

Patterns

Review What You Know

Circle the object that is the same.



Circle the group that is the same.



4. **CCB**

BCC CBC CCB CBB

Home-School Connection

Dear Family,

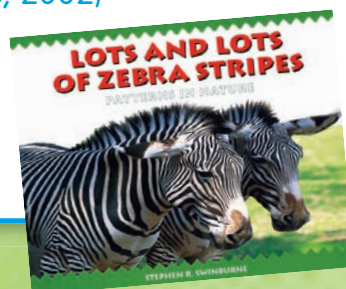
Today my class started Topic 9, **Patterns**. I will learn how to see and make patterns. Here are some of the new math words I will be learning and some things we can do to help me with my math.

Love,

Book to Read

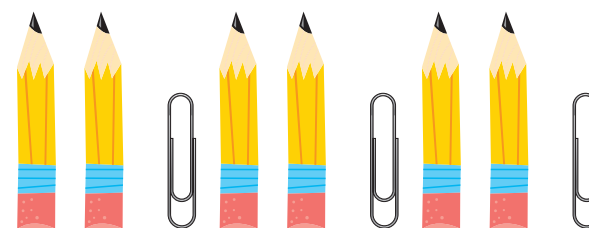
Reading math stories reinforces concepts. Look for this title in your local library:

Lots and Lots of Zebra Stripes: Patterns in Nature
by Stephen R. Swinburne
(Boyd's Mills Press, 2002)



Home Activity

Use small objects to make patterns like this:

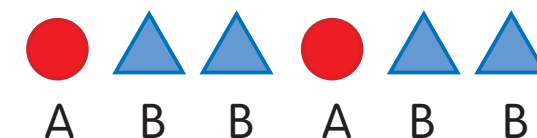


Ask your child to identify the part that repeats (pencil, pencil, paper clip) and then continue the pattern.

My New Math Words

pattern

a list or a design with a part that repeats



repeats

something that appears over and over again



The circle and the triangle are the parts that repeat.

predict

to say what you think will happen



There is a pattern in this cube train. You can predict that the next two cubes will be green and yellow.

Number of players: 2

How to Play

1. Choose your side. Take turns. Place your paper clip on START. Toss the dot cube. Move your paper clip that many spaces.
2. When you reach the empty space at the end of the row, decide which shape comes next. If your partner agrees, slide to the next row.
3. Keep playing until you reach FINISH.

Player 1

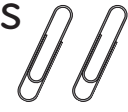
Start

Finish

Pattern Slide

What you need

- 1 dot cube
- 2 paper clips



Player 2

Start

Finish

Name _____

Describing Patterns



1.



2.



3.



Home Connection Your child used connecting cubes to make patterns and identify the part that repeats.

Home Activity Make a sound pattern for your child, such as stomp feet, clap hands, stomp feet, clap hands, stomp feet, clap hands, and so on. Ask your child to tell what part you are repeating to make the pattern.

SDAP 2.1 Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape).

This is a color **pattern**.

Say the names of the colors.
Red, red, blue. Red, red, blue. Red, red, blue.

R R B R R B R R B

repeats over and over.

R R B R R B R R B

Red, red, blue repeats.

R, R, B repeats over and over.

R R B R R B R R B

The colors and letters make the same pattern.

Guided Practice

Circle the part that repeats. Fill in the letters.

1.

Y G Y G Y G

2.

Do you understand? How can you tell if is a pattern?

Independent Practice

Circle the part that repeats. Fill in the letters.

3.

4.

Algebra Circle the cube that does **not** belong in the pattern.

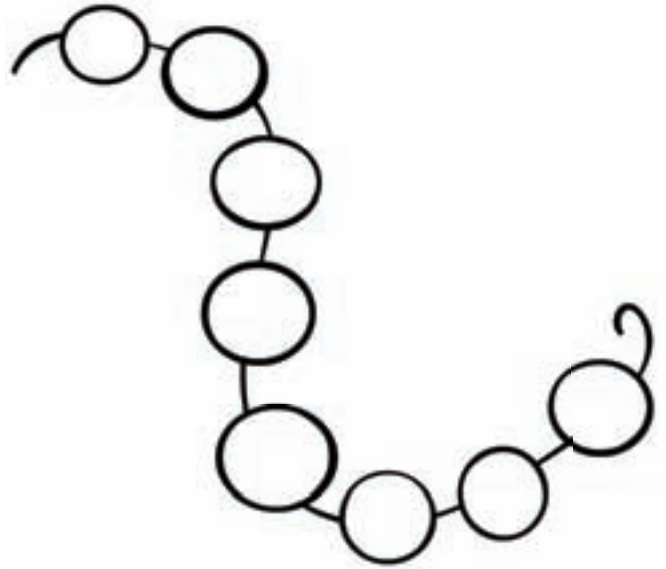
5.

Word Bank
pattern
repeats

Problem Solving


Solve the problems below.

