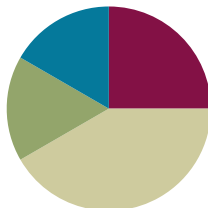# Lesson 10

Objective: Solve put together with result unknown math stories by drawing and using 5-group cards.

Suggested Lesson Structure

■ Fluency Practice   (15 minutes)
■ Application Problem   (10 minutes)
■ Concept Development   (25 minutes)
■ Student Debrief   (10 minutes)

Total Time   **(60 minutes)**

Fluency Practice (15 minutes)

▪ Happy Counting the Say Ten Way **1.NBT.2**   (2 minutes)
▪ Cold Call: 1 More **1.OA.5**   (2 minutes)
▪ Target Practice: 5 and 6 **1.OA.6**   (11 minutes)

Happy Counting the Say Ten Way (2 minutes)

Note: Providing students with ongoing practice with counting throughout the year builds and maintains their counting skills, which are foundational for later Grade 1 work using the Level 3 strategy of making ten and taking from ten to add and subtract.

Repeat the Happy Counting activity from Lesson 3 Fluency Practice counting from 15 to 25 and back the Say Ten way.

Cold Call: 1 More (2 minutes)

Note: This activity supports the connection of counting on 1 to adding 1.

Tell students you are going to say a number aloud and instruct them to think about the number that is 1 more. Let them know you will cold call one student to say the number aloud as quickly as possible.

Target Practice: 5 and 6 (11 minutes)

Materials: (S) Per set of partners: personal white board, target practice (Fluency Template), 6 counters, 1 die

Note: This activity addresses the core fluency objective for Grade 1 of adding and subtracting within 10.

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See directions on the Target Practice board. First, use 5 as the target number, and then distribute 1 more counter and use 6 as the target number.

Application Problem (10 minutes)

The class is collecting canned food to help those in need. The teacher brings in 3 cans to start the collection. On Monday, Becky brings in 2 cans. On Tuesday, Talia brings in 2 cans. On Wednesday, Brendan brings in 2 cans. How many cans were there at the end of each day?

Draw a picture to show your thinking. What do you notice about what happened each day?

Extension: If this pattern continues, how many cans will the class have on Friday?

Note: This problem serves as a bridge from the previous lesson, in which students solved *add to* problems. Students will discuss their strategies during the Debrief, and connect the work with today's lesson of using drawings and 5-group cards to solve.
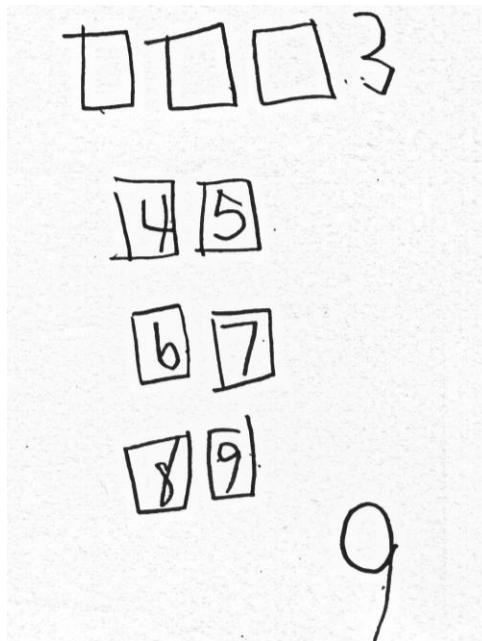
Concept Development (25 minutes)

Materials: (T) 7 children picture card (Lesson 5 Template 2), 10 children on playground picture card (Lesson 8 Template) (S): 5-group cards (Lesson 5 Template 1), personal white boards, number bond and two blank equations (Lesson 9 Template), 10 children on playground picture card (Lesson 8 Template) per pair

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

As you tell the math story, make sure to have it written on the board or on a handout for students who need information presented visually. Presenting material in more than one way helps different styles of learners. In this part of the lesson, auditory and visual learners will benefit.
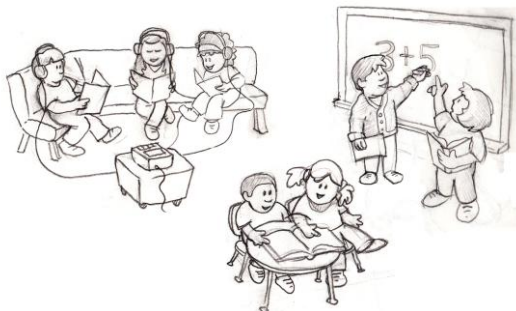
T: When I tell the math story from the picture, you draw a picture to match it. In a first-grade classroom, some students are sitting down and learning. Use simple math drawings like circles to draw how many students are sitting down.

