
- Model by showing students one group of manipulative with 6 and one group with 2. Say, "These groups are the different. This one (point to group with 6) has more. I am going to hold up this sign that this group is more." Model holding up more sign.
- Say, "Now it's your turn." Hand each child paper more cards. "You are going to show me this sign (hold up more sign) if I point to the group with more. If I point to the group that is NOT more than, don't hold up the sign."
- Set out the following groups and point to the group that is underlined and bold.
- 2 and 6
- 5 and 3
- 4 and 7
- 6 and $\underline{1}$
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## More Than

## Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 6: Less Than.
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Engage child in 4-8 lessons of Lesson 5: More Than.

## Materials

- book, 10 manipulatives (specific to the book)


## Warm Up (30 seconds)



- Set out a group of four manipulatives. Say, "I'm going to do something to these (manipulatives). I want you to tell me if I the group is the same or different when I'm done."
- Take away a manipulative and ask students, "Is it the same or different?"
- "Yes. It's different. I took one away. I changed the group by taking one away. It is different now."
- Start again with another group of manipulatives (no more than 5). Repeat process. This time add one manipulative. Point out that the group is different now


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask something they remember
- "We have been learning all about (unit theme.)"
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages. Point out numbers in book.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives. Have students say names).
- Set out one group with 5 manipulative and one group with 1 manipulative.
- "I made two groups of (manipulatives). Are these groups the same or different? They're different. One group has more than the other. Let's count to find out which has more."
- Point to group with 5. Count. "1,2,3,4,5. There are five (manipulatives) in this group."
- Point to group with 1. Count. "1. There is one (manipulative) in this group."
- Point to group with five and say, "This group has more. More means a larger amount. 5 is more than 1."
- Ido: Continue modeling with groups of different amounts (2:7 and 4:6) before moving on to student practice.
- We do: After each model, encourage students to point to the larger group and say, "more."


## 3. You do: Student Practice (3-5 minutes)

- Set out two groups of manipulatives, one with 6 manipulative and one with 2 manipulatives. Say, "Let's work together to figure out which group has more. Let's count to find out."
- Count both groups, encouraging students to count with you. Ask, "Which has more?" Pause to allow students to answer. Emphasize that 6 is more than 2.
- Continue setting out groups of different quantities. Encourage all students to count together and identify the group that has more.
- Wrap up: Today we told which group had more. Remember, more means a bigger amount. Thanks for helping me to find the group with the bigger amount.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## More Than

## Materials:

- 20 blocks, paper
more cards for each child


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can use other words to tell about groups, too. Today, you are going to show me what you know about the words more than."
- Model by showing students one group of manipulatives with 7 and one group with 3. Say, "These groups are the different. This one (point to group with 7) has more. I am going to hold up this sign that this group is more." Model holding up more sign.
- Say, "Now it's your turn." Hand each child paper more cards. "You are going to show me this sign (hold up more sign) if I point to the group with more. If I point to a group that is NOT more than, don't hold up the sign."
- Set out the following groups and point to the group that is underlined and bold.
- 8 and 3
- 6 and $\mathbf{2}$
- 4 and 6
- $\underline{7}$ and 1
- Record results on the Post check form.
- Assess results to decide how to proceed in math sequence.


## More Than

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No | Student Name Yes No  <br>     |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 6: Less Than.
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 5: More Than before reassessing with post check 2 .

## More Than

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 6: Less Than.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 5: More Than and continue on to Lesson 6: Less Than in small group.

## Less Than

## Materials:

- 20 manipulatives, paper
less cards for each child


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can use other words to tell about groups, too. Today, you are going to show me what you know about the words less."
- Model by showing students one group of manipulatives with 7 and one group with 4. Say, "These groups are the different. This one (point to group with 4) has less. I am going to hold up this sign to show that this group is less." Model holding up less sign.
- Say, "Now it's your turn." Hand each child paper less cards. "You are going to show me this sign (hold up less sign) if I point to the group with less. If I point to the group that is NOT less than, don't hold up the sign."
- Set out the following groups and point to the group that is underlined and bold.
- 5 and 8
- 6 and 1
- $\underline{2}$ and 9
- 3 and 6
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Less Than

Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square A s s e s s$ student in pre check for Lesson 7: Addition (sums of 2-4).
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$
Engage child in 4-8 lessons of Lesson 6: Less Than.

## Materials

- book, 10 manipulatives (specific to the book)


## Warm Up (30 seconds)

- Set out two groups of four manipulatives each. Ask, "Are these groups the same or different? Count to determine they are the same.
- Say, "Now I'm going to do something to one of these groups. Take away two manipulatives from one of the groups. Ask "Are they still the same? No. They are different. Now which has more?"
- Count to determine which group is "more than."
- Start again with another group of manipulatives (no more than 5). Repeat process. This time add one manipulative. Point out that the group is different now. Count to see which group is "more than" now.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask something they remember
- "We have been learning all about (unit theme.)"
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages. Point out numbers in book.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives. Have students say name(s).
- Set out one group with 6 manipulatives and one group with 1 manipulative.
- "I made two groups of (manipulatives). Are these groups the same or different? They're different. One group has more and one has less than the other."
- Point to group with 6. Count. "1,2,3,4,5,6. There are six (manipulatives) in this group."
- Point to group with 1. Count. "1. There is one (manipulative) in this group."
- Point to group with 1 and say, "This group has less. 1 is less than 6. Less means a smaller amount."
- Ido: Continue modeling with groups of different amounts (2:7 and 4:6) before moving on to student practice. Count to determine which group is "less than."
- We do: After each model, encourage students to point to the group with the smaller amount and say, "less."