6. Pat has 4 white beads and 4 red beads.
What pattern can he make?
Color the beads to show a pattern.



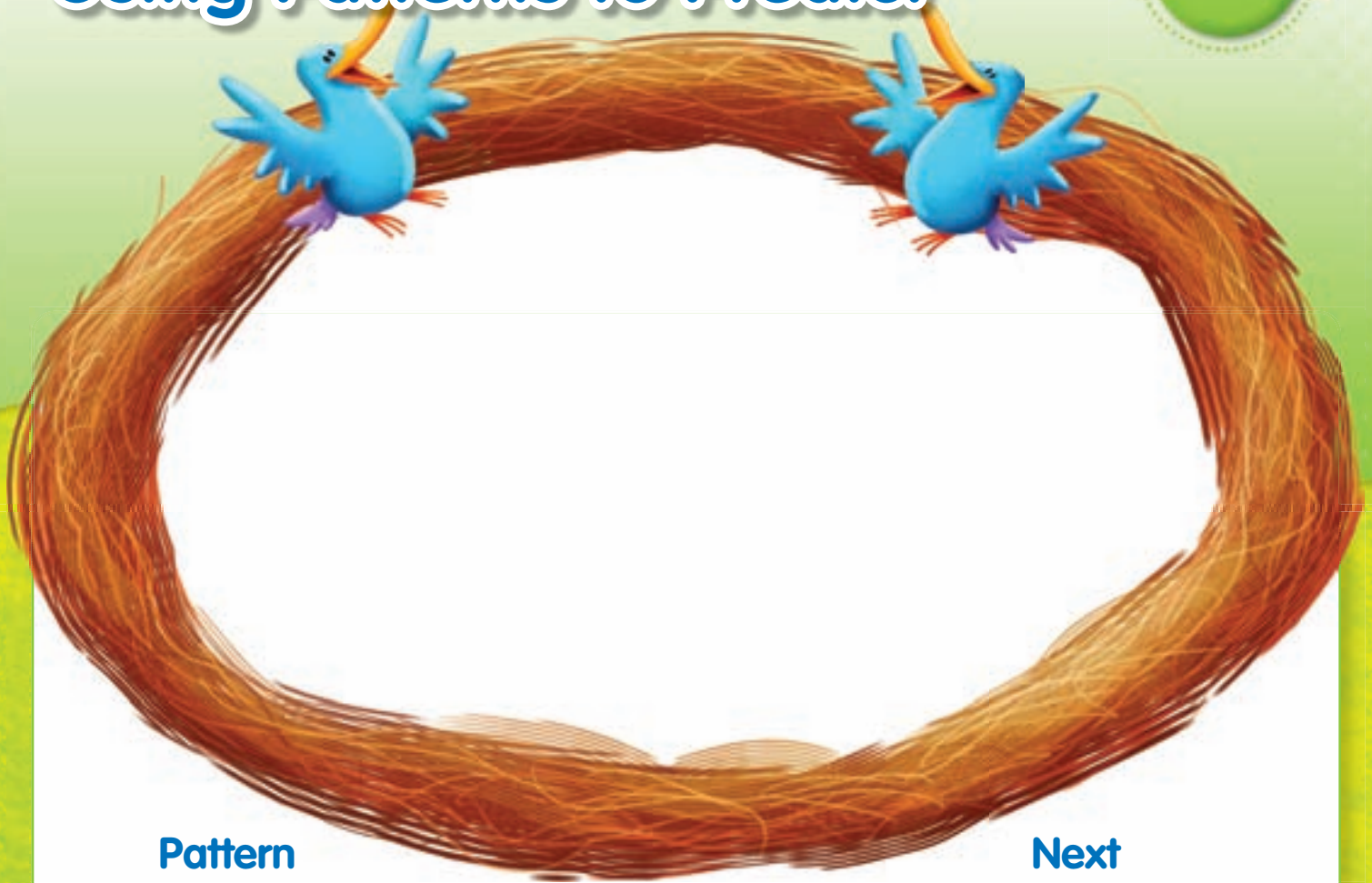
7. Look at the pattern.
Which part repeats?



8.  **Journal** Use cubes to make a pattern.
Draw the pattern.
Then make the same pattern using letters.

Name _____

Using Patterns to Predict



Pattern

Next

1.



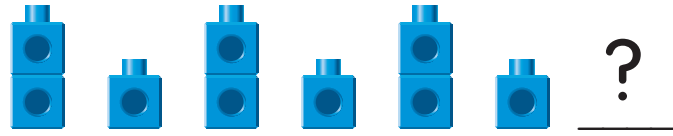
2.



Home Connection Your child identified the part of a pattern that repeats and predicted what comes next in the pattern. **Home Activity** Draw a pattern of shapes such as square, circle, square, circle, square, circle and have your child predict the shape that comes next. Then reverse roles and ask your child if your answer is correct. Repeat with various shapes.

SDAP 2.1 Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape).

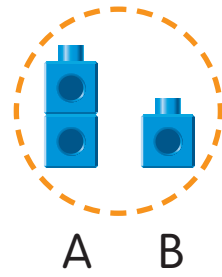
You can **predict** what comes next in a pattern.



When you predict, you tell what comes next.



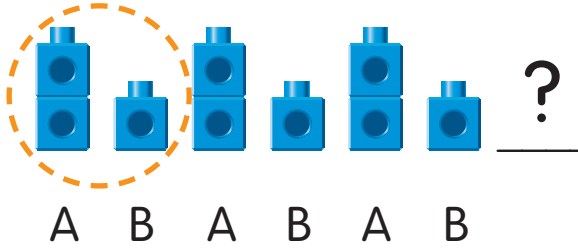
Find the part that repeats.



Name each picture with a letter.

