Eureka Math

Kindergarten

Module 4

Lessons 1-5

Number Pairs –

Addition and Subtraction to Ten

You can access videos for these lessons on the SCSD Website

Learning at Home Link

SYRACUSE CITY SCHOOL DISTRICT

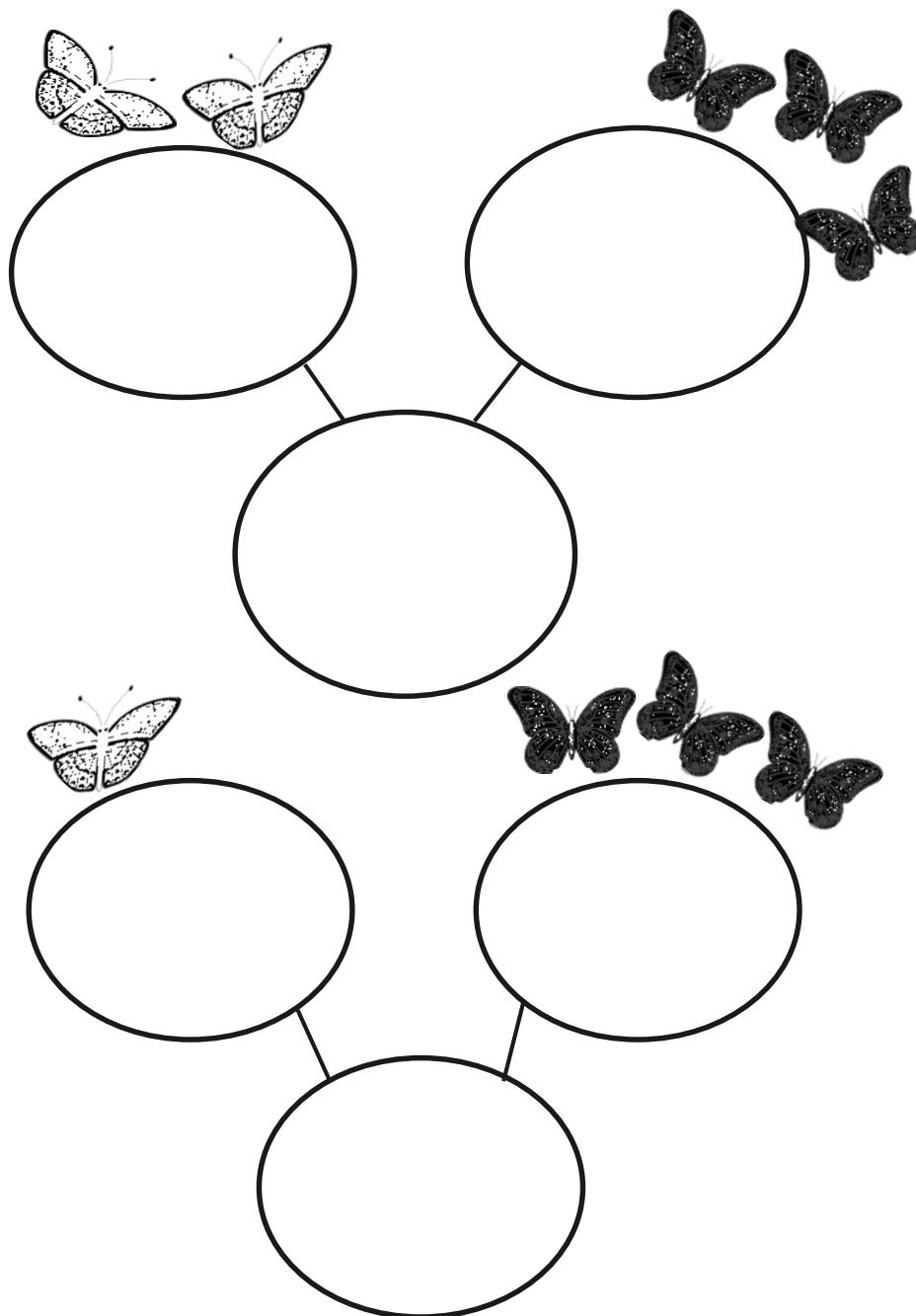EUREKA MATH®

Name _____   Date _____

Draw the light butterflies in the number bond. Then, draw the dark butterflies. Show what happens when you put the butterflies together.
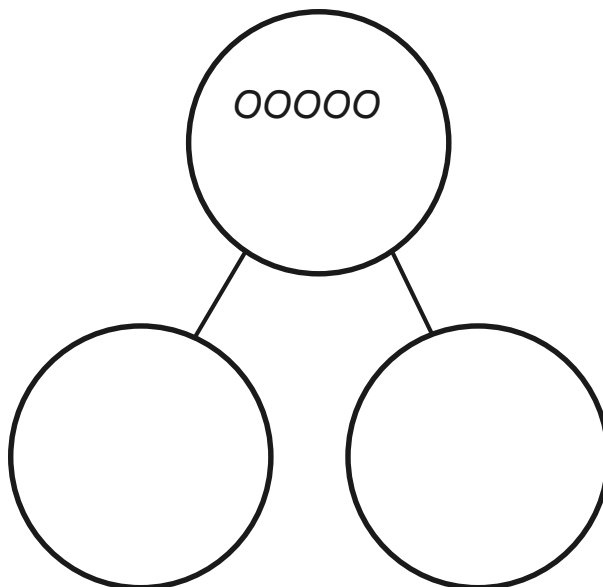
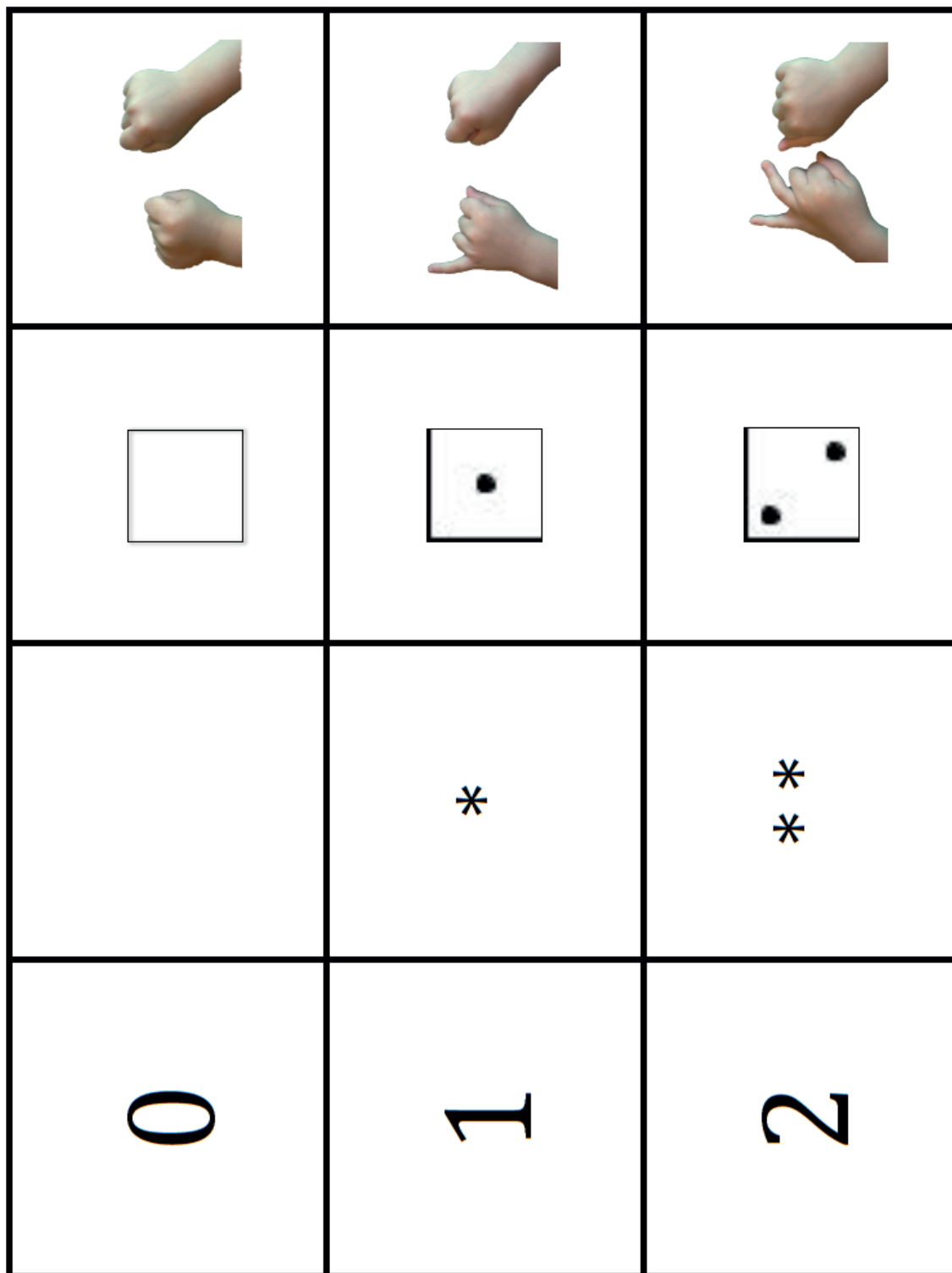**EUREKA MATH**

Lesson 1:   Model composition and decomposition of numbers to 5 using actions, objects, and drawings.

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1

Name _____   Date _____

How many 🐱 ? ☐   How many 🐱💤 ? ☐

Draw to show how to take apart the group of cats to show 2 groups, the ones sleeping and the ones awake.