## 3. You do: Student Practice (3-5 minutes)

- Set out two groups of manipulatives, one with 4 manipulatives and one with 2 manipulatives. Say, "Let's work together to figure out which group has less. Let's count to find out."
- Count both groups, encouraging students to count with you. Ask, "Which has less?" Pause to allow students to answer. Emphasize that 2 is less than 4.
- Continue setting out groups of different quantities. Encourage all students to count together and identify the group that has less.
- Wrap up: Today we learned that a group that has less is smaller. It doesn't have as many as the other group. Thank you for helping me to find the group that has less.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Less Than

## Materials:

- 20 blocks, paper
less cards for each child


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can use other words to tell about groups, too. Today, you are going to show me what you know about the word less."
- Model by showing students one group of manipulatives with 7 and one group with 4. Say, "These groups are the different. This one (point to group with 4) has less. I am going to hold up this sign to show that this group is less." Model holding up less sign.
- Say, "Now it's your turn." Hand each child paper less cards. "You are going to show me this sign (hold up less sign) if I point to the group with less. If I point to the group that is NOT less than, don't hold up the sign."
- Set out the following groups and point to the group that is underlined and bold.
- $\underline{3}$ and 6
- 7 and 1
- 2 and 8
- 4 and $\underline{9}$
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.


## Less Than

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  |  |  |  |
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|  |  |  |  | Student Name Yes No  <br>     |  |  |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 7: Addition (Sums of 2-4)
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 6: Less Than before reassessing with post check 2.

## Less Than

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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| Student Name | Yes | No |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 7: Addition (Sums of 2-4.)
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 6: Less Than and continue on to Lesson 7: Addition (Sums of 2-4) in small group.

## Addition

## Addition: Sums of 2-4

## Materials:

- 4 blocks for each student, paper number cards (1-4) for each student, paper + and = signs


## Directions:

- Say, "We know that numbers tell us how many. We can count to find out how many and we can use numbers to show how many. We can also put small groups together to make bigger groups. This is called addition. Today you are going to show me what you know about addition."
- Model by showing students one group of blocks with 1 and one group with 2. Say, "This groups has 1 and this group has 2." Place number cards for 1 and 2 under the groups. "Now I am going to add these groups." Place addition sign between number cards and push groups together. Place equals sign and model counting group. "I added 1 plus 2 and now I have 3. 1 plus 2 equals 3."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper + and = signs. "I am going to give you two small groups. You are going to use the number cards to show how many in each group. Then you are going to add the groups to make a bigger group."
- Give each child two small groups (make sure they add up to 2-4). Encourage the children to count each small group, use the number cards to tell how many in each, add the groups, and use the + and $=$ signs to complete the addition sentence.
- Continue until each child has had a chance to add groups that equal 2,3 , and 4 .
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Addition: Sums of 2-4

## Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess students with pre check for Lesson 8: Addition (Sums of 4-6).
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Engage child in 4-8 lessons of Lesson 7: Addition: Sums of 2-4.

## Materials

- book, number line (1-20), paper number cards 1-4, addition and equal sign, 4 manipulatives (specific to the book) for each student


## Warm Up (30 seconds)

- "When we count, there is always a number that comes next. We are going to count together. When I stop, you will tell me what number comes next. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number comes next?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on a few pages. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to add. When you add, you put small groups together to make one big group."
- Set out one group of 1 and one group of 2. "Let's count these groups." Count each group and label with the correct number card. "Now let's add these groups together." Set the addition sign between the number cards. "This sign means add. We say plus when we see it." Push the two groups together.
- "We added the group of 1 and the group of 2. Let's find out how many that is together." Count the group. Add the equal sign. Say, "this sign means altogether. We say equals when we see it." Place the number card for 3 to complete the number sentence. Read " $1+2=3$."
- I do: Continue modeling by adding groups of $1+1$, and $1+3$.
- We do: After each model, encourage the students to read the whole addition sentence with you.