S: (Draw 5 circles.)

T: Some students are standing up and learning. Draw this part of the story.

S: (Draw 2 circles.)

T: How many students are there in all? (Give time for students to count on.)

S: 7 students!

T: Write the number sentence to match your drawing.

T: (Have students identify what each number represents.)

Using the same picture, generate one or two story problems for students to draw and solve (e.g., 3 + 4 = 7, 1 + 6 = 7).
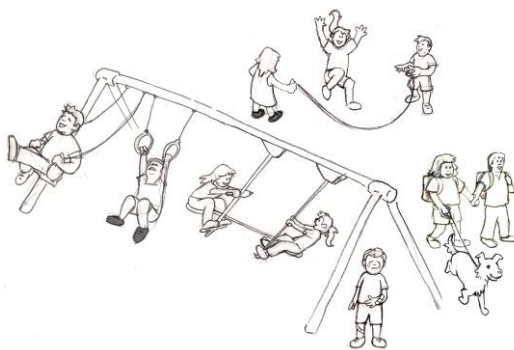
T: (Distribute 5-group cards to each student.) Let's look at the picture of children playing on the playground. I'll make up a math story and you use your 5-group cards to match the story. At recess, 3 students are having fun on the swings. Show me with your 5-group card, using the numeral side.

S: (Show the number 3.)

T: Three students are having fun playing with the jump rope. Show me with your 5-group card, using the dot side.

S: (Show 3 dots.)

T: Count on to find out how many students are playing on the swings and how many students are playing with the jump rope. (Give time for students to solve.)

T: Write the number sentence using numbers to match your drawing.

S: (Write 3 + 3 = 6.)

T: (Have students identify what each number represents.)

> **NOTES ON MULTIPLE MEANS OF REPRESENTATION:**
>
> Circulate as students are telling their story problems and solving using 5-group cards. Guide and encourage students to use math vocabulary in discussion. When students use these words, it is apparent that they are applying what they are learning.

Using the same picture, generate one or two story problems for students to solve using their 5-group cards. You might continue with the following suggested examples: 5 + 5 = 10 (children in the air, children on the ground), 3 + 7 = 10 (sitting kids, standing kids).

T: (Write 8 + 2 on the board.) Now, it's your turn to be the storyteller. Study the picture card carefully! Work with your partner to come up with a story that matches my expression.

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Lesson 10:   Solve *put together with result unknown* math stories by drawing and using 5-group cards.
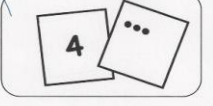
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Circulate and choose pairs to share their stories. There are multiple ways to represent 8 + 2 in the picture. Distribute a picture of the playground to each pair of students. Have them work together to make up story problems and solve them by using 5-group cards. Circulate, and then choose a pair of students to share their story for the class to solve at the end of this lesson.

Problem Set (10 minutes)

Students should do their personal best to complete the Problem Set within the allotted 10 minutes. For some classes, it may be appropriate to modify the assignment by specifying which problems they work on first. Some problems do not specify a method for solving. Students solve these problems using the RDW approach used for Application Problems.

Student Debrief (10 minutes)

Lesson Objective: Solve *put together with result unknown* math stories by drawing and using 5-group cards.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.
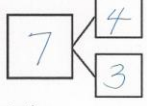
You may choose to use any combination of the questions below to lead the discussion.

- In our lesson, we used simple math drawings like circles to draw the students in our problem. Why would we use circles instead of drawing the students?
- Look at your Problem Set and your Application Problem. What strategies have you been using to tell and solve our stories today?
- What patterns do you see in your Application Problem?
- Share with a partner how you solved the Application Problem. In what ways did you solve it

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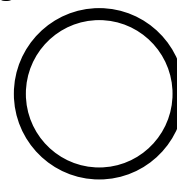Date: 10/21/14

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differently? In what ways did you solve it similarly?