OOOOO

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Lesson 1:   Model composition and decomposition of numbers to 5 using actions, objects, and drawings.
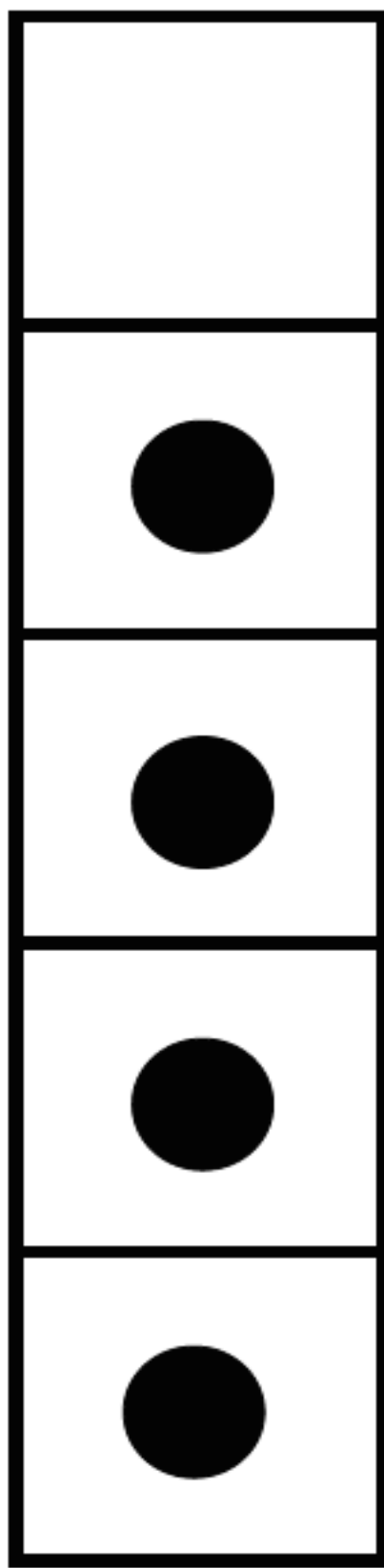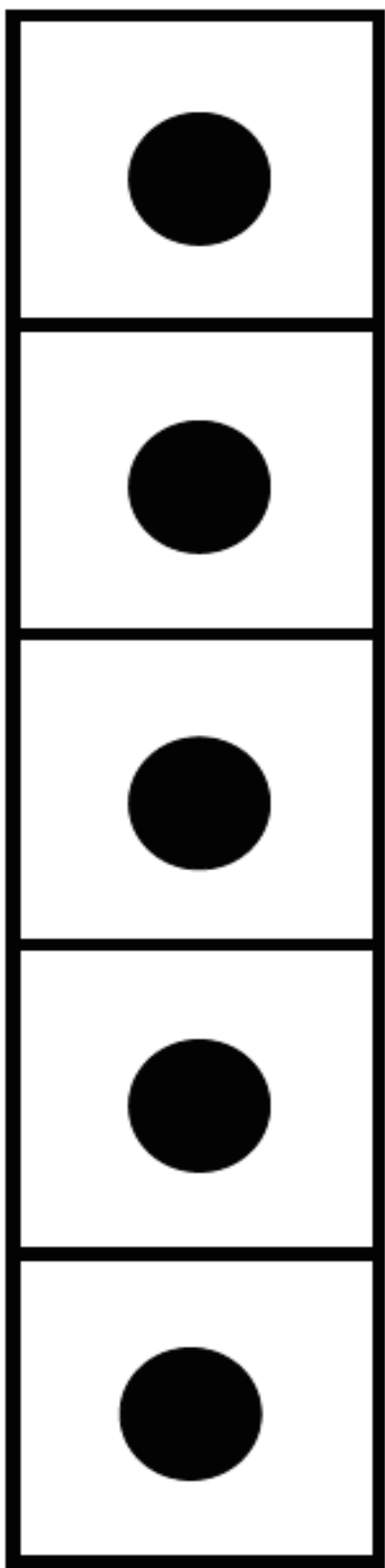
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2

Cut along lines to create cards. Print on cardstock or laminate for repeated use.

matching game cards

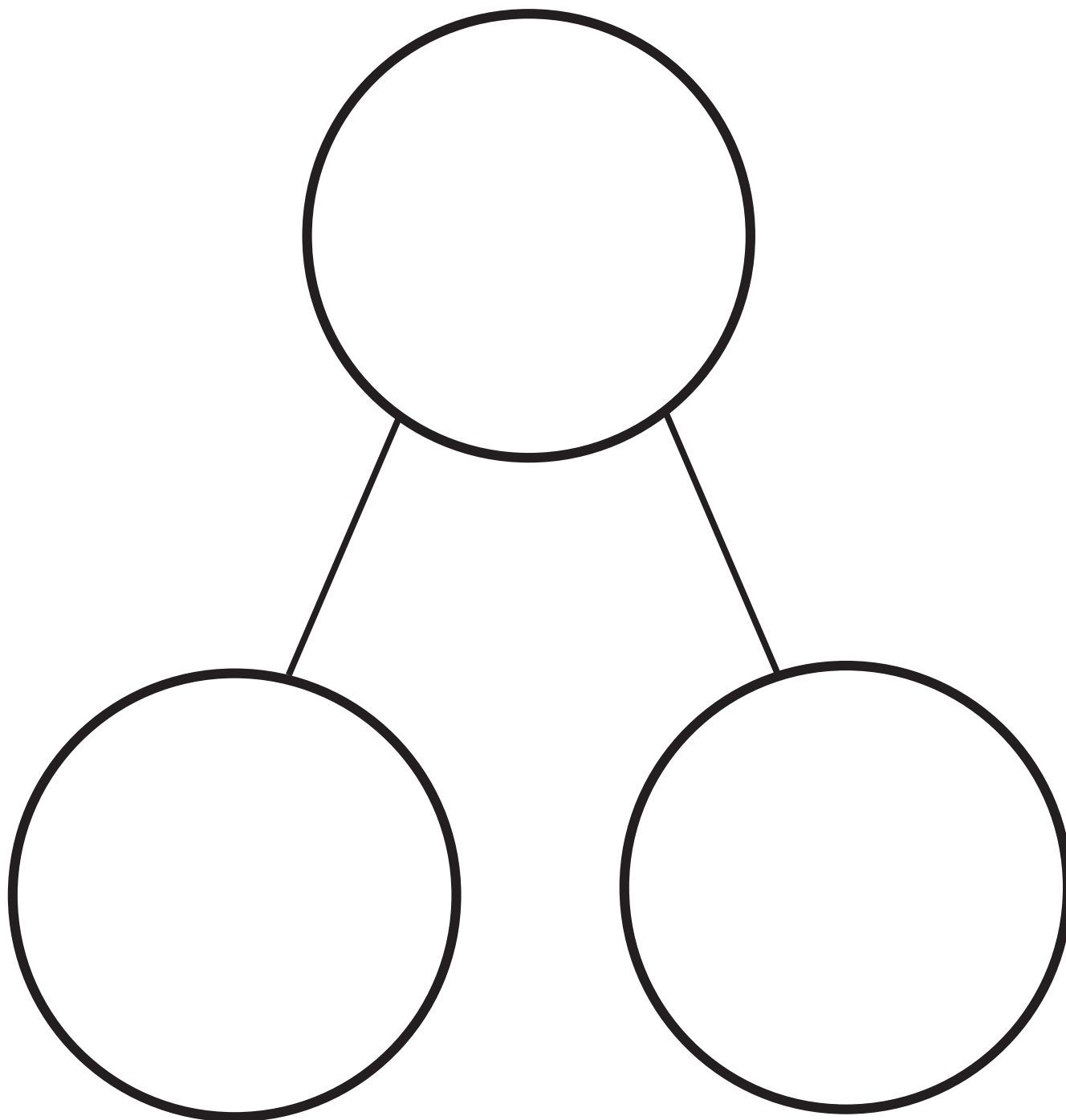EUREKA
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Lesson 1:   Model composition and decomposition of numbers to 5 using
actions, objects, and drawings.