## 3. You do: Student Practice (3-5 minutes)

- Give each student two small groups of manipulatives, the paper numeral cards (1-4), paper + and = signs.
- "Now you are going to add. First count each small group and use the number cards to tell how many in each group. Then put the groups together to add. Don't forget to count the big group to find out how many there are altogether."
- Continuously provide two small groups of manipulatives so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully work through the multi-step process of addition.
- Wrap up: Today we practiced adding. When we add, we put small groups together to make a bigger group.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Addition: Sums of 2-4

## Materials:

- 4 blocks for each student, paper number cards (1-4) for each student, paper + and = signs


## Directions:

- Say, "We have been practicing putting two small groups together to make one bigger group. This is called addition. Today you are going to show me what you know about addition."
- Model by showing students one group of manipulatives with 1 and one group with 2. Say, "This groups has 1 and this group has 2." Place number cards for 1 and 2 under the groups. "Now I am going to add these groups." Place addition sign between number cards and push groups together. Place equals sign and model counting group. "I added 1 plus 2 and now I have 3. 1 plus 2 equals 3."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper + and = signs. "I am going to give you two small groups. You are going to use the number cards to show how many in each group. Then you are going to add the groups to make a bigger group."
- Give each child two small groups (make sure they add up to 2-4). Encourage the children to count each small group, use the number cards to tell how many in each, add the groups, and use the + and $=$ signs to complete the addition sentence.
- Continue until each child has had a chance to add groups that equal 2,3 , and 4 .
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.


## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  | Student Name Yes No  <br>     |  |  |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student in pre check for Lesson 8: Addition (Sums of 4-6.)
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Engage student in 4-8 more Lesson 7: Addition (Sums of 2-4) before reassessing with post check 2.

## Addition: Sums of 2-4

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Assess student with pre check for Lesson 8: Addition (Sums of 4-6.)
$\square$ If the student doesn't answer with 100\% accuracy:
Move to one-on-one intervention in Lesson 7: Addition (Sums of 2-4) and continue on to Lesson 8: Addition (Sums of 4-6) in small group.

## Addition: Sums of 4-6

## Materials:

- 6 blocks for each student, paper number cards (1-6) for each student, paper + and = signs


## Directions:

- Say, "We have been adding two small groups to make a bigger group. Today you are going to show me what you know about addition again, but this time we are going to use bigger numbers."
- Model by showing students one group of manipulatives with 3 and one group with 2. Say, "This groups has 3 and this group has 2." Place number cards for 3 and 2 under the groups. "Now I am going to add these groups." Place addition sign between number cards and push groups together. Place equals sign and model counting group. "I added 3 plus 2 and now I have 5. 3 plus 2 equals 5."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper + and = signs. "I am going to give you two small groups. You are going to use the number cards to show how many in each group. Then you are going to add the groups to make a bigger group."
- Give each child two small groups (make sure they add up to 4-6). Encourage the children to count each small group, use the number cards to tell how many in each, add the groups, and use the + and $=$ signs to complete the addition sentence.
- Continue until each child has had a chance to add groups that equal 4,5 , and 6 .
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Addition: Sums of 4-6

## Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 9: Subtraction (Starting with 2-4). $\square$ If the student doesn't answer with 100\% accuracy:

