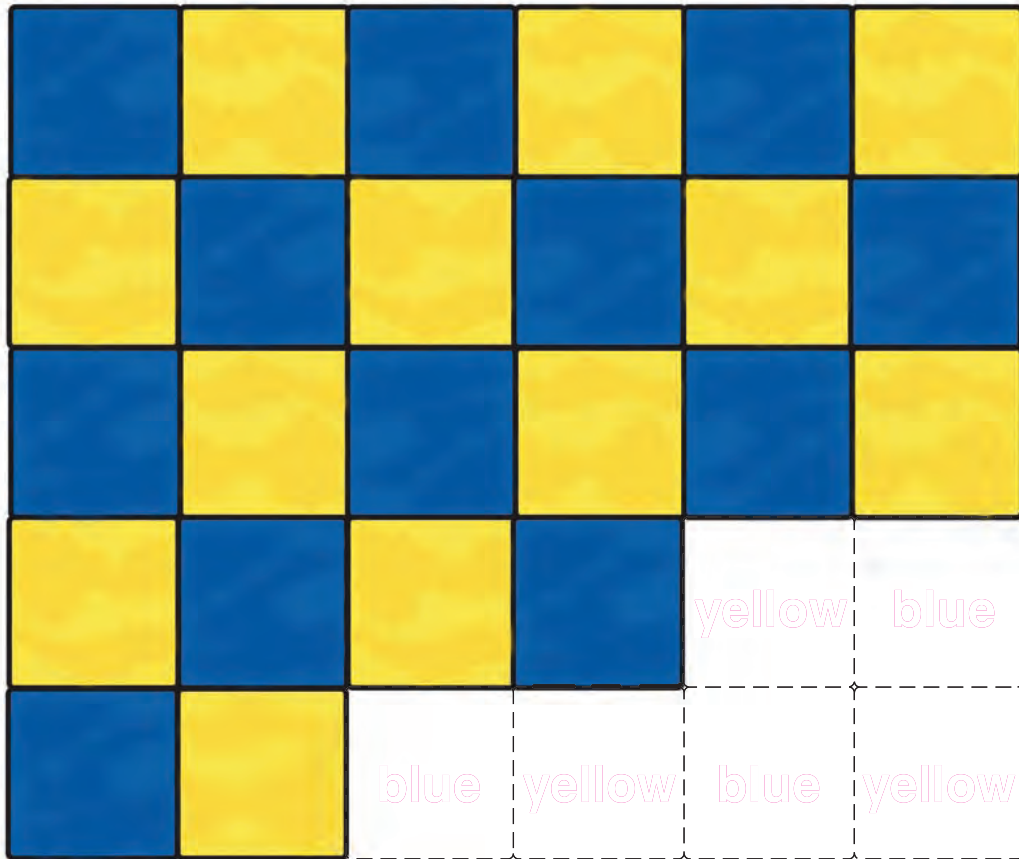


Patterns and Sorting



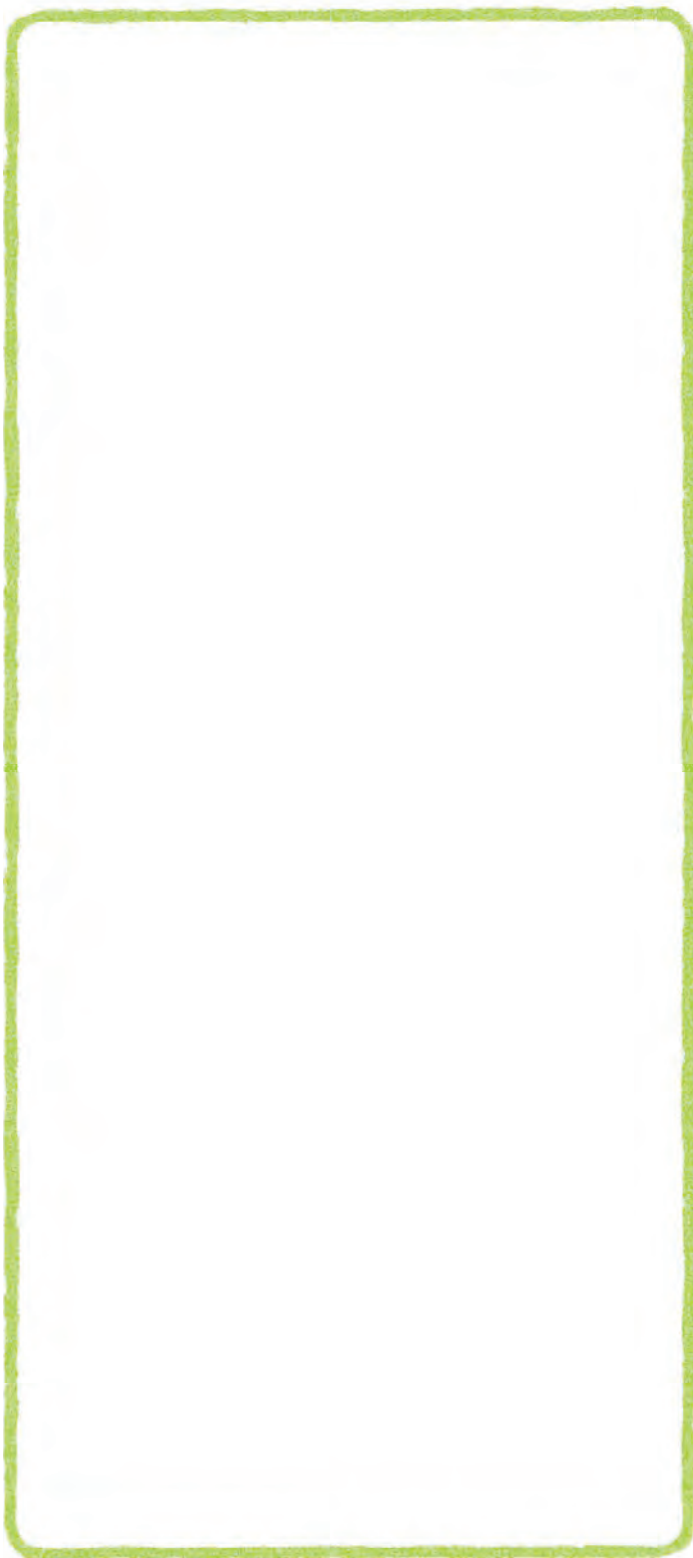
What is missing?



Name _____

What's the Same? What's Different?