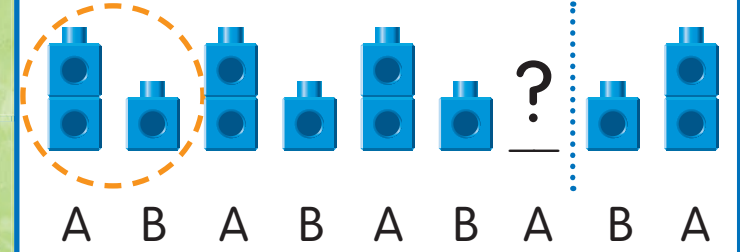


A comes first, then **B**. Then you see that **A, B** repeats.



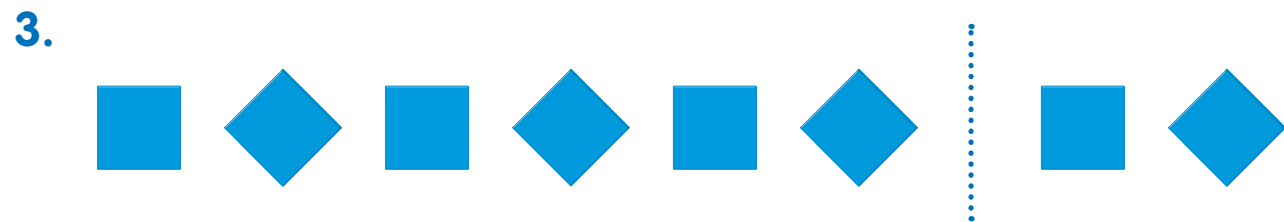
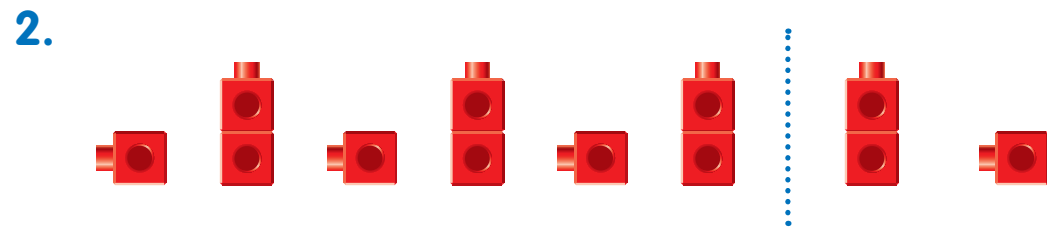
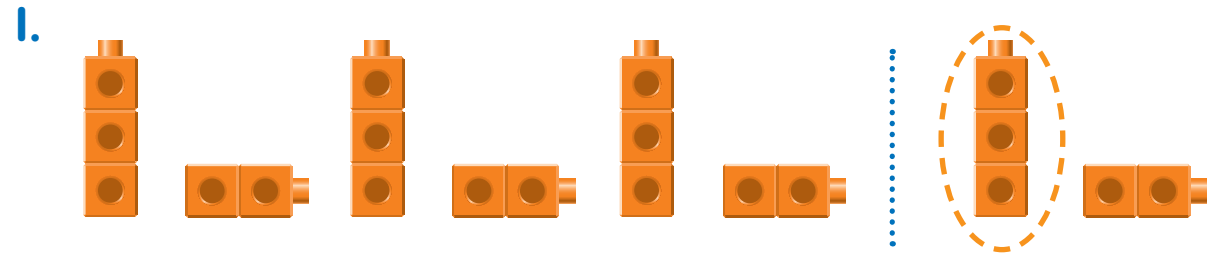
A comes next.

So  comes next.



Guided Practice

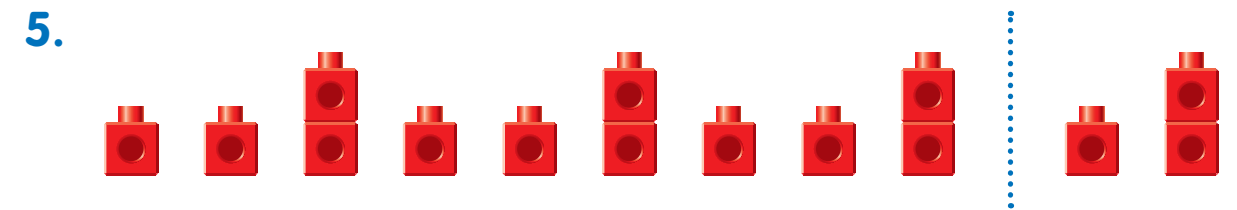
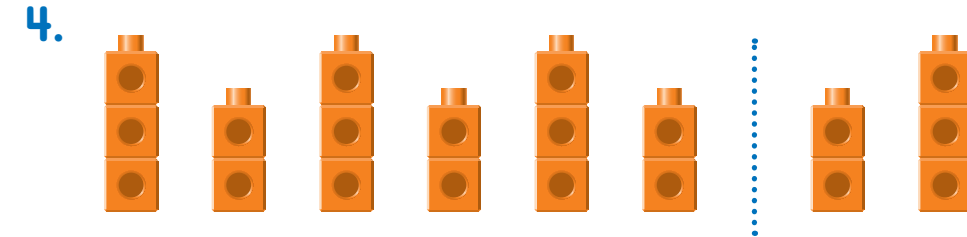
Find the pattern. Circle what comes next.



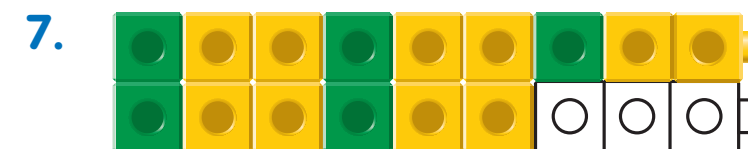
Do you understand? How can you tell what comes next in a pattern?