Engage child in 4-8 lessons of Lesson 8: Addition (Sums of 4-6.)

```
    8.A D D l T l O N
S u m s o f 4 - 6 )
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## Materials

- book, number line (1-20), 4 manipulatives (specific to the book) for each student, paper number cards 1-4 for each student, paper addition and equal sign for each student


## Warm Up (30 seconds)

- "When we count, there is always a number that comes next. We are going to count together. When I stop, you will tell me what number comes next. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number comes next?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author . Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on the pages that highlight 1-6. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to add. When you add, you put small groups together to make one big group."
- Set out one group of 2 and one group of 3. "Let's count these groups." Count each group and label with the correct number card. "Now let's add these groups together." Set the addition sign between the number cards. Push the two groups together.
- "We added the group of 2 and the group of 3. Let's find out how many that is together." Count the group. Add the equal sign and place the number card for 5 to complete the number sentence. Read " $2+3$ = 5."
- I do: Continue modeling by adding groups of $4+2$, and $1+4$.
- We do: Encourage children to count each small group with you. After each model, have students read the entire addition sentence.


## 3. You do: Student Practice (3-5 minutes)

- Give each student two small groups of manipulatives, the paper numeral cards (1-6), paper + and = signs.
- "Now you are going to add. First count each small group and use the number cards to tell how many in each group. Then put the groups together to add. Don't forget to count the big group to find out how many there are altogether."
- Continuously provide two small groups of manipulatives so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully work through the multi-step process of addition.
- Wrap up: Today we added with bigger numbers. We took two groups with big amounts and put them together to make a really big group. Thanks for helping me with that big addition.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Addition: Sums of 4-6

## Materials:

- 6 blocks for each student, paper number cards (1-6) for each student, paper + and = signs


## Directions:

- Say, "We have been practicing putting two smaller groups together to make one bigger group. This is called addition. Today you are going to show me what you know about addition."
- Model by showing students one group of blocks with 4 and one group with 2. Say, "This groups has 4 and this group has 2." Place number cards for 4 and 2 under the groups. "Now I am going to add these groups." Place addition sign between number cards and push groups together. Place equals sign and model counting group. "I added 4 plus 2 and now I have 6. 4 plus 2 equals 6."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper + and = signs. "I am going to give you two small groups. You are going to use the number cards to show how many in each group. Then you are going to add the groups to make a bigger group."
- Give each child two small groups (make sure they add up to 4-6). Encourage the children to count each small group, use the number cards to tell how many in each, add the groups, and use the + and $=$ signs to complete the addition sentence.
- Continue until each child has had a chance to add groups that equal 4,5 , and 6 .
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Addition: Sums of 4-6

## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  | Student Name Yes No  <br>     |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 9: Subtraction (Starting with of 2-4.)
$\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Engage student in 4-8 more Lesson 8: Addition (Sums of 4-6) before reassessing with post check 2.

## Addition: Sums of 4-6

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 9: Subtraction (Starting with 2-4.)
$\square$ If the student doesn't answer with $100 \%$ accuracy:
$\square$ Move to one-on-one intervention in Lesson 8: Addition (Sums of 4-6) and continue on to Lesson 9: Subtraction (Starting with 2-4) in small group.

## Subtraction

## Subtraction: Starting with 2-4

## Materials:

- 4 blocks for each student, paper number cards (1-4) for each student, paper - and = signs


## Directions:

- Say, "We know that we can put small groups together to make a bigger group. That's called addition. We can also start with a bigger group and take away to make a small group. This is called subtraction. Today you are going to show me what you know about subtraction."
- Model by showing students a group of 3 manipulatives. Say, "This group has 3." Place number cards for 3 under the group. "Now I am going to take away 1." Place subtraction sign and number card for 1. Place equals sign and model counting group. "I started with 3 and took away 1. How many do I have now? Two. 3 minus 1 equals 2."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper - and = signs. "I am going to give you a big group. You are going to use the number card to show how many. Then I will tell you how many to take away to do subtraction."
- Give each child a big group (2-4). Encourage the children to count big group and use the number card to tell how many. "Now everyone will take away 1." Encourage the children to complete the subtraction sentence with the cards and take away 1 to find the answer.
- Continue giving out group and asking students to take away one until each child has had a chance to start with groups of 2,3 , and 4 .
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Subtraction: Starting with 2-4

Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:

- If the student answers with 100\% accuracy:
$\square$ Assess student on pre check for Lesson 10: Subtraction (Starting with 4-6). $\square$ If the student doesn't answer with 100\% accuracy:
$\square$ Engage child in 4-8 lessons of Lesson 9: Subtraction: Starting with 2-4.


## Materials

- book, number line, 4 manipulatives (specific to the book) for each student, paper numbers 1-4, paper + and = signs


## Warm Up (30 seconds)

- "When we count, there is always a number that comes before. We are going to count together. When I stop, you will tell me what number came before. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number came before?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on the pages that highlight 1-4. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to subtract. When you subtract, you start with a big group and take some away to make smaller groups."
- Set out one group of 3. "Let's count these (name of manipulative.)" Count and label with the number card 3. "Now let's subtract, or take away 3." Set the subtraction sign and number card 3 out to make 3-3. Take away (hide behind you) all 3 manipulatives as you count 1, 2, 3.
- "We started with 3 then we took away 3. Let's find out how many are left." Point to the empty space where the manipulatives used to be. "None. There are no more!" Add the equal sign to the subtraction sentence and place the number card for 0 to complete the number sentence.
- I do: Continue modeling by subtracting groups of 4-2, and 3-2.
- We do: Encourage children to count groups with you. After each model, encourage children to read entire subtraction sentence.


## 3. You do: Student Practice (3-5 minutes)



- Give each student one small group of manipulatives (no more than 4) then place the - sign and the number card 2 under the group. Also give each student the paper numeral cards (1-4.)
- "Now you are going to subtract. First count your large group. Find the number with your cards."
- "Now everyone subtract 2. How many are left?" Encourage students to use number cards and = sign to complete and read the number sentence.
- Continuously provide a small groups of manipulatives and place the - sign and a number card so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could work through the multi-step process of subtraction.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Subtraction: Starting with 2-4