NCTM Standards 1, 2, 6, 7, 9, 10



GROUP 1

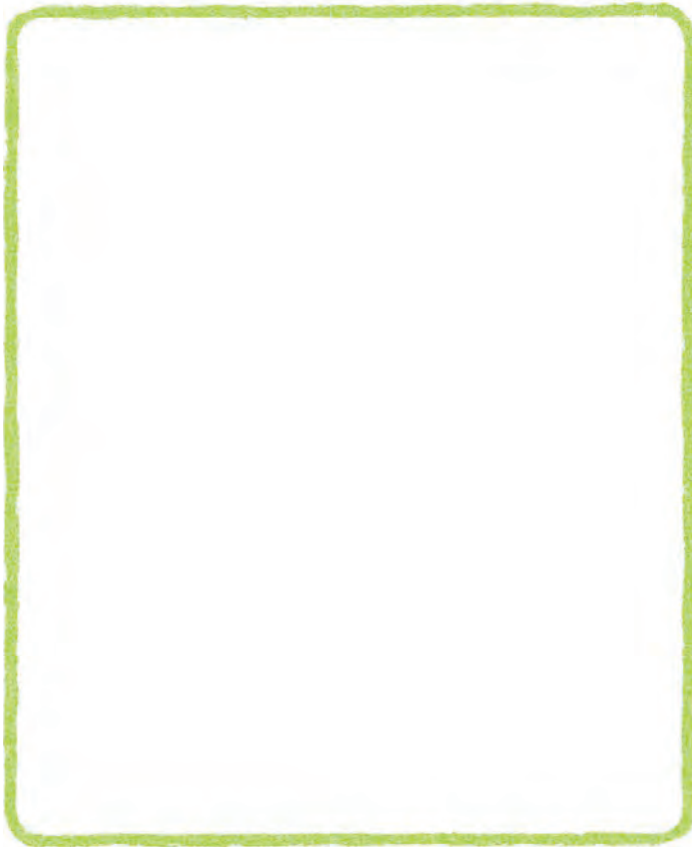
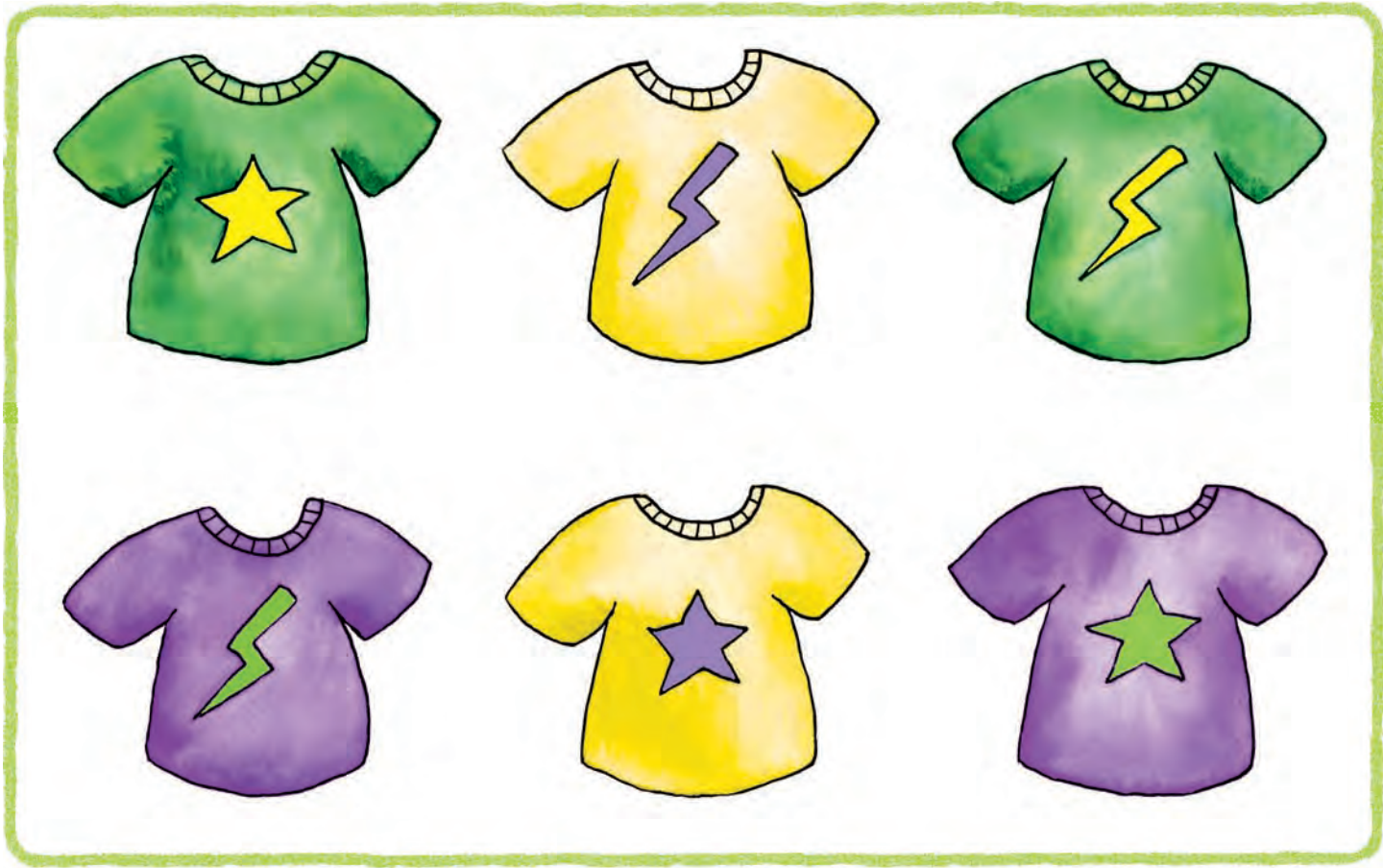


GROUP 2

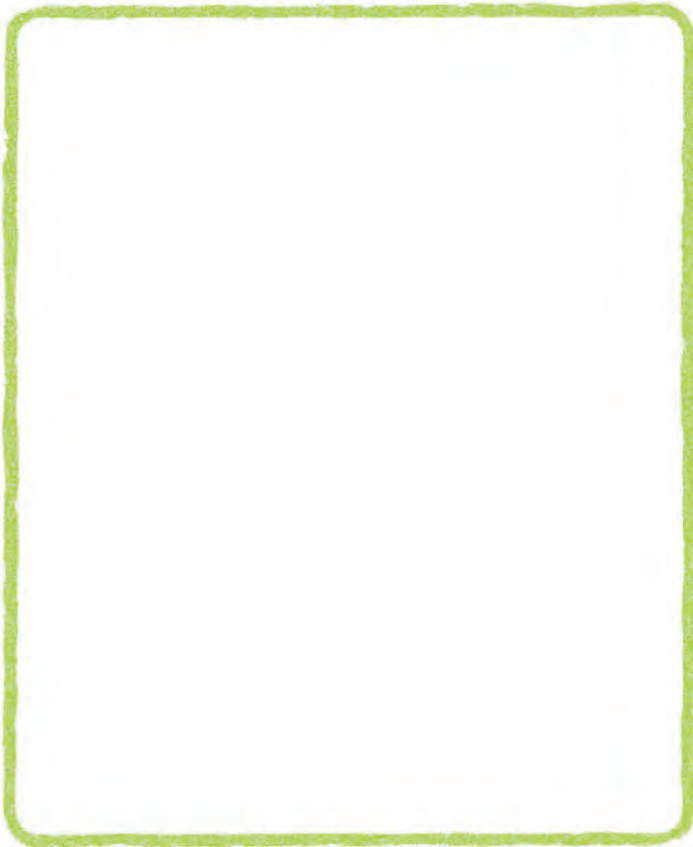
Sort the Face Cutouts. Paste one group into each sorting box.



NOTE: Your child is learning to sort objects by attributes. Have your child tell you how the objects were sorted.