Independent Practice

Find the pattern. Circle what comes next.



Algebra Find the pattern. Color what is missing.



Word Bank
predict

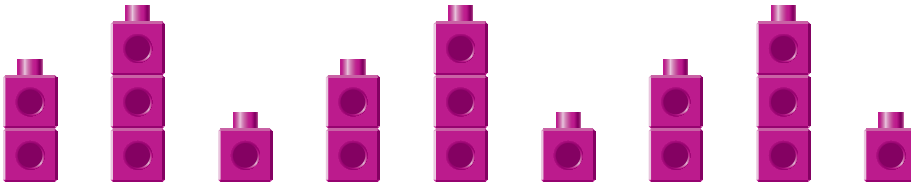
Problem Solving

Solve the problems below.

8. Jim made this pattern with his buttons. If he adds a button at the end of the pattern, what color will it be?



9. Kate makes a pattern with her cubes. Look at the pattern. What comes next?



10.  **Journal** Ana has some balloons. Draw a color pattern Ana might make.

Name _____

Extending Shape Patterns



Pattern


1.

Next

2.



Home Connection Your child learned to identify and extend repeating shape patterns and used letters to describe how the patterns repeat. **Home Activity** Have your child use small household objects such as paper clips, buttons, and coins to make and describe patterns.

SDAP 2.1  Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape).

This is a shape pattern.
You can make a pattern
go on and on.



This is the part that repeats.



You can use the part
that repeats to tell
what comes next.

Say each shape.
The shape that comes next is a triangle.



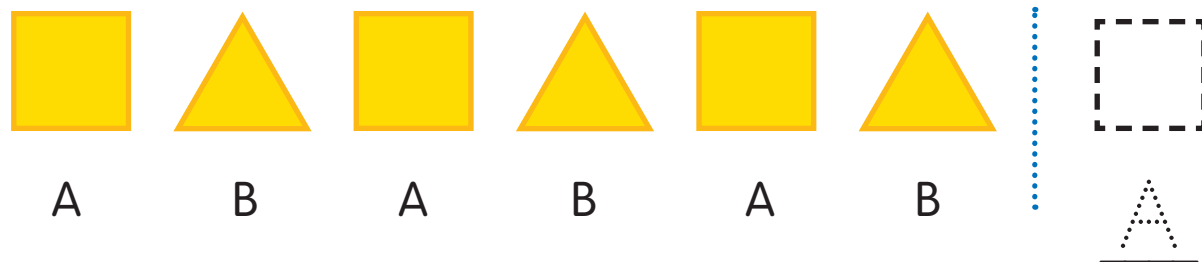
The pattern is
triangle, circle,
triangle, circle,
triangle, circle.



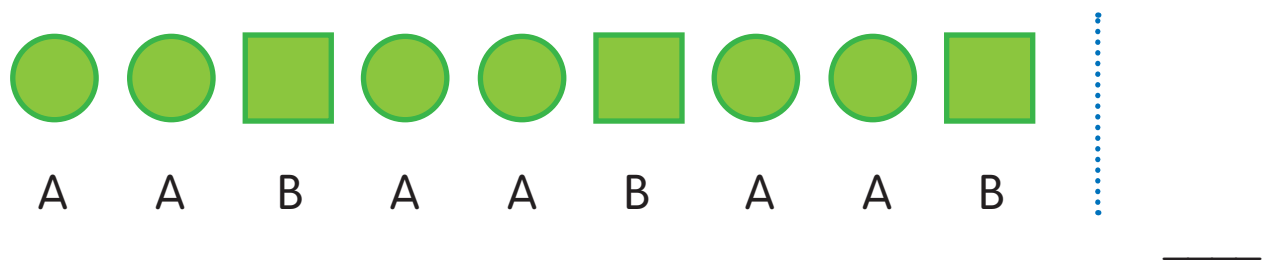
Guided Practice

Draw the shape that comes next. Then write
the letter that comes next.

1.



2.

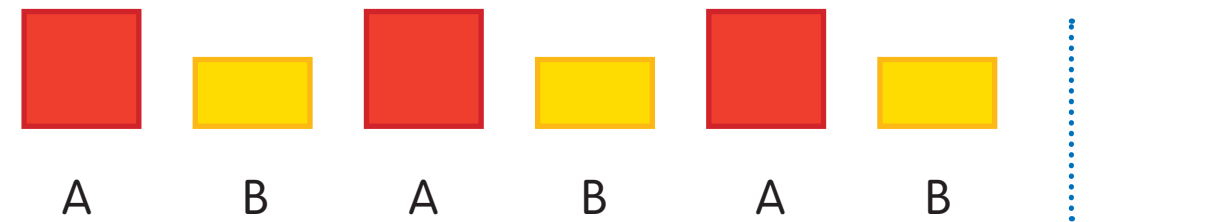


Do you understand? Explain how you know what letter comes next
in the pattern.