- What do you think was an efficient strategy to use to solve the Application Problem? What made that strategy efficient?
- I heard many of you say that you counted on 2 each time. Help me write a number sentence that shows what happened on Monday. (3 + 2 = 5.) Let's circle the part that shows that we counted on 2.
- How could we use 5-group cards to show how to solve this?
- Was counting on the same as adding today? How do you know? (The numbers were increasing; we were counting up, etc.)

Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help you assess the students' understanding of the concepts that were presented in the lesson today and plan more effectively for future lessons. You may read the questions aloud to the students.

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Target Number:

Target Practice

Choose a *target number* between 6 and 10 and write it in the middle of the circle on the top of the page. Roll a die. Write the number rolled in the circle at the end one of the arrows. Then, make a bull's-eye by writing the number needed to make your target in the other circle.
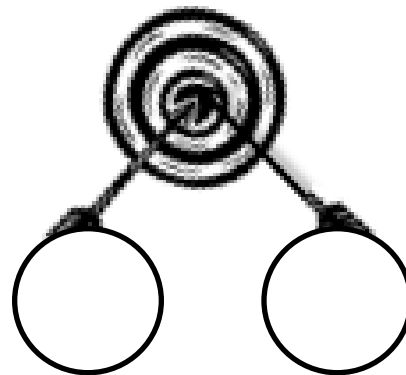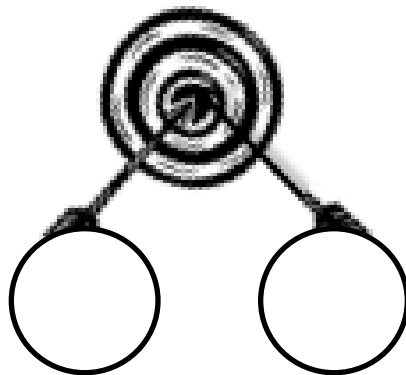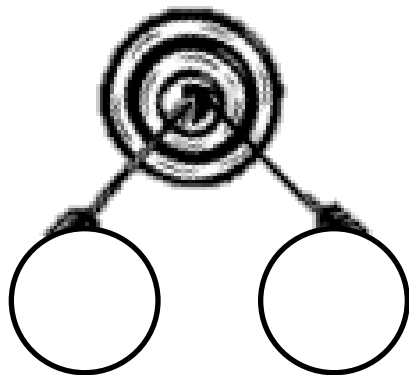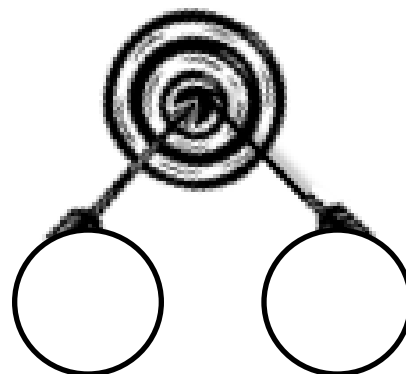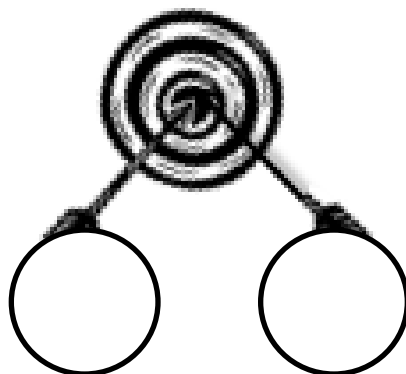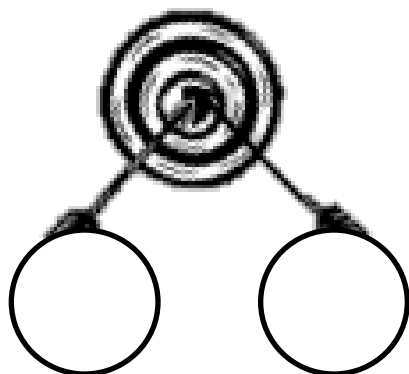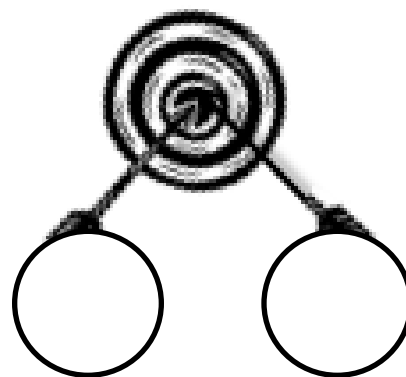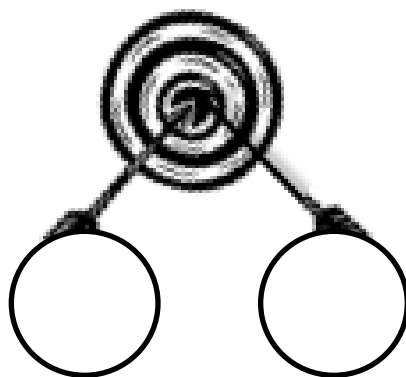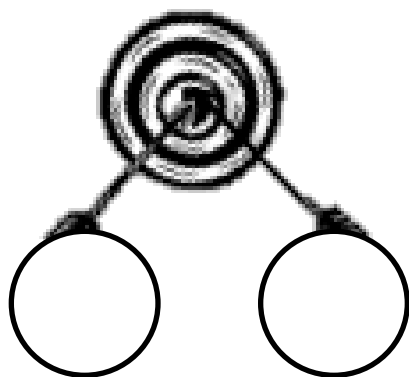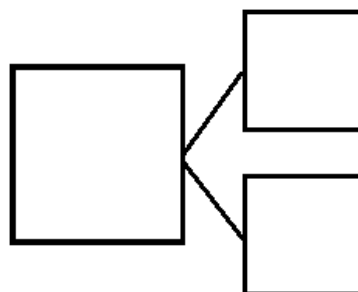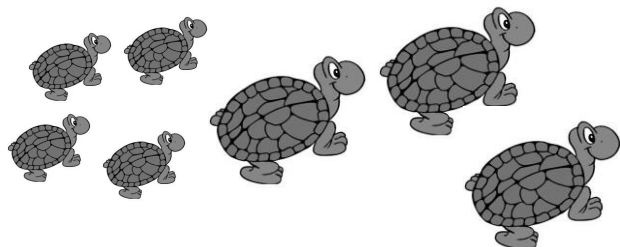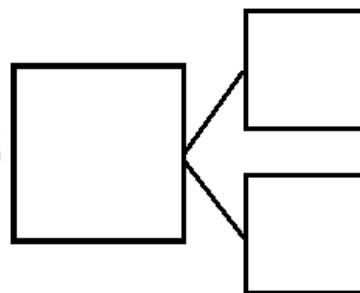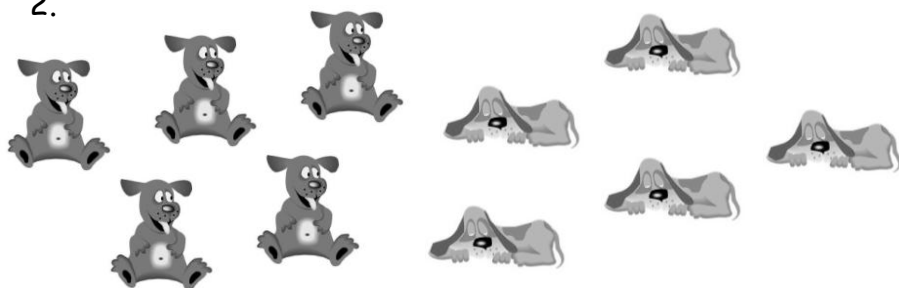
target practice