GROUP 1

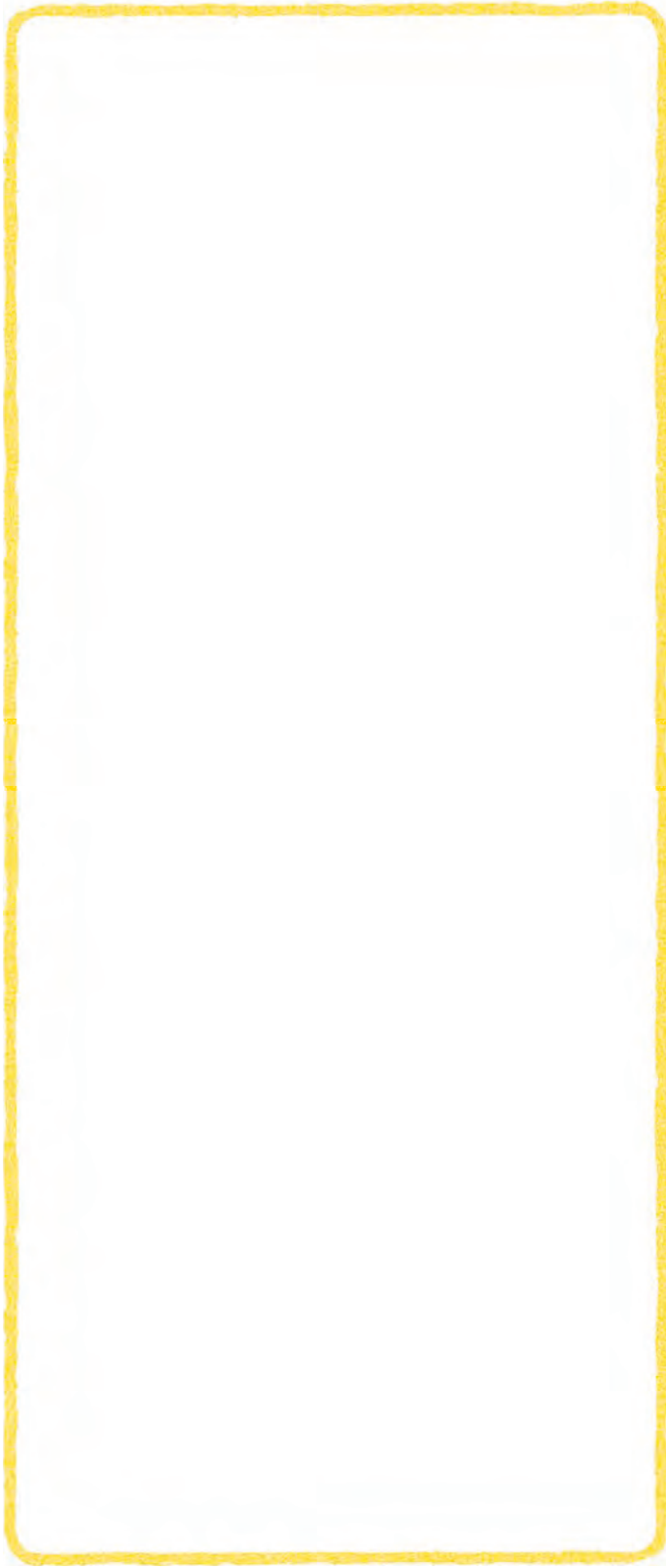


GROUP 2

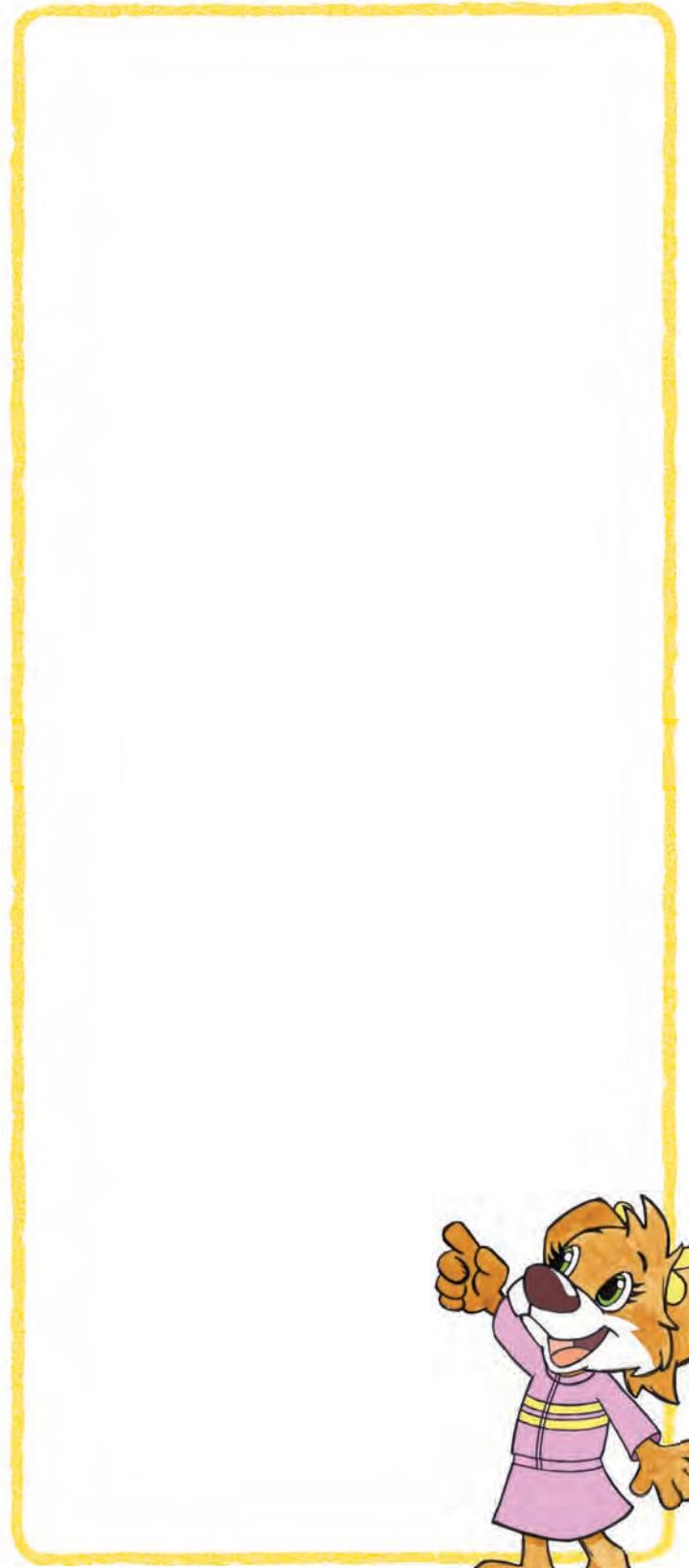
Sort the shirts into two groups. Draw a line from each shirt to a sorting box.

Sorting in Different Ways

NCTM Standards 1, 2, 3, 6, 7, 8, 9, 10



GROUP 1



GROUP 2

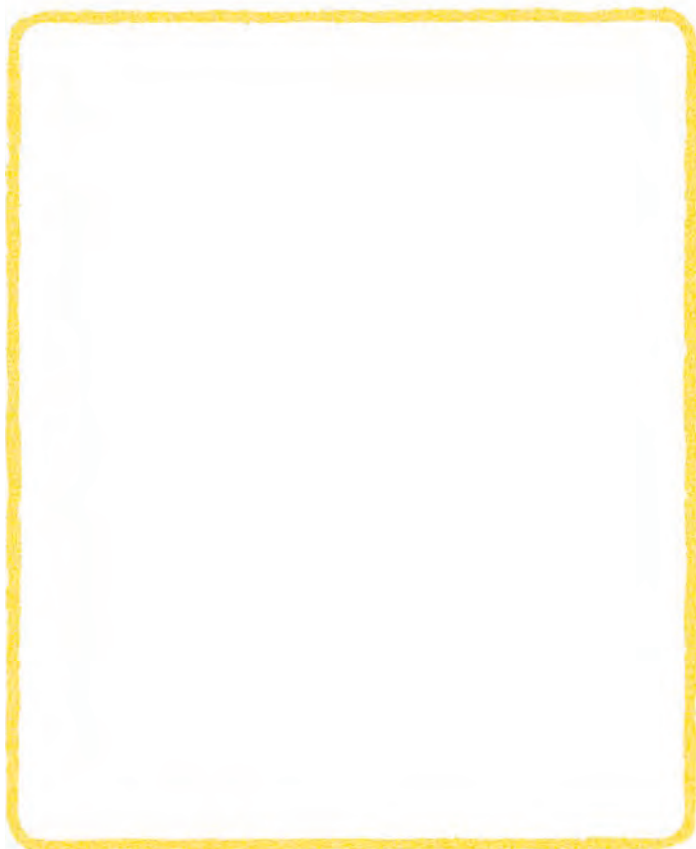


Sort attribute links into two groups. Draw the links in each group.

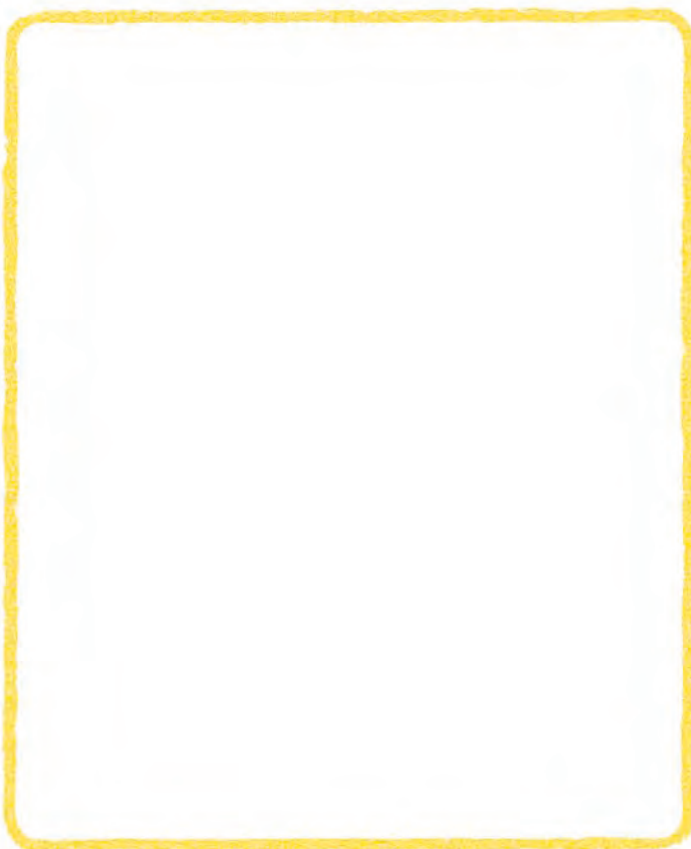


NOTE: Your child is learning to sort objects by color, shape, or size. Have your child tell you how the objects were sorted.