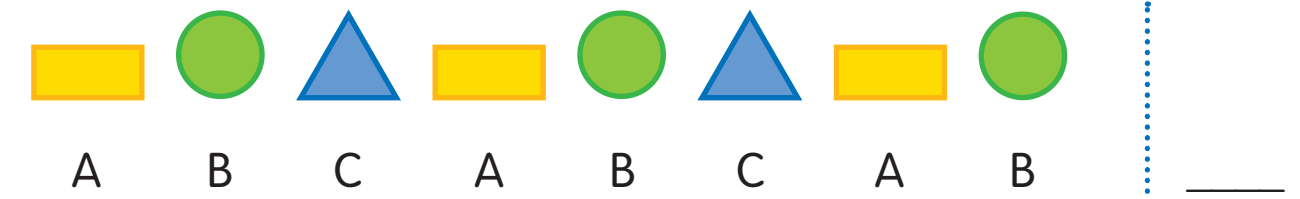
Independent Practice

Draw the shape that comes next. Then write
the letter that comes next.

3.

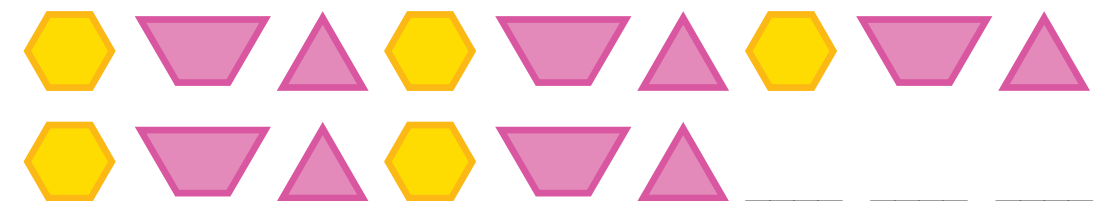


4.



Algebra Find the pattern. Use pattern blocks.
Draw the missing shapes.

5.



Problem Solving

Solve the problems below.

6. Carlos begins a pattern.

He wants this part to repeat three times in all.

How many squares will Carlos need to complete the pattern?

How many triangles?

Draw the shapes. Write the numbers.



___ more squares

___ more triangles

7. What part repeats?

A B C A B C A B C

A B B



A B



A A B



A B C



8.  **Journal** Use pattern blocks. Draw a shape pattern.