Name _____   Date _____

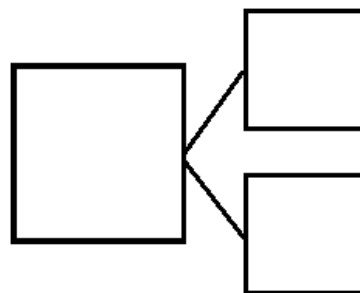1. Use the picture to write the number sentence and the number bond.
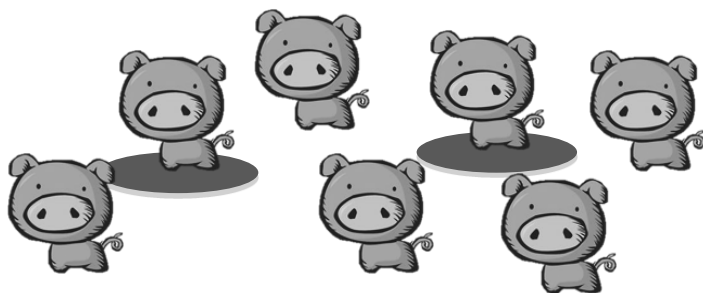
_____ little turtles   +   _____ big turtles   = _____ turtles

2.

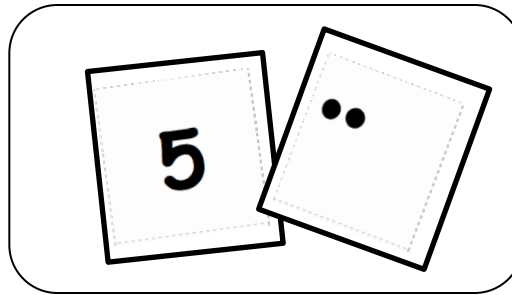_____ dogs that are awake   +   _____ sleeping dogs   = _____ dogs

3.

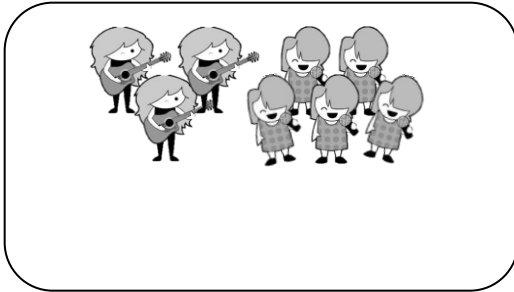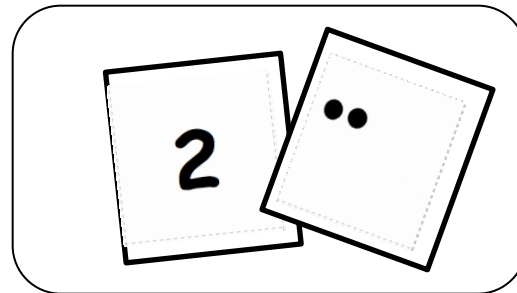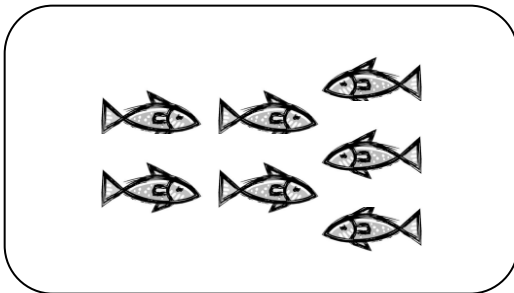_____ pigs   +   _____ pigs in mud   = _____ pigs

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                                              drawing and using 5-group cards.   **engage**ny   **1.C.21**
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4. Draw a line from the picture to the matching 5-group cards.
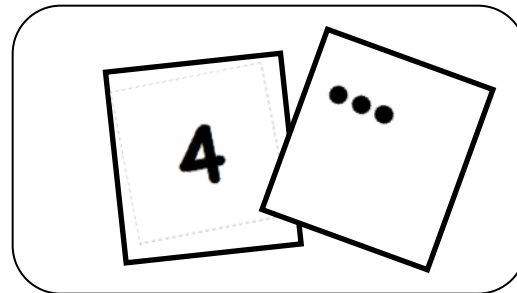
a.

b.

c.
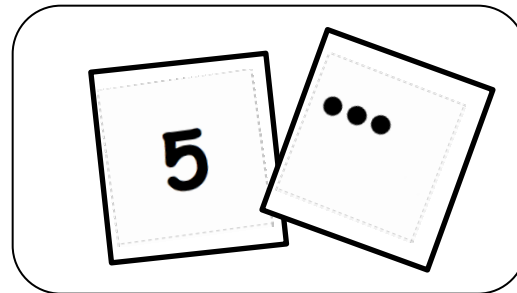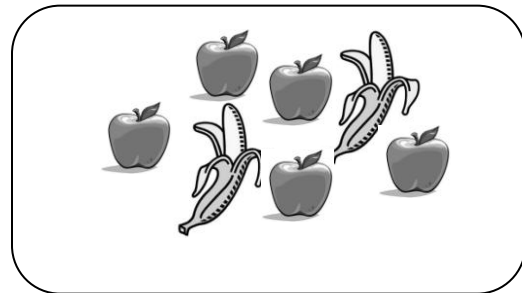
d.
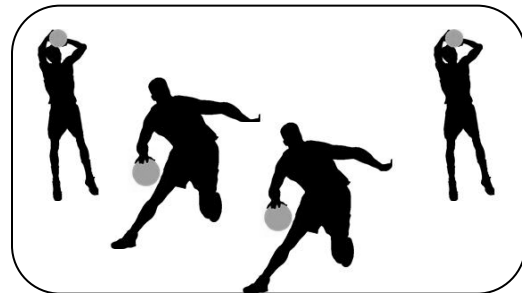
Name _____   Date _____