A G E D
H C B F



GROUP 1

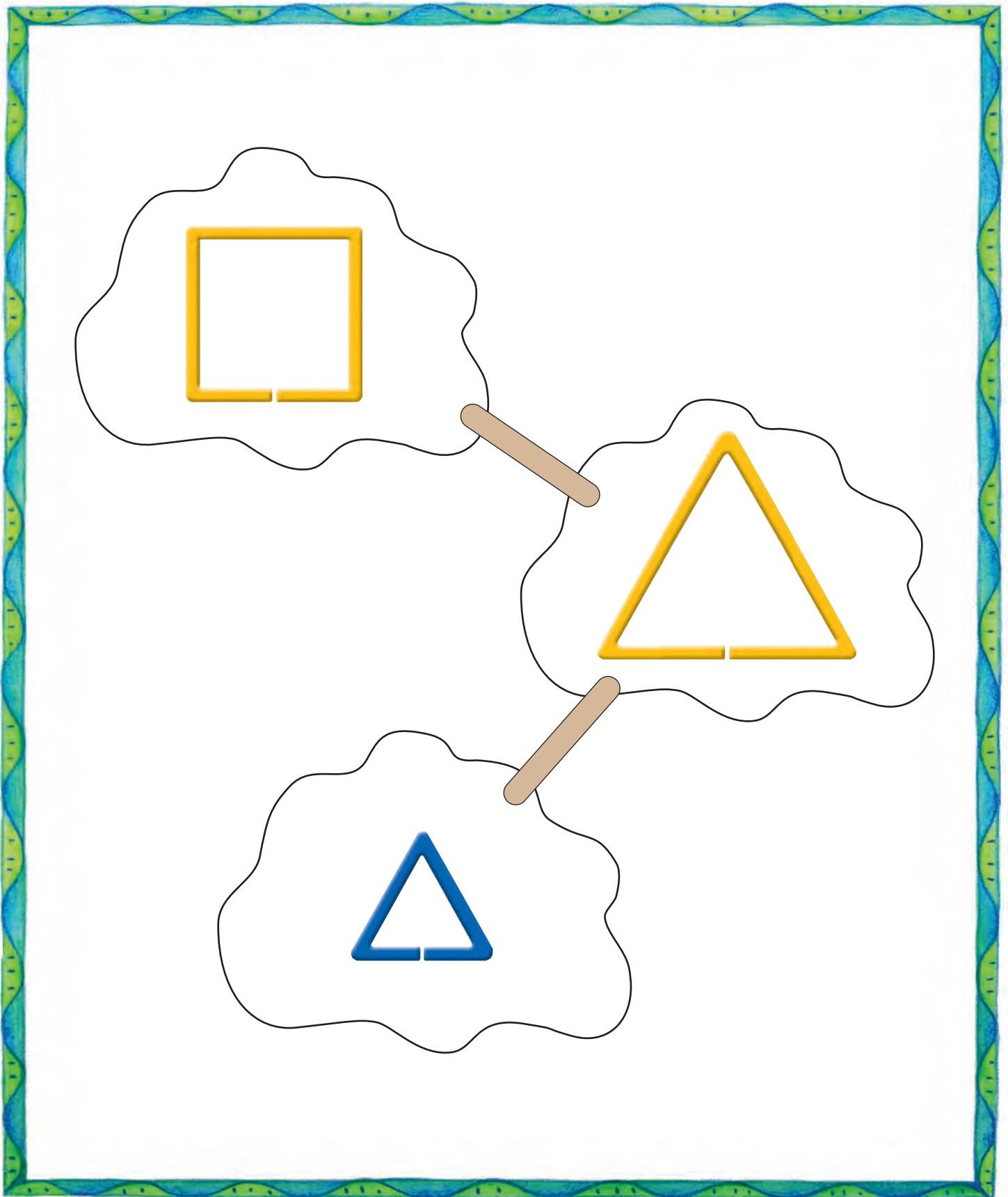


GROUP 2

Sort the letters into two groups. Write the letters for each group in a sorting box.

Counting Differences

NCTM Standards 1, 3, 6, 7, 9, 10

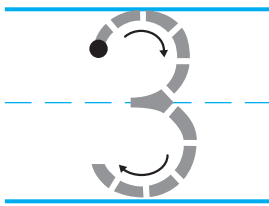
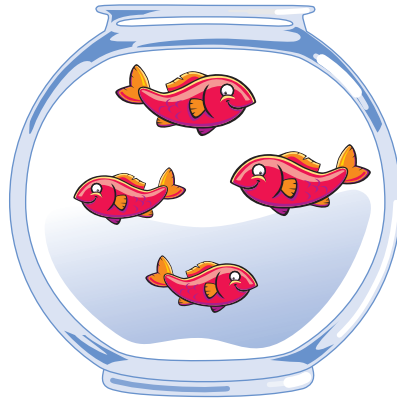


© Education Development Center, Inc.

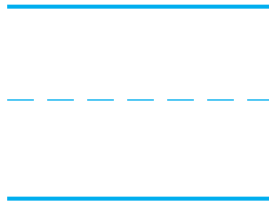
Complete the riddle by drawing the correct number of dots—one for each difference—on each stick.



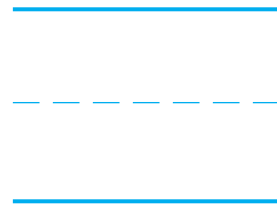
NOTE: Your child is learning to sort items. Have your child describe each figure by color, size, and shape. For example, the top figure is a large, yellow square.



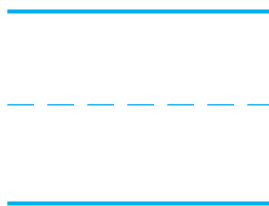
+



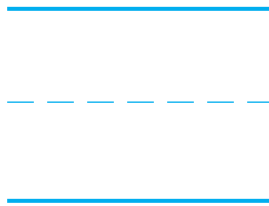
=



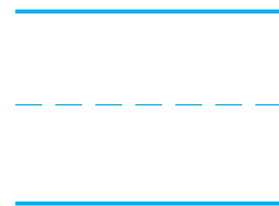
All



+



=

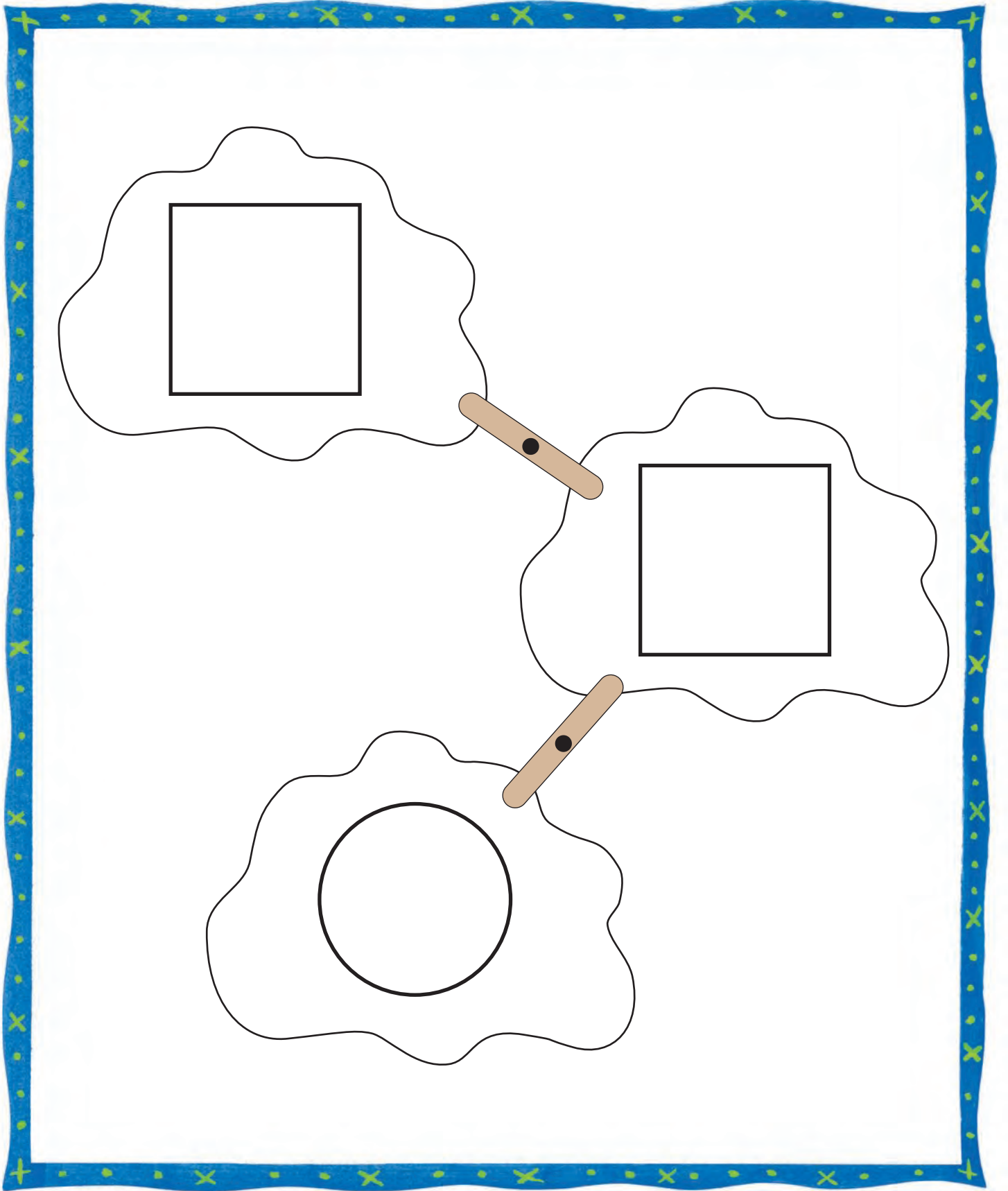


All

Write the numbers to show how the fish are sorted.
Then write how many fish in all.