## Materials:

- 4 blocks for each student, paper number cards (1-4) for each student, paper - and = signs


## Directions:

- Say, "We have been practicing starting with a big group and taking away to make a smaller group. This is called subtraction. Today you are going to show me what you learned about subtraction."
- Model by showing students a group of 4 manipulatives. Say, "This group has 4." Place number cards for 4 under the group. "Now I am going to take away 2." Place subtraction sign and number card for 2. Place equals sign and model counting group. "I started with 4 and took away 2. How many do I have now? Two. 4 minus 2 equals 2."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper - and = signs. "I am going to give you a big group. You are going to use the number card to show how many. Then I will tell you how many to take away to do subtraction."
- Give each child a big group (2-4). Encourage the children to count big group and use the number card to tell how many. "Now everyone will take away 1." Encourage the children to complete the subtraction sentence with the cards and take away 1 to find the answer.
- Continue giving out group and asking students to take away one until each child has had a chance to start with groups of 2,3 , and 4 .
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.


## Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No |  |  |  |  |
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|  |  |  |  | Student Name Yes No  <br>     |  |  |

Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Assess student with pre Check for Lesson 10: Subtraction (Starting with 4-6).
$\square$ If the student doesn't answer with 100\% accuracy:
Engage student in 4-8 more Lesson 9: Subtraction (Starting with 2-4) before reassessing with post check 2.

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 10: Subtraction (Starting with 4-6.)
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 9: Subtraction (Starting with 2-4) and continue on to Lesson 10: Subtraction (Starting with 4-6) in small group.

## Subtraction: Starting with 4-6

## Materials:

- 6 blocks for each student, paper number cards (1-6) for each student, paper - and = signs


## Directions:

- Say, "We have been practicing subtraction. Today you are going to show me what you know about subtraction with bigger numbers."
- Model by showing students a group of 5 manipulatives. Say, "This group has 5." Place number cards for 5 under the group. "Now I am going to take away 2." Place subtraction sign and number card for 2. Place equals sign and model counting group. "I started with 5 and took away 2. How many do I have now? Three. 5 minus 2 equals 3."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper - and = signs. "I am going to give you a big group. You are going to use the number card to show how many. Then I will tell you how many to take away to do subtraction."
- Give each child a big group (4-6). Encourage the children to count the big group and use the number card to tell how many. "Now everyone will take away 1." Encourage the children to complete the subtraction sentence with the cards and take away 1 to find the answer.
- Continue giving out groups and asking students to take away a certain number until each child has had a chance to start with groups of 2,3 , and 4 .
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Subtraction: Starting with 4-6

Pre Check Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:Assess student on pre check for Lesson 11: Copy the Pattern.
$\square$ If the student doesn't answer with 100\% accuracy:
Engage child in 4-8 lessons of Lesson 10: Subtraction: Starting with 4-6.


## Materials

- book, number line, 6 manipulatives (specific to the book) for each student, paper numbers 1-6, paper + and = signs


## Warm Up (30 seconds)

- "When we count, there is always a number that comes before. We are going to count together. When I stop, you will tell me what number came before. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number came before?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on the pages that highlight 1-6. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to subtract. When you subtract, you start with a big group and take some away to make smaller groups."
- Set out one group of 6. "Let's count these (name of manipulative.)" Count and label with the number card 6. "Now let's subtract, or take away 4." Set the subtraction sign and number card 4 out to make 6-4. Take away (hide behind you) 4 manipulatives as you count 1, 2.
- "We started with 6 then we took away 4. Let's find out how many are left." Count the remaining manipulatives. "Two. There are two left!" Add the equal sign to the subtraction sentence and place the number card for 2 to complete the number sentence.
- Ido: Continue modeling by subtracting groups of 5-2, 4-3, and 5-5 (emphasize "none."
- We do: Encourage children to count groups with you. After each model, encourage children to read entire subtraction sentence.


## 3. You do: Student Practice (3-5 minutes)



- Give each student one small group of manipulatives (no more than 6) then place the - sign and the number card 2 under the group. Also give each student the paper numeral cards (1-6.)
- "Now you are going to subtract. First count your large group. Find the number with your cards."
- "Now everyone subtract 2. How many are left?" Encourage students to use number cards and = sign to complete and read the number sentence.
- Continuously provide a small groups of manipulatives and place the - sign and a number card so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could work through the multi-step process of subtraction.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Subtraction: Starting with 4-6

## Materials:

- 6 blocks for each student, paper number cards (1-6) for each student, paper - and = signs


## Directions:

- Say, "We have been practicing starting with a big group and taking away to make a smaller group. This is called subtraction. Today you are going to show me what you learned about subtracting with bigger numbers."
- Model by showing students a group of 5 manipulatives. Say, "This group has 5." Place number cards for 5 under the group. "Now I am going to take away 2." Place subtraction sign and number card for 2. Place equals sign and model counting group. "I started with 5 and took away 2. How many do I have now? Three. 5 minus 2 equals 3."
- Say, "Now it's your turn." Hand each child paper numbers cards and paper - and = signs. "I am going to give you a big group. You are going to use the number card to show how many. Then I will tell you how many to take away to do subtraction."
- Give each child a big group (4-6). Encourage the children to count big group and use the number card to tell how many. "Now everyone will take away 1." Encourage the children to complete the subtraction sentence with the cards and take away 1 to find the answer.
- Continue giving out group and asking students to take away a different number away until each child has had a chance to start with groups of 4,5 , and 6 .
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.

Post Check \#1 Records:

- Did the child answer with $100 \%$ accuracy?

| Student Name | Yes | No | Student Name Yes No  <br>     |  |  |  |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Assess student with pre check for Lesson 11: Copy the Pattern.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Engage student in 4-8 more Lesson 10: Subtraction (Starting with 4-6) before reassessing with post check 2 .

## Post Check \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 11: Copy the Pattern
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 10: Subtraction (Starting with 4-6) and continue on to Lesson 11: Copy the Pattern in small group.

## Patterning

## Copy the Pattern

## Materials:

- a variety of 10 colorful blocks for each student, 10 colorful blocks for teacher


## Directions:

- Say, "Have you ever seen a pattern? A pattern is the same thing over and over again."
- Model by creating a simple ABAB pattern. Read the pattern. Say, "Do you see how the pattern repeats over and over? Encourage students to read the pattern with you.