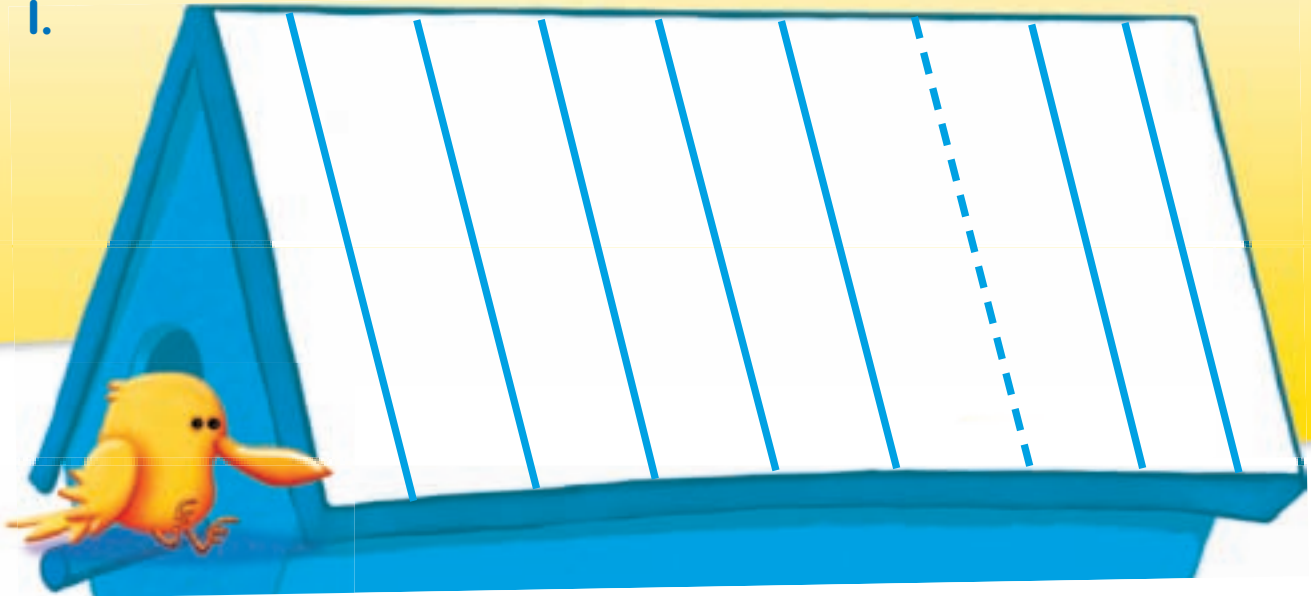


Name _____

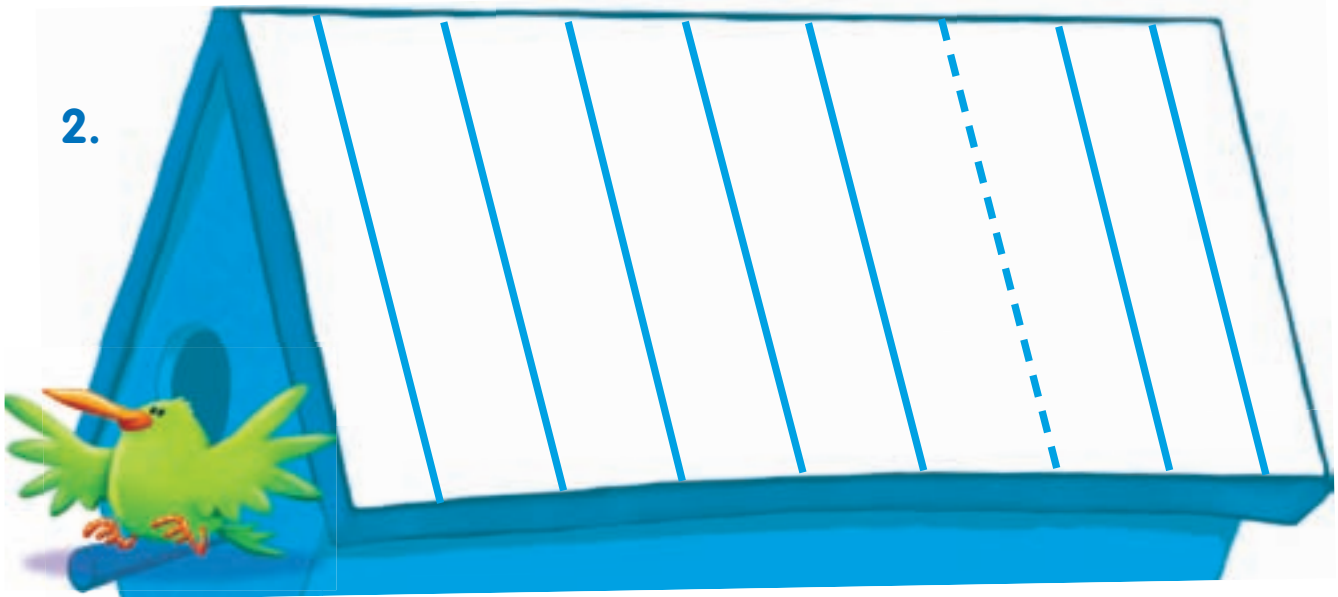
Problem Solving

Look for a Pattern

1.



2.



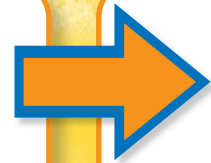
Home Connection Your child made a color pattern and then identified and completed a pattern started by a partner.

Home Activity Show a row of objects that follow a pattern (for example, spoon, fork, spoon, fork, etc.). Have your child continue the pattern.

SDAP 2.1 Describe, extend, and explain ways to get to a next element in simple repeating patterns (e.g., rhythmic, numeric, color, and shape). Also **MR 2.0, MR 2.1.**

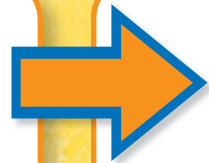
Read and Understand

Tyler's mom is making a blanket with a pattern. What colors will the next stripes be?



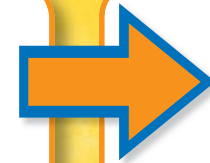
Plan

Find the color pattern.



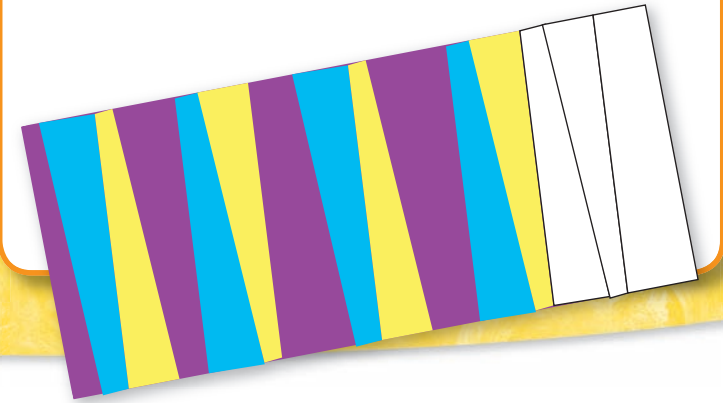
Solve

Color the stripes to follow the pattern.



Look Back and Check

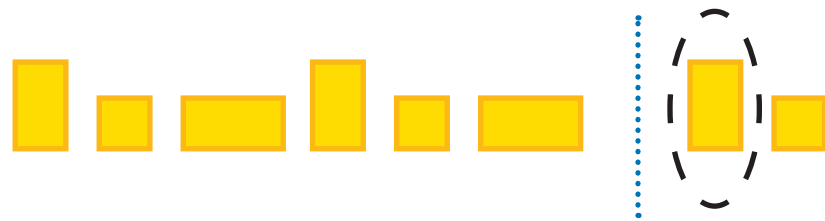
Do your stripes match the rest of the pattern?



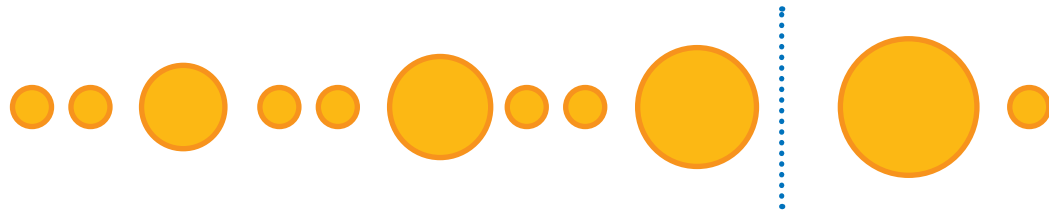
Guided Practice

Look for the pattern. Circle what comes next.