Shape Dominoes and Riddles

NCTM Standards 1, 3, 6, 7, 9, 10

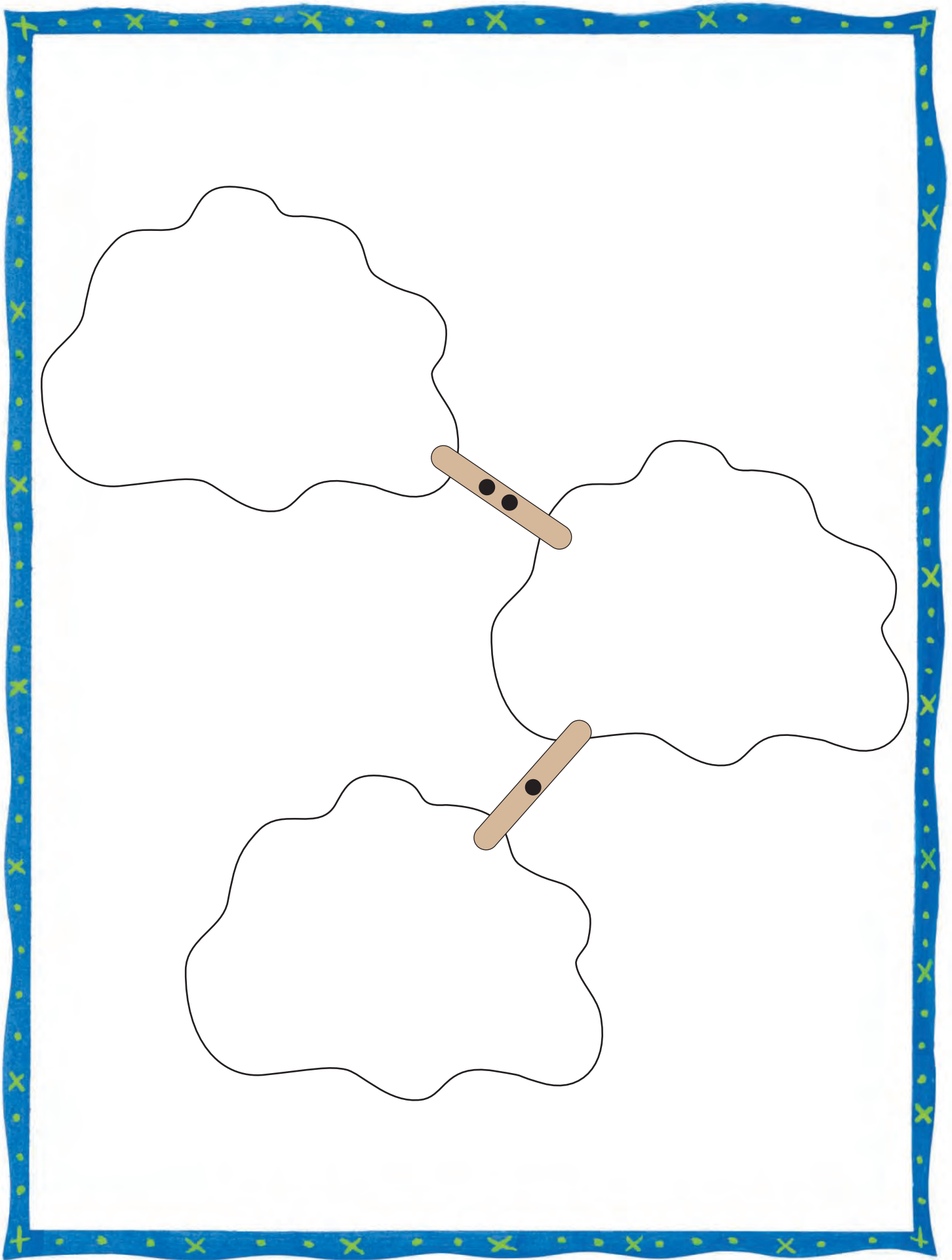


© Education Development Center, Inc.

Color the figures to make the riddle true.



NOTE: Each figure is different in one way from the one connected to it. Have your child explain how the figures are the same and how they are different.



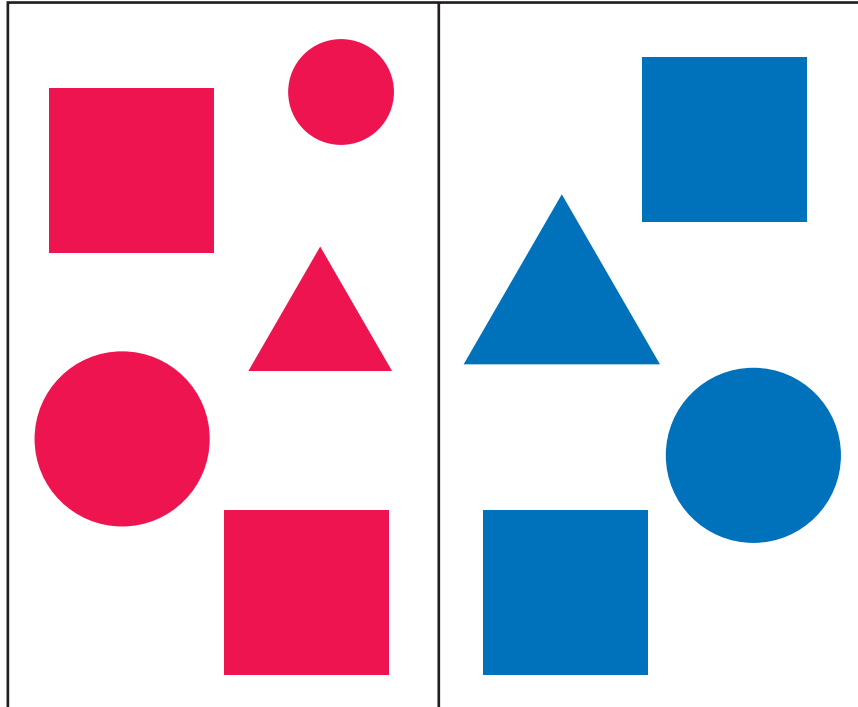
Draw and color three figures to solve the riddle.

Sorting by Two Attributes

NCTM Standards 1, 2, 3, 6, 7, 9, 10

Red

Blue



	+	
	=	
Red	Blue	All

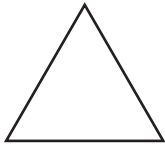
Write the numbers to match the sort.

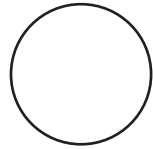


NOTE: Ask your child to tell you how the figures were sorted.

BIG

small



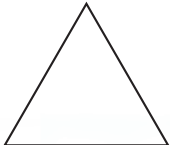
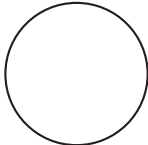


Tracing exercise with a fish icon. It shows a large grey letter 'L' on a set of three horizontal lines (top, middle dashed, bottom) with arrows indicating stroke direction. This is followed by a plus sign, a smaller grey letter 'l' on the same lines, an equals sign, and a blank set of lines for the result.

BIG **small** **All**



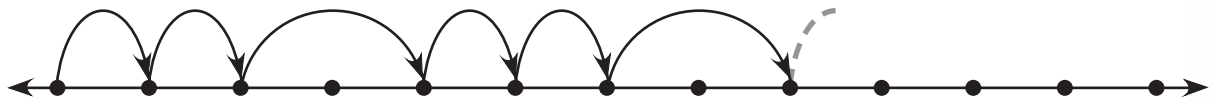
Tracing exercise with a turtle icon. It shows a blank set of three horizontal lines (top, middle dashed, bottom). This is followed by a plus sign, a blank set of the same lines, an equals sign, and a blank set of lines for the result.

  **All**

Write the numbers to match the sort.

Introducing Repeating Patterns

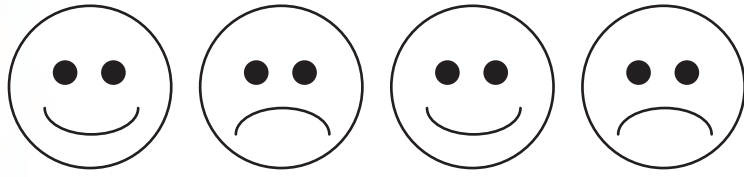
NCTM Standards 1, 2, 6, 7, 8, 9, 10



Extend each pattern.

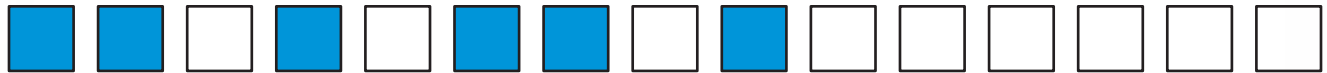


NOTE: Your child is learning to find the smallest repeating part of each pattern. Ask your child to point to the repeating part of each pattern above.