- Say, "Now it's your turn. I'm going to make another pattern and you're going to use your blocks to make the same pattern."
- Create another ABAB pattern. Start reading the pattern and encourage the children to join in with you.
- Say, "Your turn. Use your blocks to make this same pattern."
- Repeat two more times.
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Copy the Pattern

Pre Check Records:

- Was the child able to replicate the patterns with $100 \%$ accuracy?

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Interpreting the Results:

- If the student replicate the patterns with $100 \%$ accuracy:
$\square$ Assess child on pre check of Lesson 12: Extend the Pattern.
$\square$ If the student doesn't replicate the patterns with $100 \%$ accuracy:
$\square$ Engage child in 4-8 lessons of Lesson 11: Copy the Pattern.

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## Materials

- book, a variety of 10 manipulatives (specific to the book) for each student and teacher


## Warm Up (30 seconds)



- "Let's see if you can do what I'm doing."
- Using two basic body movements (claps, knee pats, stomps, shoulder taps, etc.) teacher creates a simple ABAB pattern.
- Teacher continues while encouraging students to join in.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author . Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on a few pages with pictures that relate to the manipulative you will use to model and practice patterning.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulative and have them repeat.
- "I'm going to make a pattern with these (names of manipulatives.)"
- Create a simple ABAB pattern with the manipulatives. Read the pattern aloud.
- Encourage students to read the pattern with you.
- I do: Repeat with one more simple ABAB pattern.
- We do: After students read the pattern, encourage them to copy the pattern identically with their manipulative.


## 3. You do: Student Practice (3-5 minutes)

- Create a simple $A B A B$ pattern with the manipulative.
- Encourage students to point to and read the pattern after you. Before replicating the same pattern.
- Wrap up: "We worked with patterns today. Patterns are the same thing over and over again. Thanks for making patterns with me."


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Copy the Pattern

## Materials:

- a variety of 10 colorful blocks for each student and teacher


## Directions:

- Say, "We have been practicing reading patterns. A pattern is the same thing over and over again. Today you are going to show me what you know about reading patterns."
- Model by creating a simple ABAB pattern. Read the pattern. Say, "Do you see how the pattern repeats over and over? Now It's your turn."
- Create another $A B A B$ pattern. Start reading the pattern and encourage the children to join in with you.
- Say, "Now it's your turn to make the same pattern."
- Repeat two more times.
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Copy the Pattern

## Post Check \#1 Records:

- Did the child replicate the patterns with $100 \%$ accuracy?

| Student Name | Yes | No |  | Student Name Yes No  <br>     |  |  |
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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in Lesson 12: Extend the Pattern in small group.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Engage student in 4-8 more Lesson 11: Copy the Pattern before reassessing with post check 2.

## Copy the Pattern

## Post Check \#2 Records:

- Did the child replicate the patterns with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
Engage child in Lesson 12: Extend the Pattern.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 11: Copy the Pattern and continue on to Lesson 12: Extend the Pattern in small group.

## Extend the Pattern

## Materials:

- a variety of 12 colorful blocks for each student


## Directions:

- Say, "We have been practicing reading patterns. We know that patterns repeat over and over again. Today we are going to extend a pattern, or make it longer."
- Model by creating an ABAB pattern. Read the pattern. Then extend the pattern with the next four manipulatives."
- Say, "Now it's your turn." Create an ABAB pattern. Hand each child a block that will be used to extend the pattern. Ask the children to read the pattern and then work together to extend the pattern.
- Continue creating and extending patterns until each child has had a chance to be the first one to begin extending the pattern.
- Record results on the Pre Check form.
- Assess results to decide how to proceed in math sequence.


## Extend the Pattern

## Pre Check Records:

- Did the child extend the patterns with $100 \%$ accuracy?

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Interpreting the Results:

- If the student answers with 100\% accuracy:

You have completed all grade level lessons. Engage child in any enrichment lesson.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
$\square$
Engage child in 4-8 lessons of Lesson 12: Extend the Pattern.

## Materials

- book, a variety of 10 manipulatives (specific to the book) for each student


## Warm Up (30 seconds)



- "Let's see if you can do what I'm doing."
- Using two basic body movements (claps, knee pats, stomps, shoulder taps, etc.) teacher creates a simple ABAB pattern.
- "Now I'm going to stop. Let's see if you can keep it going." Teacher stops and students continue.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on a few pages with pictures that relate to the manipulatives you will use to model and practice patterning.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat.
- "I'm going to make a pattern with these (names of manipulatives.)"
- Create a simple $A B A B$ pattern with the manipulatives. Read the pattern aloud.
- Encourage students to read the pattern with you.
- "Now I'm going to keep the pattern going. I'm going to add on."
- Continue the pattern with 4 more manipulatives.
- Read the pattern and encourage the children to read with you.
- Ido: Repeat with one more ABAB pattern.
- We do: Encourage students to tell you which manipulative comes next as you extend the pattern.


## 3. You do: Student Practice (3-5 minutes)

- Set out manipulatives in a simple ABAB pattern in front of each student.
- Give the student the manipulatives they need to add 4 more to the pattern.
- "Now you are going to read your pattern and make it longer."
- Continuously provide $A B A B$ patterns and extra manipulative cards so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully read and extend their patterns.
- Wrap up: "We made extended patterns today. Thank you for helping me read the patterns and make them longer."


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Extend the Pattern

## Materials:

- a variety of 12 colorful blocks for each student


## Directions:

- Say, "We have been practicing extending a pattern, or making it longer."
- Model by creating an ABAB pattern. Read the pattern. Then extend the pattern with the next four blocks.
- Say, "Now it's your turn." Create an ABAB pattern for each child. Hand each child 4 blocks that will be used to extend the pattern. Ask the children to read the pattern and then use the extra blocks to extend the pattern.
- Continue creating and extending patterns until each child has had a chance to read and extend 3 patterns.
- Record results on the Post Check form.
- Assess results to decide how to proceed in math sequence.


## Extend the Pattern

## Post Check \#1 Records:

- Did the child extend 4 patterns with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage children in any extension activity.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Engage student in 4-8 more Lesson 12: Extend the Pattern before reassessing with post check 2.

## Extend the Pattern

Post C \#2 Records:

- Did the child answer with $100 \%$ accuracy?

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Interpreting the Results:
$\square$ If the student answers with 100\% accuracy:
$\square$ Engage child in any Enrichment activity.
$\square$ If the student doesn't answer with $100 \%$ accuracy:
Move to one-on-one intervention in Lesson 12: Extend the Pattern and continue on to any Enrichment activity in small group.

## Enrichment