1

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* * * *	* * * * *	* * * * * *
3	4	5

matching game cards

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large 5-frame cards

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Lesson 1:   Model composition and decomposition of numbers to 5 using
actions, objects, and drawings.

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graphic of birds

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Lesson 1:   Model composition and decomposition of numbers to 5 using actions, objects, and drawings.

25

number bond

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Lesson 1: Model composition and decomposition of numbers to 5 using actions, objects, and drawings.

4

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Name _____   Date _____

Draw the blue fish in the first circle on top. Draw the orange fish in the next circle on top. Draw all the fish in the bottom circle.
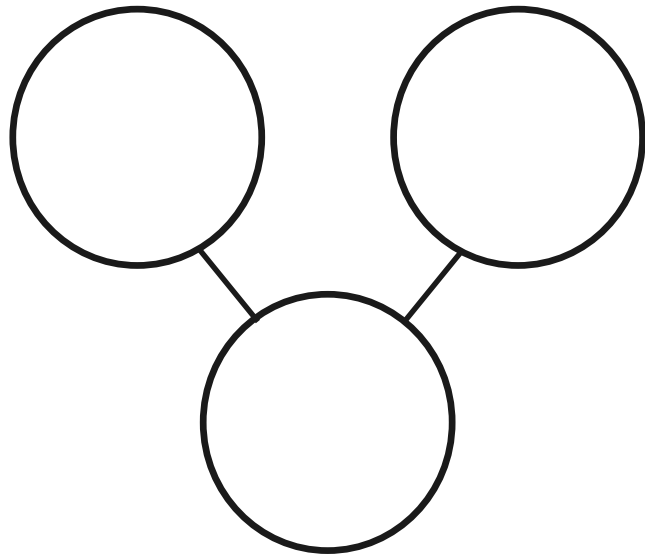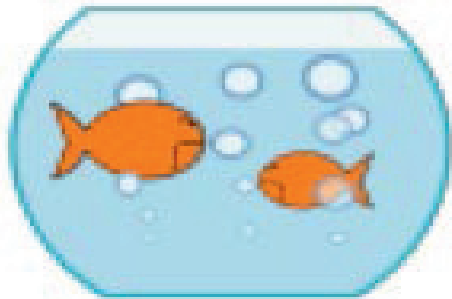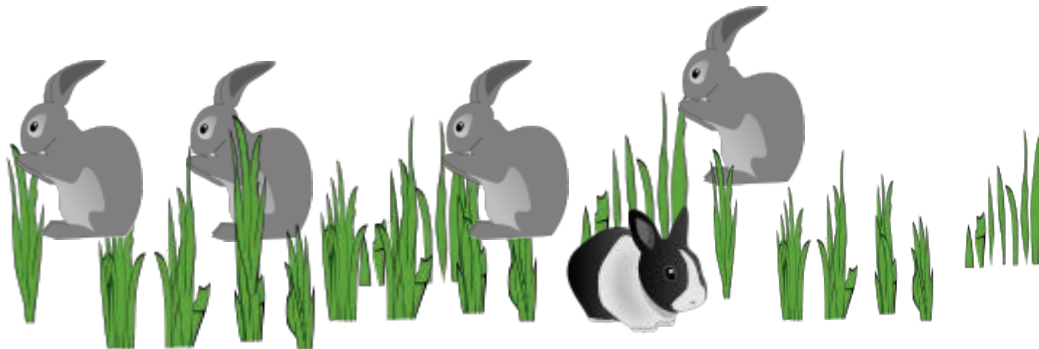
☐ and ☐ make ☐

Draw a square for each fish in the top circle. Draw a square for each goldfish in the bottom circle. In the last circle on the bottom, draw a square for each spiny fish.
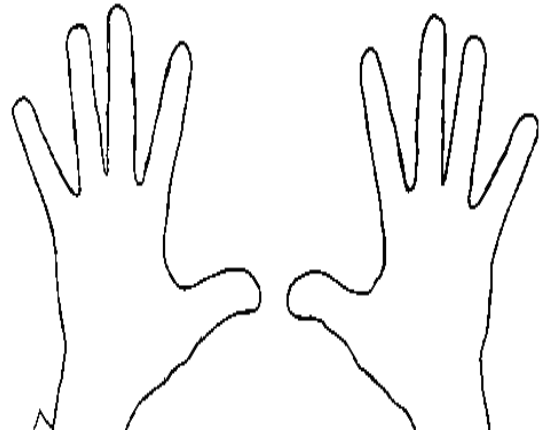
☐ and ☐ make ☐

Lesson 1:   Model composition and decomposition of numbers to 5 using actions, objects, and drawings.