ABCABC



--	--	--	--	--	--	--	--



--	--	--	--	--	--	--	--

Extend each pattern.
 Create your own patterns.

More Repeating Patterns

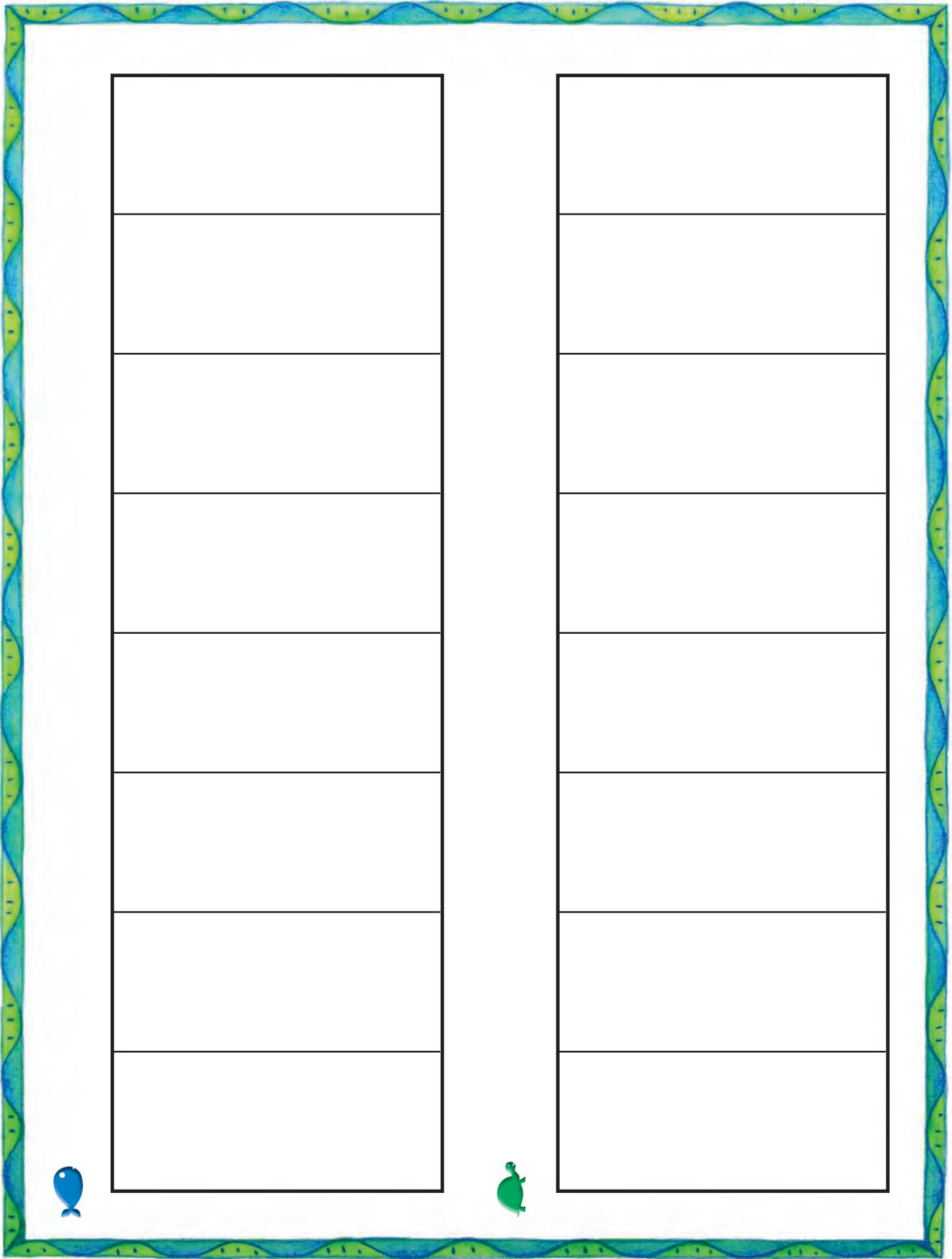
NCTM Standards 1, 2, 3, 6, 7, 9, 10

© Education Development Center, Inc.

Extend each pattern.



NOTE: Your child is learning to identify, describe, and extend patterns with numbers, letters, and shapes. Ask your child to tell what part of each pattern repeats.



Create your own patterns.

Patterns on the Number Line

NCTM Standards 1, 2, 6, 7, 9, 10

© Education Development Center, Inc.

The worksheet contains four vertical number lines, each with 10 dots and an upward-pointing arrow. The lines are separated by vertical orange lines. Below each number line is a small icon: a blue fish, a green turtle, a yellow star, and a red heart. The first number line shows a pattern of four jumps between the 2nd and 3rd dots. The second number line shows a pattern of three jumps between the 2nd and 3rd dots, with a dashed line indicating the start of a fourth jump. The third number line shows a pattern of four jumps between the 2nd and 3rd dots, with a dashed line indicating the start of a fifth jump. The fourth number line shows a pattern of four jumps between the 2nd and 3rd dots.

Extend each pattern of jumps.



NOTE: Your child is learning to show patterns as jumps on the number line. Ask your child to tell about each pattern.



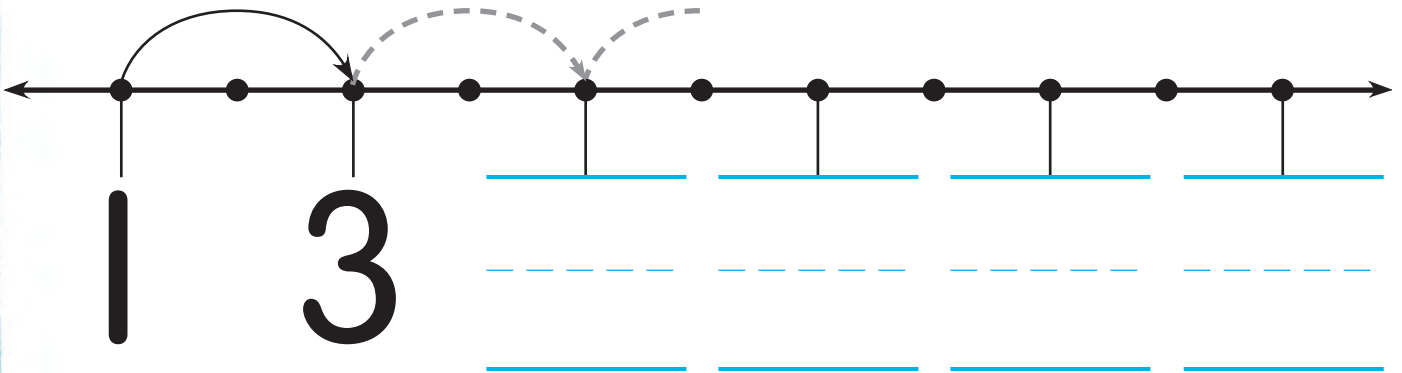
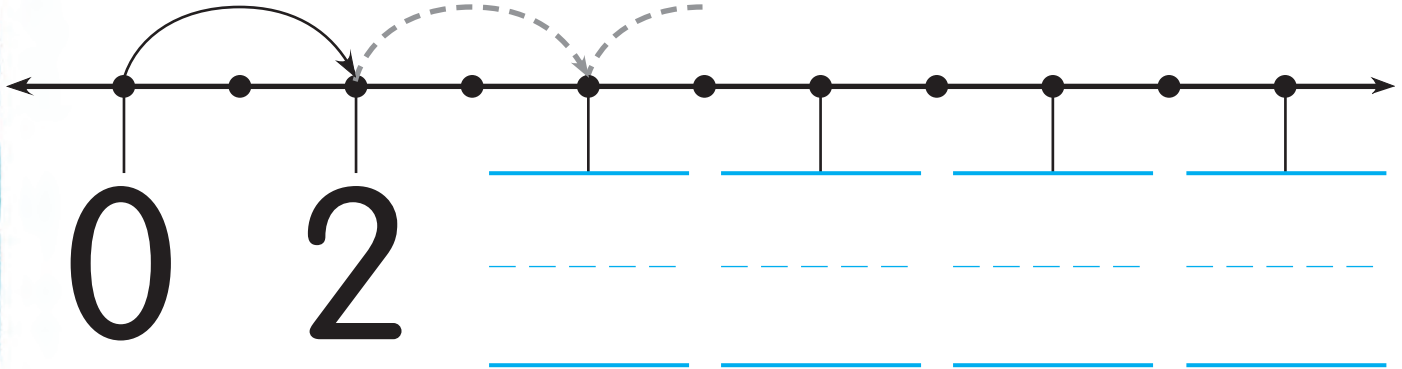
A B C A B C A B C



-  Create a number line jump pattern like the shape pattern.
-  Create a number line jump pattern like the letter pattern.
-  Create your own pattern.