``` R E C O G N I T I O N
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## Materials

- book, number line (1-20), number cards 11-20, 20 manipulatives (specific to the book) for each student, tens frame and paper numerals


## Warm Up (30 seconds)

- "Let's count together!"
- Point to number line as you count 1-20. Encourage students to count with you.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many."
- Read the story or highlight a few key pages.
- "The largest number in this book is (last number in book). There are numbers after that. Today we are going to practice counting bigger numbers."


## 2. Model the Activity (2-3 minutes)

- Place the cards above the tens frame to make 11.
- "This is the number 11 " Place cubes into the tens frame by counting aloud until you get to the number 11. Start by filling in (top down) the tens square on the left before filling in the tens square on the right.
- I do: Continue modeling numbers between 12 and 20 before moving on to student practice.
- We do: After placing number cards above the tens frame, encourage the students to say the number with you then count as you place the blocks on the tens frame.


## 3. You do: Student Practice (3-5 minutes)

- Give each student a tens frame, number cards, and 20 cubes

- "Now you are going to build a number and use the tens frame to count that number of blocks. Let's start with the number 12."
- Continue asking students to make the number and create it with blocks. Take turns providing immediate, corrective feedback to each student. Take note of which students could successfully name, count, and identify numbers 11-20.
- Wrap up: Today we made big numbers using blocks. Thank you for helping me count and make those big numbers.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Materials

- book, number line, number cards 1-10, 10 manipulatives (specific to the book) for each student, paper number cards 1-10 for each student, paper + and = signs for each student


## Warm Up (30 seconds)

- "When we count, there is always a number that comes next. We are going to count together. When I stop, you will tell me what number comes next. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number comes next?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?"

Encourage students to say, "How many."

- Read the story or just focus on the pages that highlight 6-10. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to add. When you add, you put small groups together to make one big group."
- Set out one group of 5 and one group of 2. "Let's count these groups." Count each group and label with the correct number card. "Now let's add these groups together." Set the addition sign between the number cards. Push the two groups together.
- "We added the group of 5 and the group of 2. Let's find out how many that is together." Count the group. Add the equal sign and place the number card for 7 to complete the number sentence. Read " 5 + 2 = 7 ."
- I do: Continue modeling by adding groups of $3+4$, and $6+1$.
- We do: Encourage the students to count each group with you and read the whole addition sentence.


## 3. You do: Student Practice (3-5 minutes)

- Give each student two small groups of manipulatives, the paper numeral cards (1-10), paper + and = signs.
- "Now you are going to add. First count each small group and use the number cards to tell how many in each group. Then put the groups together to add. Don't forget to count the big group to find out how many there are altogether."
- Continuously provide two small groups of manipulatives so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully work through the multi-step process of addition.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary


## Materials

- book, number line, number cards 1-10, 10 manipulatives (specific to the book) for each student, paper number cards (1-10) for each student, paper - and + signs for each student


## Warm Up (30 seconds)

- "When we count, there is always a number that comes before. We are going to count together. When I stop, you will tell me what number came before. Count with me and point to your number line."
- Count while pointing to numbers on number line. Pause and ask, "what number came before?"
- Pause 3-4 times throughout activity.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author . Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on the pages that highlight 1-10. Display number cards as you read. Point out numbers as they appear in the book. Have students repeat numbers with you.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat the name(s).
- "Today we are going to subtract. When you subtract, you start with a big group and take some away to make smaller groups."
- Set out one group of 8. "Let's count these (name of manipulative.)" Count and label with the number card 8. "Now let's subtract, or take away 3." Set the subtraction sign and number card 3 out to make 8-3. Move three manipulatives to the right, above the number card .
- "We started with 8 then we took away 3. Let's find out how many are left." Count the group. Add the equal sign and place the number card for 5 to complete the number sentence. Read " $8-3=5$."
- Ido: Continue modeling by subtracting groups of 7-4, 9-6, and 6-6 (emphasize concept of none).
- We do: Encourage the students to count groups with you and read the entire subtraction sentence.