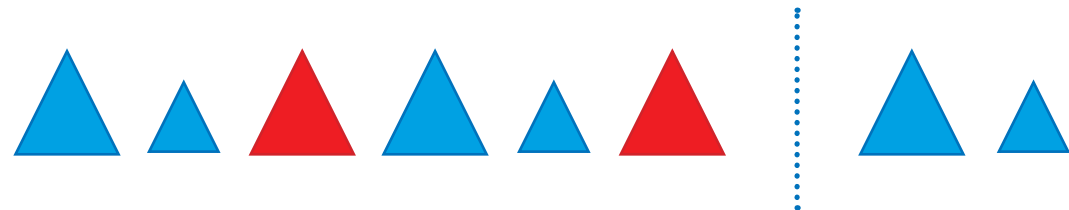
1.



2.



3.



Do you understand? How do you know what comes next in a pattern?

Independent Practice

Write, draw, or color to complete the pattern.

4.

C D E C D E _ _ _

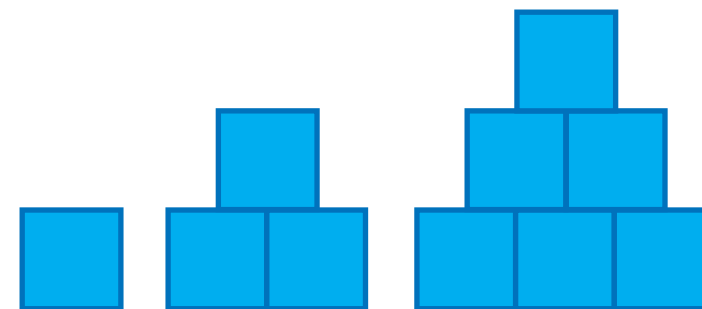
5.



6.

3, 3, 8, 3, 3, 8, _ , _ , _

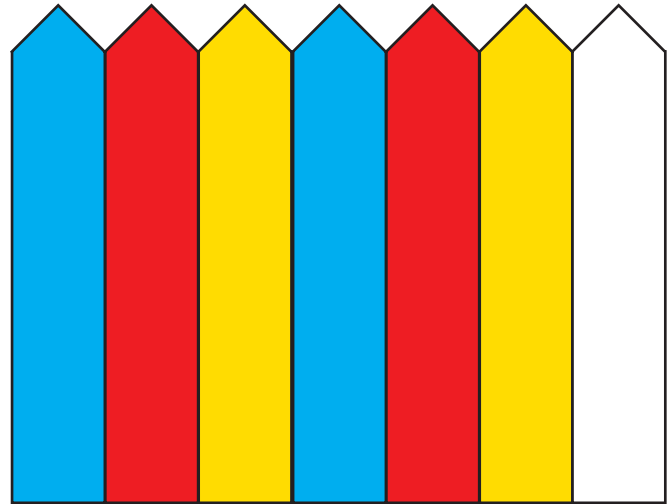
7.



Problem Solving

Find a pattern to solve.

8. Eva paints a fence. She uses a color pattern. What color should she paint the next post?



9. What numbers continue the pattern?

3, 5, 7, 3, 5, 7

3, 5, 7



3, 7, 5



5, 3, 7

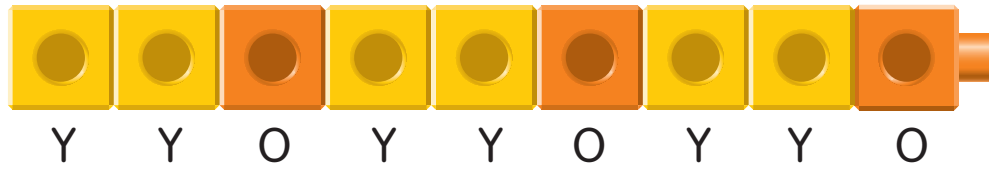


5, 7, 3

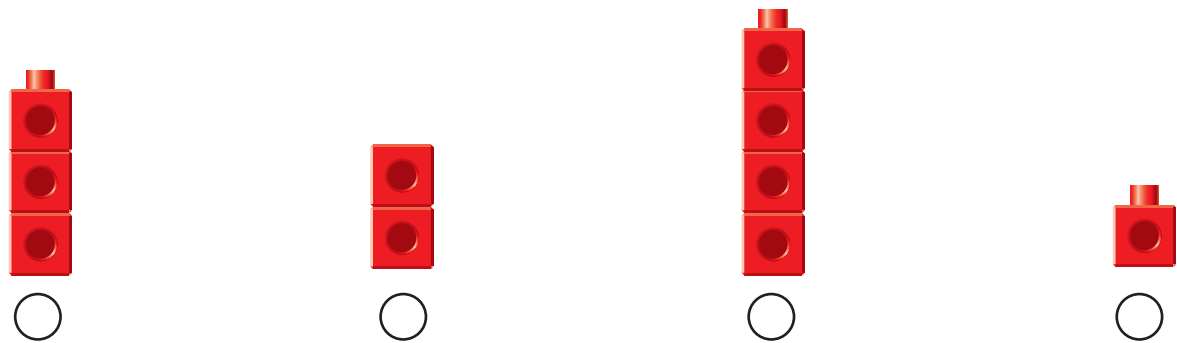
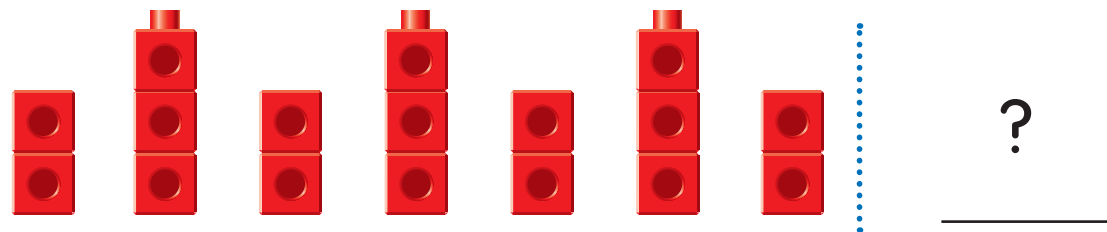


10.  **Journal** Use colors, shapes, or letters to make a pattern.