3

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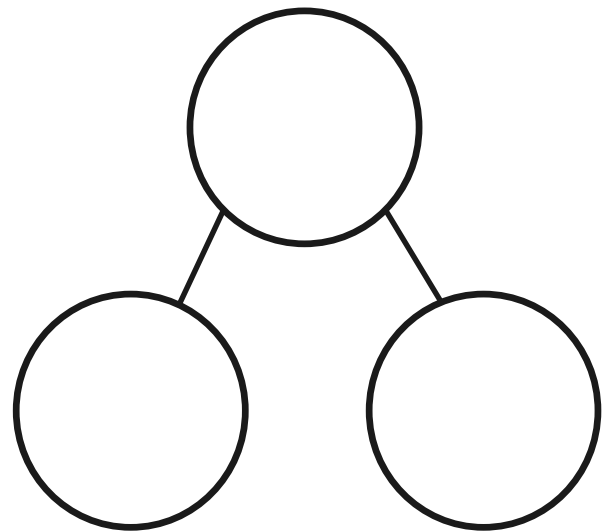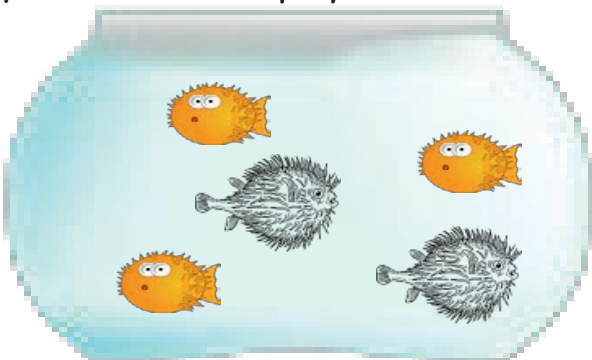
Name _____   Date _____