Growing Patterns on the Number Line

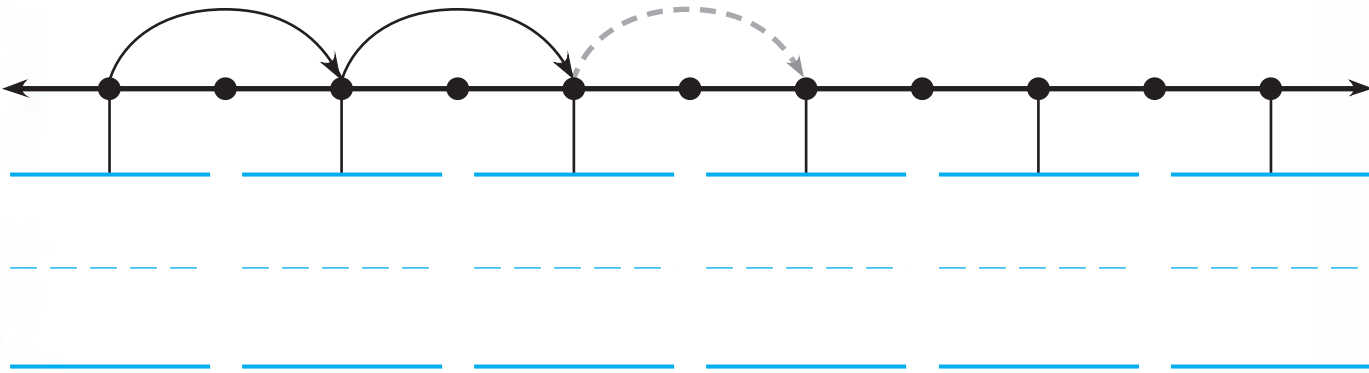
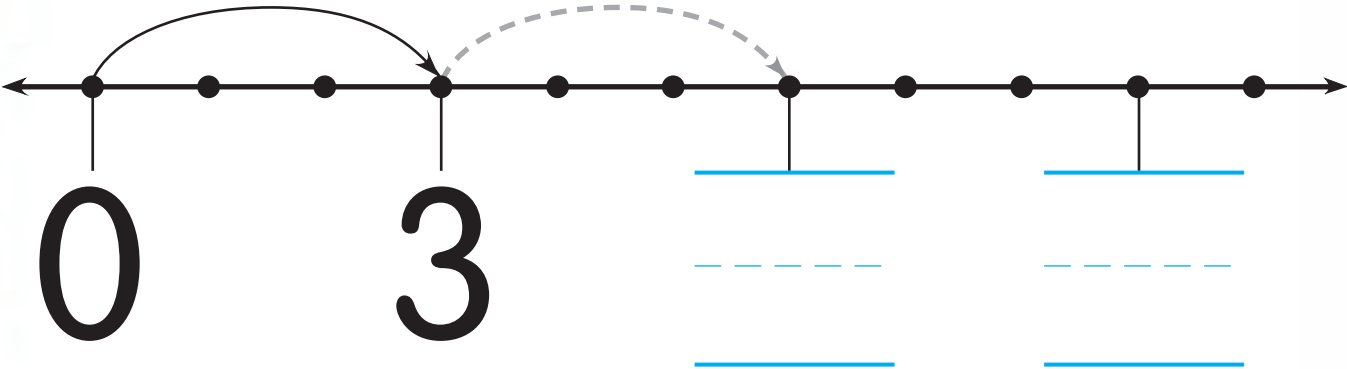
NCTM Standards 1, 2, 6, 7, 9, 10



Extend each pattern of jumps and write the missing numbers.



NOTE: Your child is learning to skip-count on the number line. Ask your child to tell you what the next number would be.



-  Extend the pattern of jumps and write the missing numbers.
-  Extend the pattern of jumps and write numbers to match the number line jumps.

Extending the Number Line

NCTM Standards 1, 2, 6, 7, 9, 10

A number line activity consisting of 15 circles connected in a path. The circles are arranged in four rows. The top row has four circles: the second one contains '14'. The second row has four circles: the fourth one contains '11'. The third row has four circles: the second one contains '6'. The bottom row has five circles: the first one contains '0', and the second one contains '1'. All other circles are empty for writing. Each circle has three horizontal lines (top, middle-dashed, bottom) for writing.

Write the missing numbers.



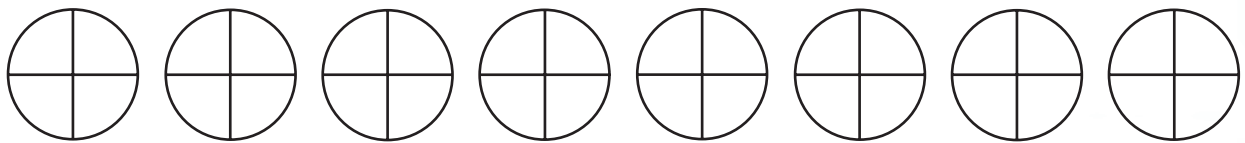
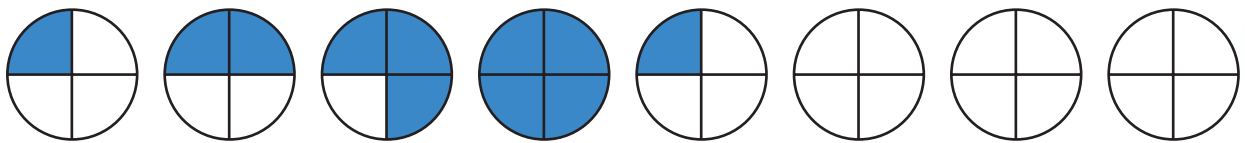
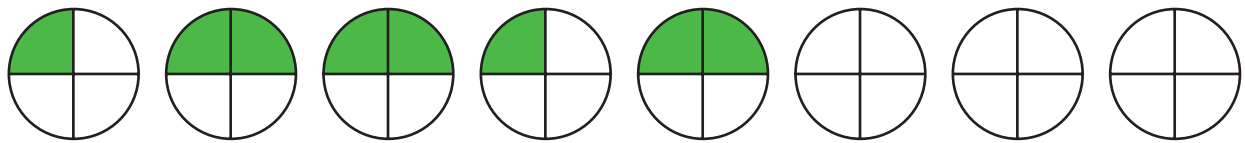
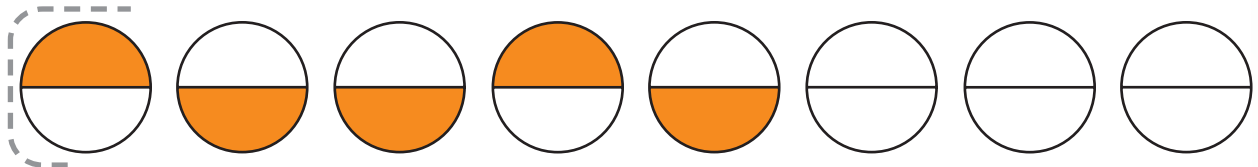
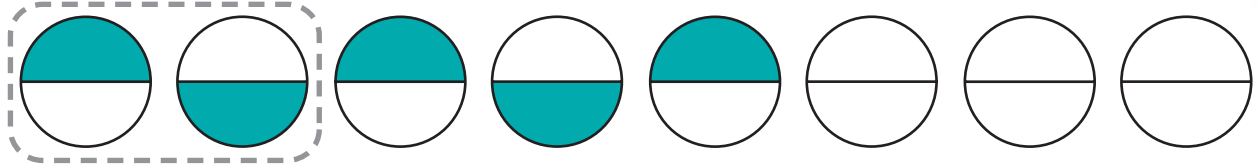
NOTE: Your child is learning to count and write numbers to 40. Have your child point to each number on this page and say its name.

A grid of 15 circles, each containing three horizontal lines for writing. The circles are connected by a path. The numbers 31, 24, 16, and 19 are written in some of the circles. The circles are colored blue or yellow.

Write the missing numbers.

More Patterns

NCTM Standards 2, 3, 6, 7, 8, 9, 10



Circle the smallest repeating part of each pattern. Extend each pattern.
 Create your own pattern.



NOTE: Your child is learning to identify patterns. Ask your child to describe the smallest repeating part of each pattern on this page.



Blue	Orange	Orange			
Orange	Blue	Orange			
Orange	Orange	Blue			







Extend the pattern.
 Create your own patterns.