## 3. You do: Student Practice (3-5 minutes)

- Give each student one small group of manipulatives ( $6,7,8,9$, or 10 ) then place the - sign and the number card 2 under the group. Also give each student the paper numeral cards (1-10.)
- "Now you are going to subtract. First count your large group and use the number cards to tell how many."
- "Now everyone subtract 2. How many are left?" Encourage students to use number cards and = sign to complete and read the number sentence.
- Continuously provide a small groups of manipulatives and place the - sign and a number card so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully work through the multi-step process of subtraction.
- Wrap up: Today we did subtraction. We used big numbers. Thanks for doing subtraction with me.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

## Materials

- book, a variety of manipulatives (specific to the book) for each student


## Warm Up (30 seconds)



- "We have been using body movements to make patterns. Who thinks they can use their own body to make their own pattern?"
- Teacher models a simple ABAB pattern before calling on a child to create their own.
- Teacher and other students join in with the pattern.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on a few pages with pictures that relate to the manipulatives you will use to model and practice patterning.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulatives and have them repeat.
- "I'm going to make a pattern with these (names of manipulatives.)"
- Create a simple ABAB pattern with the manipulatives. Read the pattern aloud.
- Encourage students to read the pattern with you.
- "Now I'm going to keep the pattern going. I'm going to add on."
- Continue the pattern with 4 more manipulatives.
- Read the pattern and encourage the children to read with you.
- Ido: Repeat with one more ABAB pattern.
- We do: "Help me make a pattern now." Choose and show students the 2 manipulatives that you will use. Encourage students to help you create an ABAB pattern. Guide them where necessary.


## 3. You do: Student Practice (3-5 minutes)

- "I made patterns. Now it's your turn to make a pattern."

- Hand each student a variety of 10 manipulatives in like groups.
- "Before you make a pattern, you have to see what manipulatives you have. What do you have? Name the manipulatives with each student."
- "Now you are going to make a pattern. When you're done, you will read the pattern you made to me."
- Continuously provide manipulatives and ask students to read their created patterns so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully read and extend their patterns.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary

#  <br> ( Cr ea te an ad var n n d p at t e r n ) 

## Materials

- book, a variety of 12 manipulatives (specific to the book) for each student


## Warm Up (30 seconds)



- "We have been using body movements to make patterns. Who thinks they can use their own body to make their own pattern?"
- Teacher models an advanced pattern (AABAAB, ABBABBA, etc.) before calling on a child to create their own.
- Teacher and other students join in with the pattern.


## 1. Re-Read the Story (3-4 minutes)

- "Do you remember this story?" Point out title and author. Ask them something they remember.
- "We have been learning all about (unit theme)."
- "There were many numbers in this book. Numbers tell us how many." What do numbers tell us?" Encourage students to say, "How many."
- Read the story or just focus on a few pages with pictures that relate to the manipulative you will use to model and practice patterning.


## 2. Model the Activity (2-3 minutes)

- Show students the manipulatives. Name the manipulative and have them repeat.
- "I'm going to make a pattern with these (names of manipulatives.)"
- Create an advanced pattern with the manipulatives. Read the pattern aloud.
- Encourage students to read the pattern with you.
- "Now I'm going to keep the pattern going. I'm going to add on." Continue the pattern with 4 more manipulatives.
- Read the pattern and encourage the children to read with you.
- I do: Repeat with one more advanced pattern. Possible examples: ABBABBA, ABCABC, ABBCABBCA
- We do: "Help me make a pattern now." Choose and show students the 2-3 manipulative s that you will use. Encourage students to help you create an advanced pattern. Guide them where necessary.


## 3. You do: Student Practice (3-5 minutes)

- "I made tricky patterns. Now it's your turn to make a tricky pattern."

- Hand each student a variety of 12 manipulatives in like groups.
- "Before you make a pattern, you have to see what manipulative you have. What do you have? Name the manipulative with each student."
- "Now you are going to make a tricky pattern. When you're done, you will read the pattern you made."
- Continuously provide manipulative and ask students to read their created patterns so all students are working at the same time. Provide immediate, corrective feedback to each student in turn. Take note of which students could successfully read and extend their patterns.


## Error correction

1. Provide answer quickly 2. Practice skill together 3. Encourage student to do skill independently 4. Repeat steps as necessary