The squares below represent a cube stick. Color the squares to match the rabbits. 4 squares gray. 1 square black. Draw the squares in the number bond.
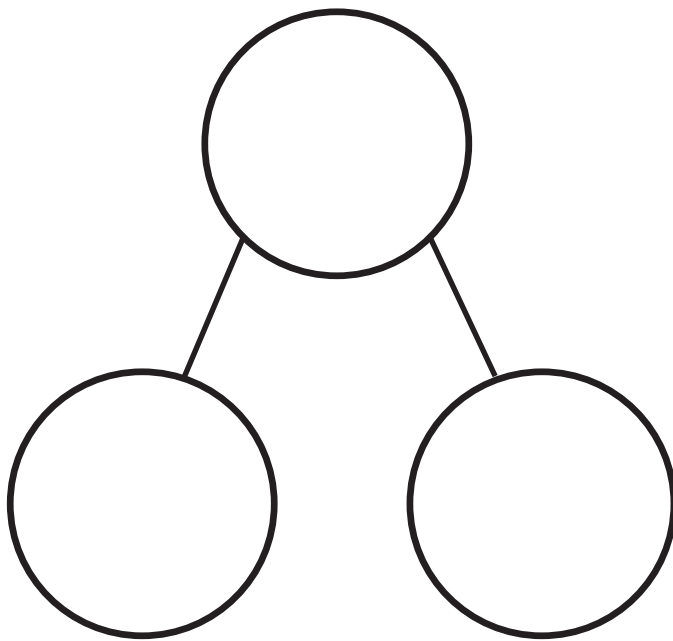
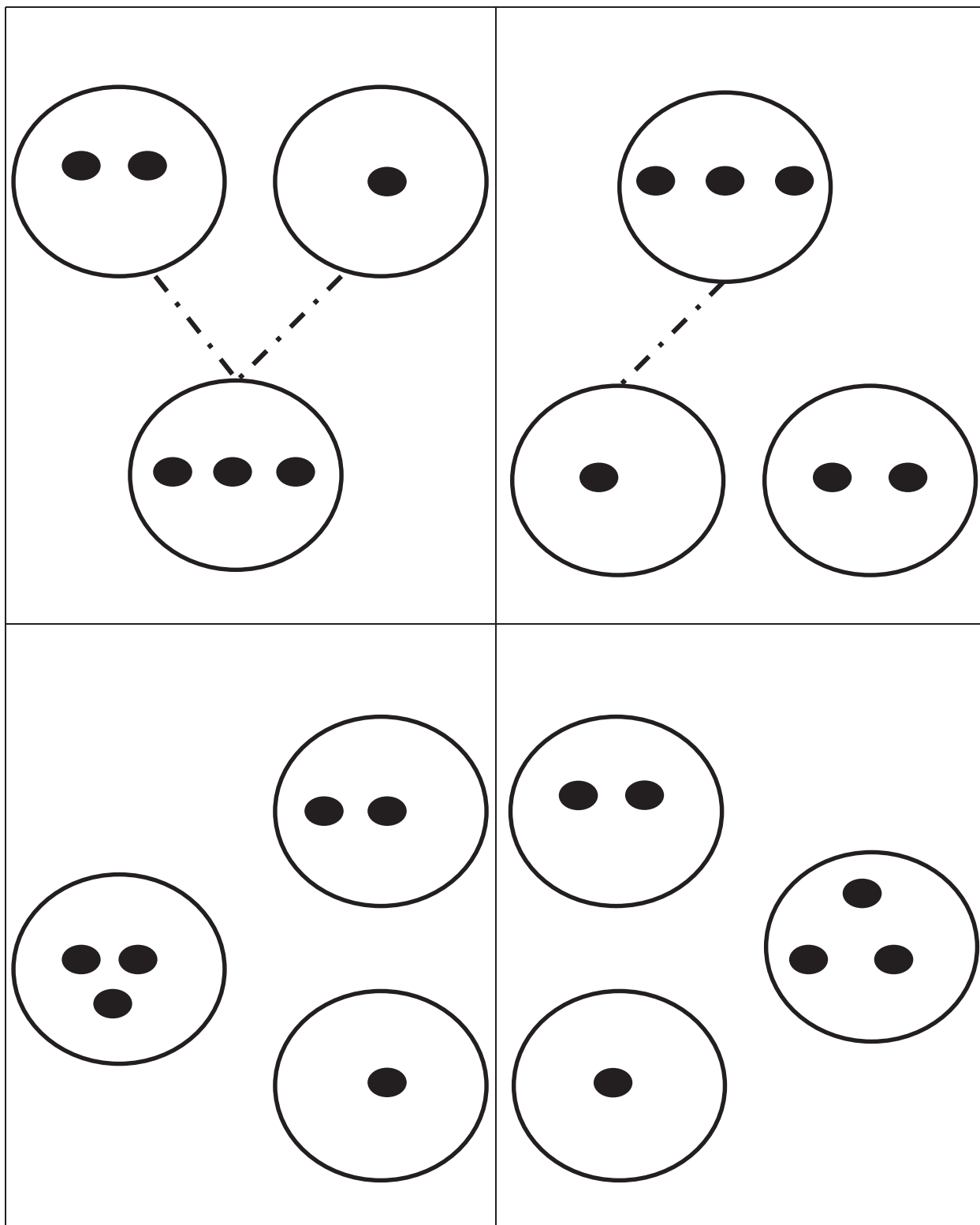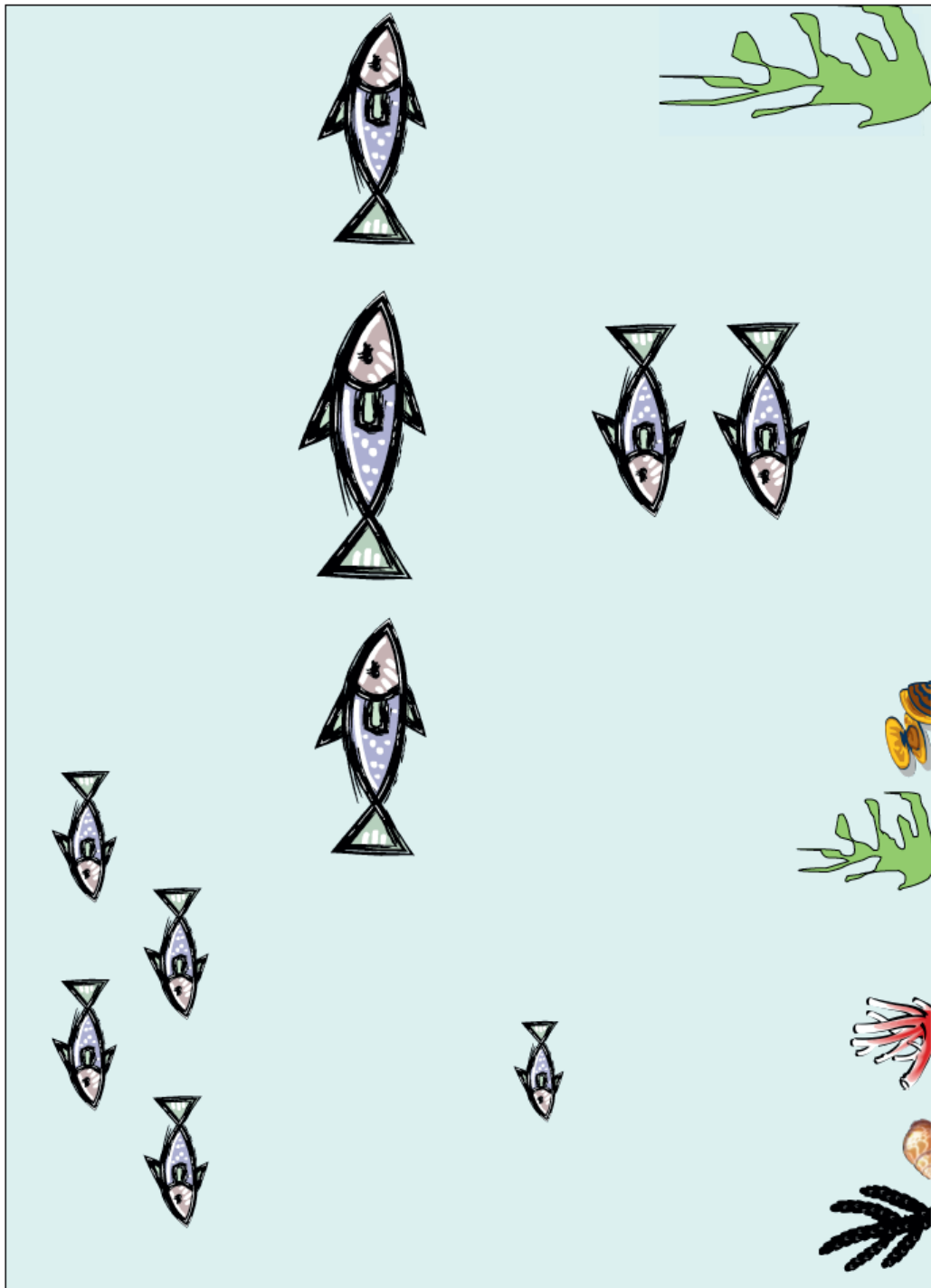Show the parts of the number bond on your fingers. Color the fingers you used.

[ ] rabbits and [ ] rabbit make [ ] rabbits.

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Lesson 2:   Model composition and decomposition of numbers to 5 using fingers
and linking cube sticks.

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make a bond of 3

Lesson 2: Model composition and decomposition of numbers to 5 using fingers and linking cube sticks.