Patterns and the Number Path

NCTM Standards 1, 2, 6, 7, 9, 10

The number path consists of 15 circles connected in a zig-zag pattern. The circles contain the following numbers or are blank:

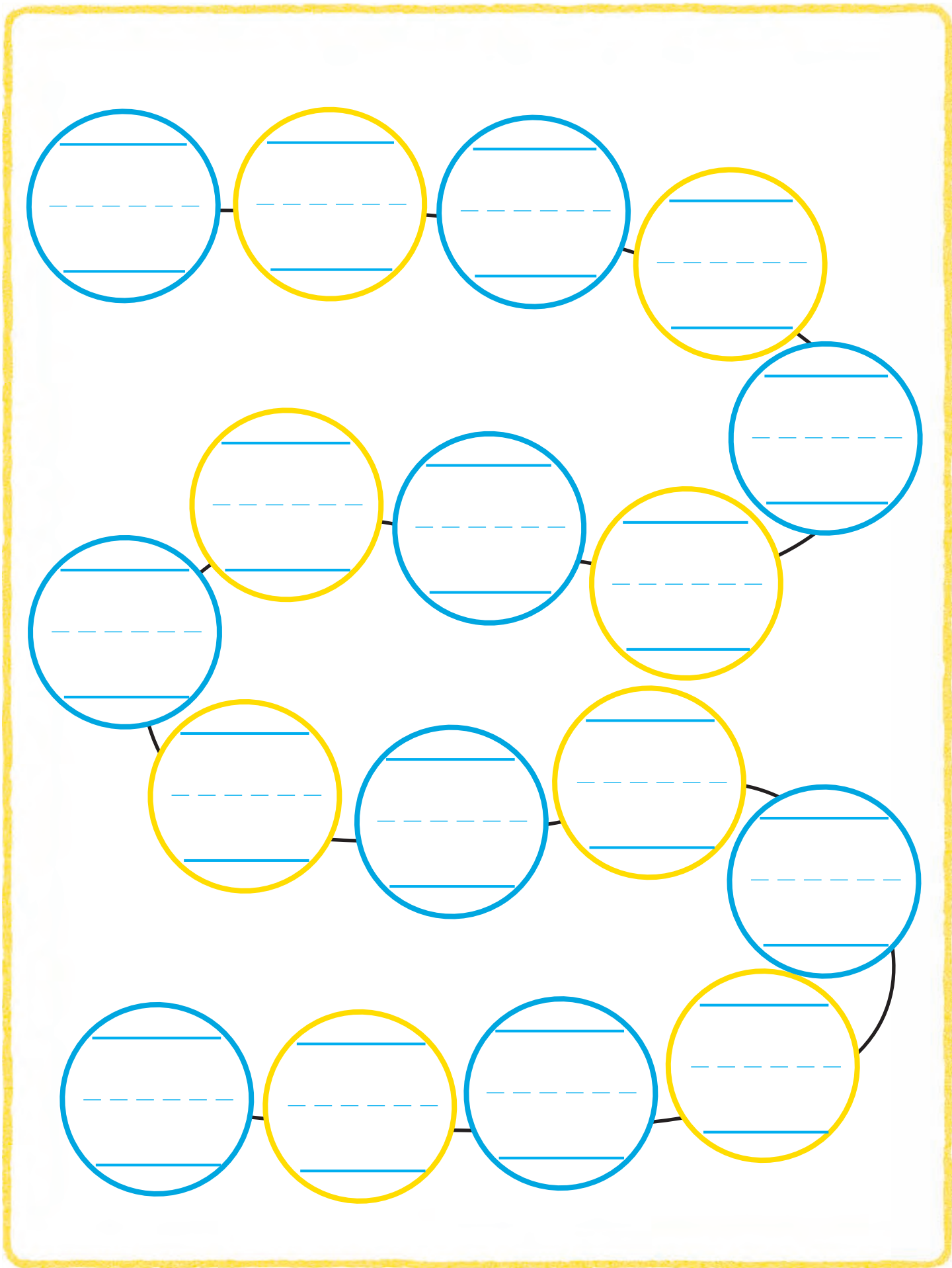
- Row 1: Blank, 13, Blank
- Row 2: Blank, 9, Blank, 11
- Row 3: 7, Blank, 5, Blank
- Row 4: Blank, 1, Blank, 3

© Education Development Center, Inc.

Write the missing numbers.



NOTE: Your child should be familiar with numbers to 40. Name a number and ask your child to tell the number that comes before it and after it.

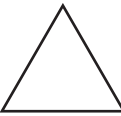
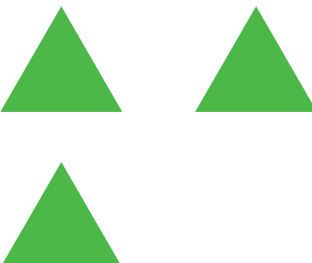
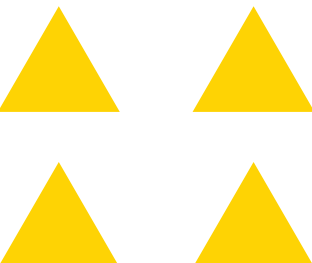






Make your own Number Path.
Begin with any number you like.

90 ninety

Sorting and Patterns


NCTM Standards 1, 2, 6, 7, 9, 10

	GREEN	YELLOW
		
		

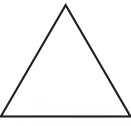
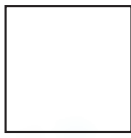


_____ + _____ = _____

_____ GREEN _____ YELLOW _____ All



_____ + _____ = _____

_____  _____  _____ All

Write number sentences to match the sort.



NOTE: Your child has been sorting figures by attributes. Ask your child to tell how the figures were sorted.

PURPLE

ORANGE





$$\begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array} + \begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array} = \begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array}$$

PURPLE ORANGE ALL



$$\begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array} + \begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array} = \begin{array}{c} \text{_____} \\ \text{-----} \\ \text{_____} \end{array}$$







ALL

Write number sentences to match the sort.

Making a Picture Graph

NCTM Standards 1, 2, 5, 6, 7, 9, 10

Type of Shirts



solid



polka dot



striped



most



least



Look at the graph.










 Circle the type of shirt that appears the most.

 Circle the type of shirt that appears the least.



NOTE: Your child is learning about graphs. Ask your child to tell you about this graph.

Type of Shirts




solid





design



striped







shirts

Look at the graph.
Write the number that tells how many shirts of each type.

Review/Assessment

NCTM Standards 1, 2, 6, 7, 9, 10

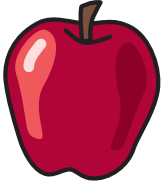
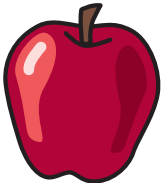

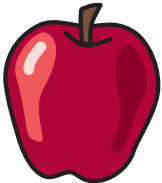
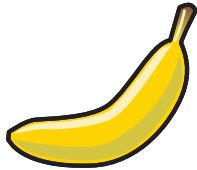

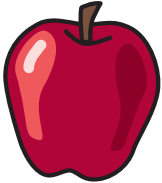
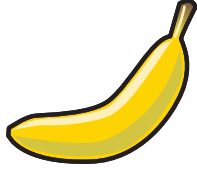

A number pattern activity on a grid. The grid consists of four rows of circles. Each circle contains a number or is blank. The numbers are 14, 12, 8, 10, 6, 4, 0, and 2. The circles are connected by lines, forming a path. The path starts at the top-left circle (blank), goes right to 14, then right to a blank circle, then down to 12, then left to a blank circle, then left to 8, then down to a blank circle, then right to 6, then right to a blank circle, then down to 4, then left to a blank circle, then left to 0, then right to a blank circle, then right to 2, then right to a blank circle.

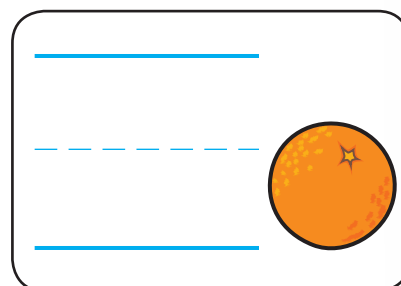
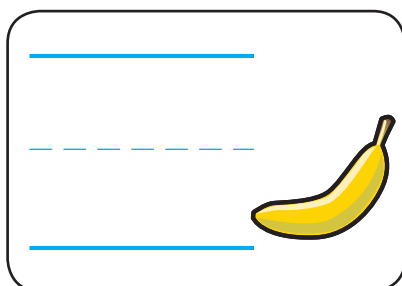
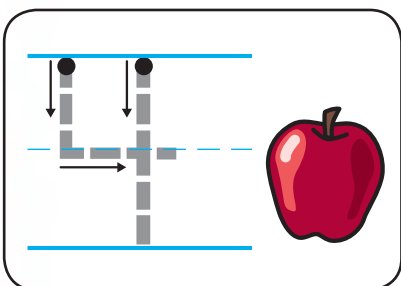
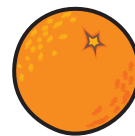
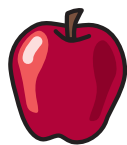
Write the missing numbers.



NOTE: This page assesses your child's understanding of number patterns. Ask your child to tell you which numbers were missing in the pattern.

Kinds of Fruit in a Fruit Bowl



Write the number that tells how many pieces of fruit of each type are in the picture graph.