1

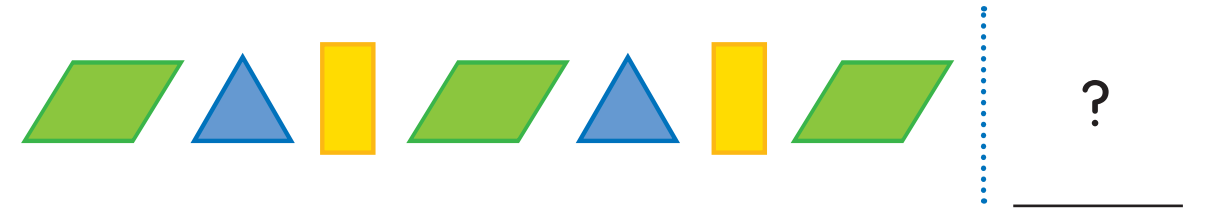


2



Name _____

3



4



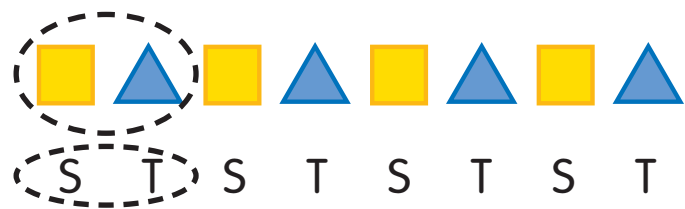
5



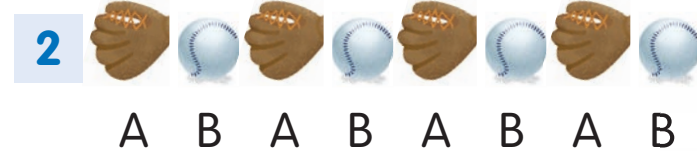
Oral Directions Say: Mark the correct answer. **3.** Which shape comes next? **4.** Which number comes next? **5.** Craig wants to continue the pattern. Which color should he use next?

Set A

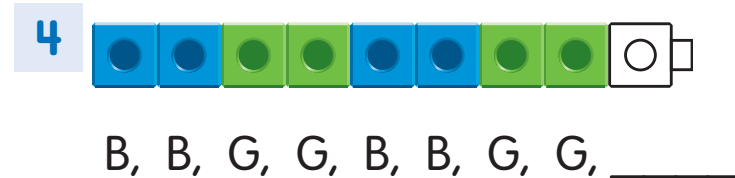
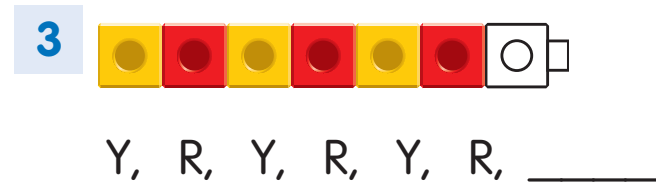
Look for the part that repeats to find the pattern.



Circle the part that repeats.

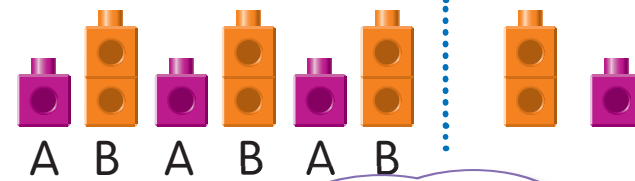


Color the cube that comes next. Then write the letter that comes next.



Set C

Find the part that repeats to predict what comes next.



The pattern is the part that repeats. A, B repeats.

A comes next.
So comes next.

Set D

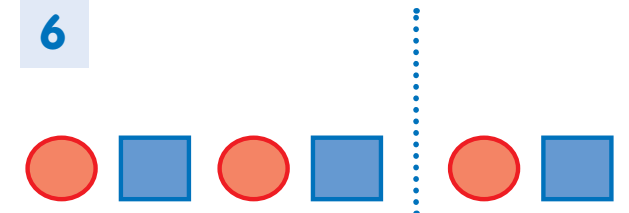
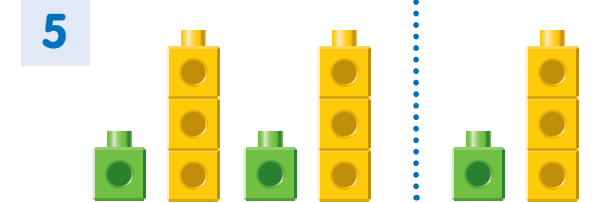
You can draw, color, or write to complete a pattern.

Draw to complete the pattern.



completes the pattern.

Find the pattern. Circle what comes next.



Color or write to complete the pattern.