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1

hidden numbers mat

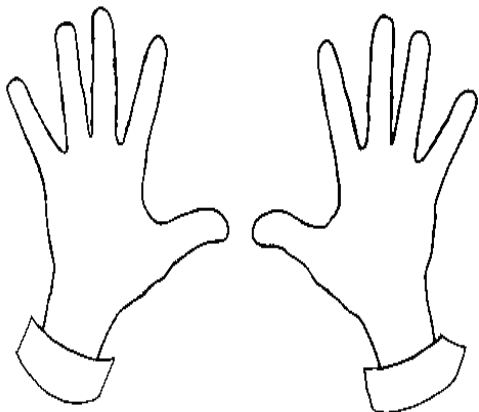Lesson 2:   Model composition and decomposition of numbers to 5 using fingers
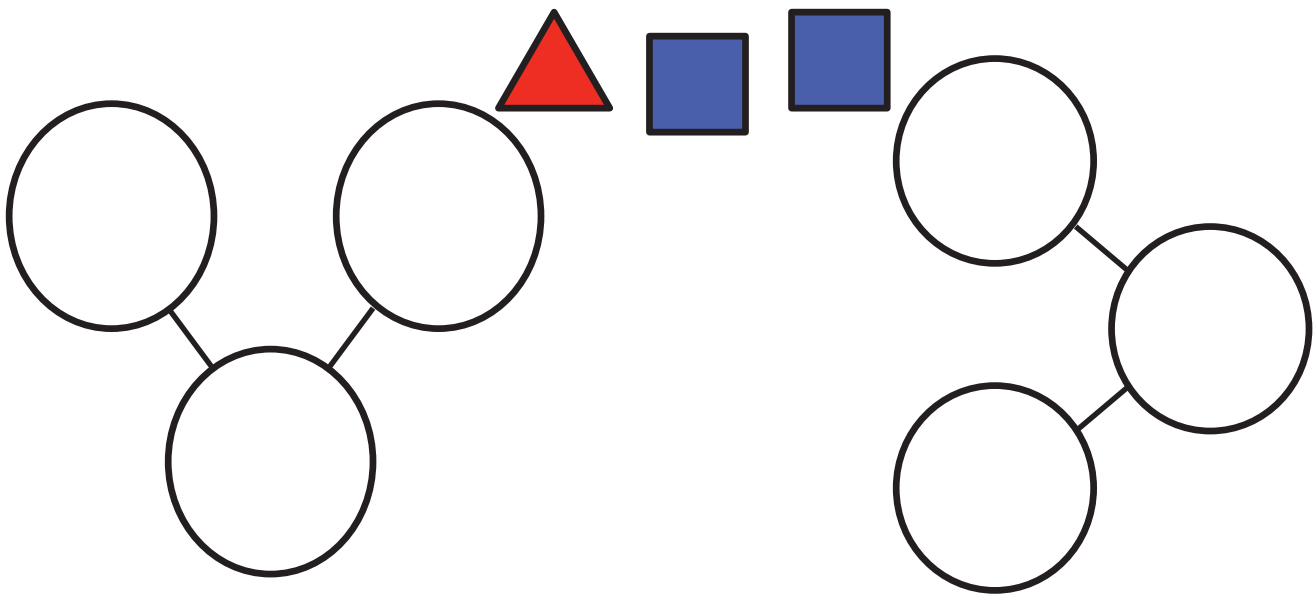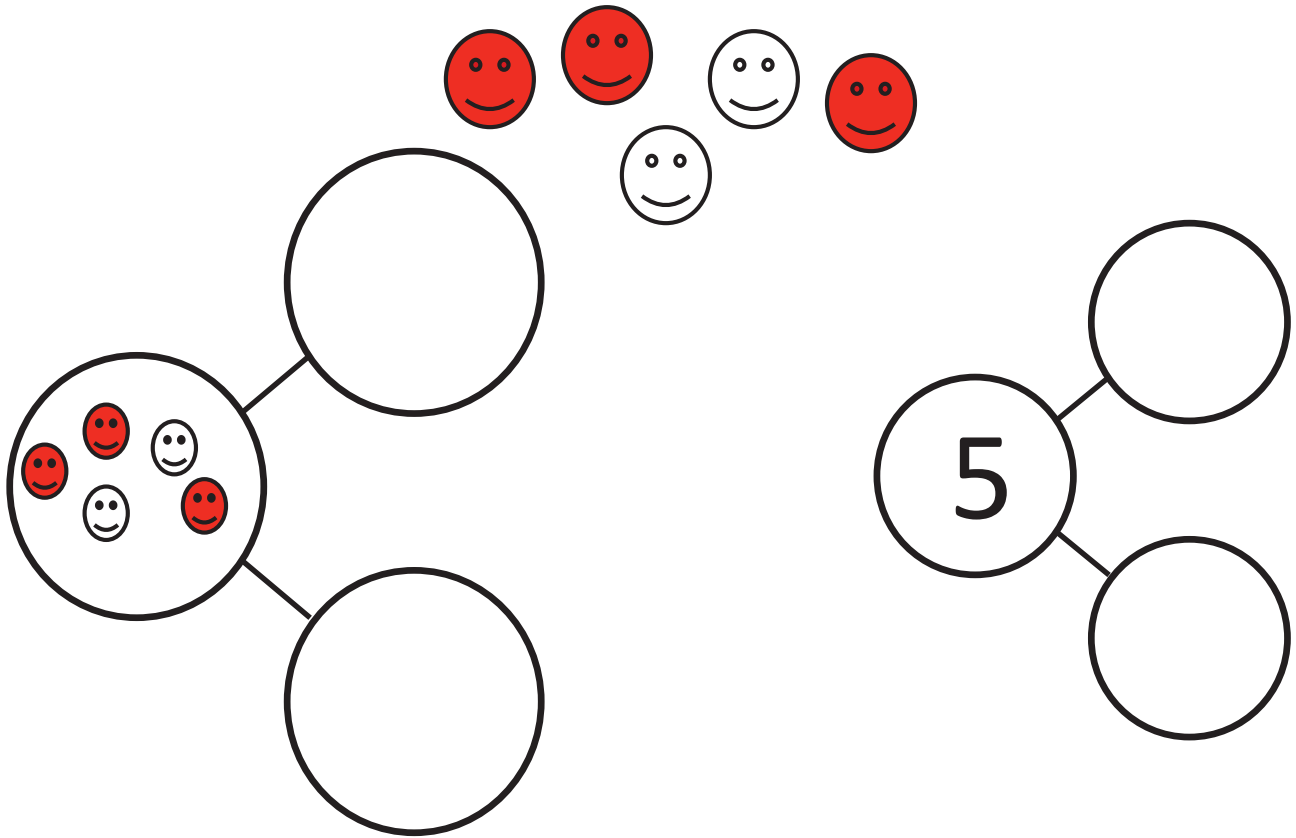and linking cube sticks.