1. Draw to show the story.   There are 3 large balls and 4 small balls.

$$\boxed{} \quad + \quad \boxed{} \quad = \quad \boxed{}$$

How many balls are there?   There are _____ balls.

2. Circle the set of tiles that match your picture.

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| **Lesson 10:** | Solve *put together with result unknown* math stories by drawing and using 5-group cards. |
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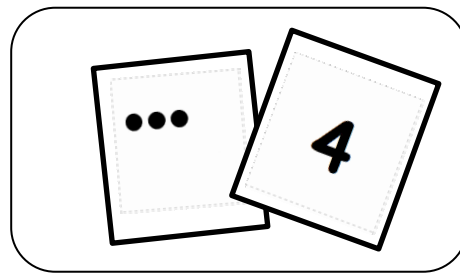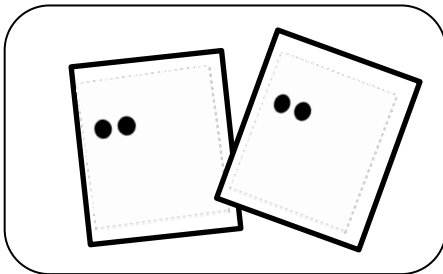
Name _____   Date _____

1. Use your 5-group cards to solve.

Draw the other 5-group card to show what you did.

☐ + ☐ = ☐

5	

_____
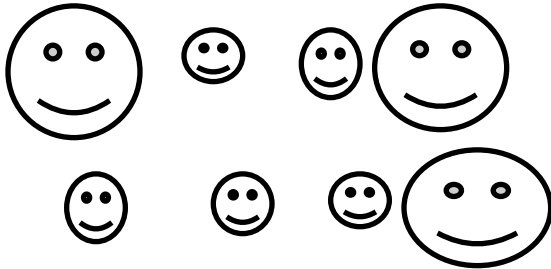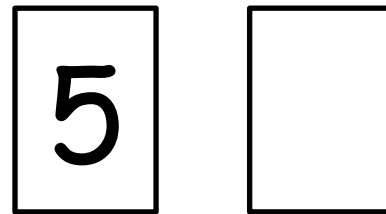
2. Use your 5-group cards to solve.

Draw the other 5-group card to show what you did.
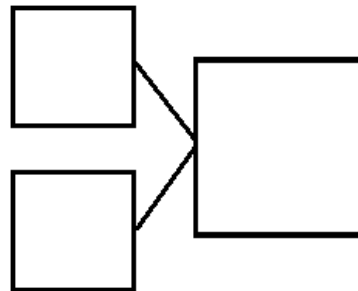
☐ = ☐ + ☐

4	
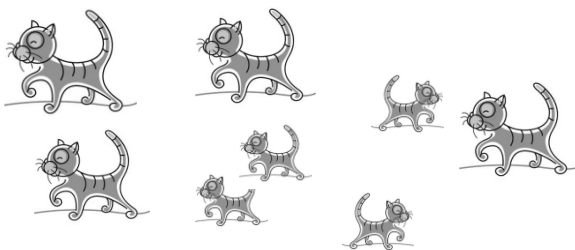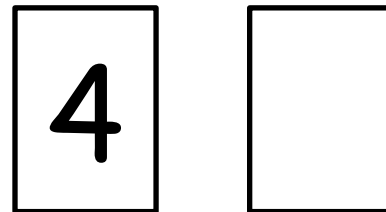
3. There are 4 tall boys and 5 short boys. Draw to show how many boys there are in all.

There are _____ boys in all.

Write a number sentence to show what you did.

☐ **+** ☐ **=** ☐

Write a number bond to match the story.

———————————————————————————————————————

4. There are 3 girls and 5 boys. Draw to show how many children there are altogether.

Write a number bond to match the story.

There are _____ children altogether.

Write a number sentence to show what you did.

☐ **+** ☐ **=** ☐

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