2

Name _____   Date _____

The squares below represent a cube stick. Color some squares blue and the rest of the squares red. Draw the squares you colored in the number bond. Show the hidden partners on your fingers to an adult. Color the fingers you showed.
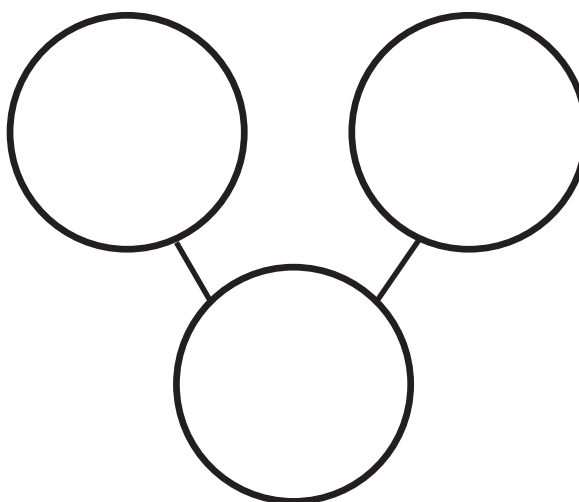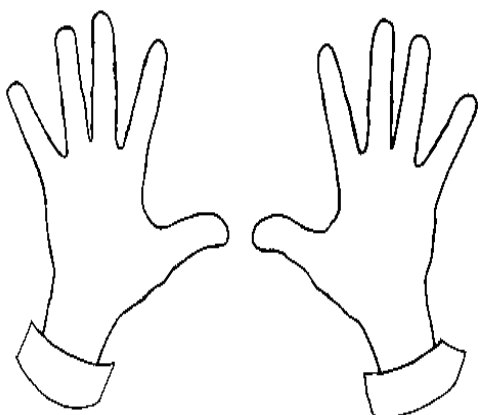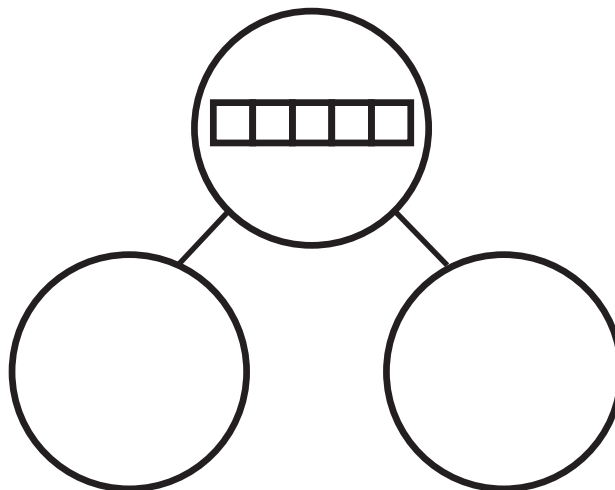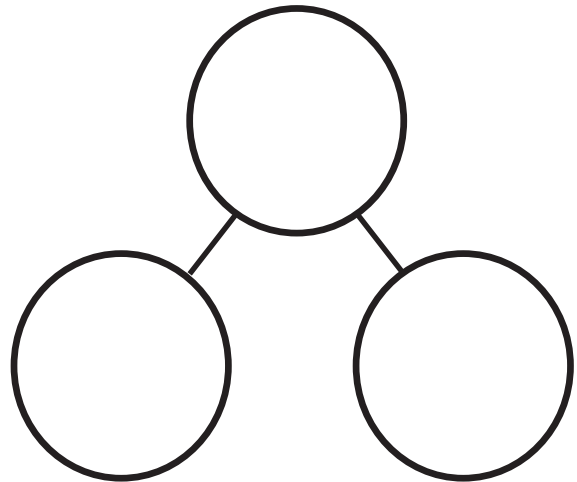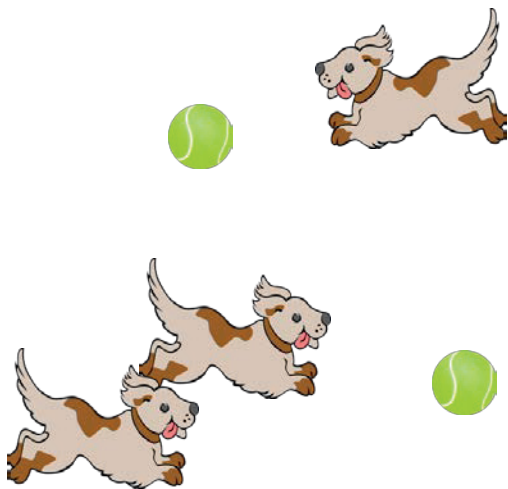
Name _____   Date _____

Draw the shapes and write the numbers to complete the number bonds.

Write numbers to complete the number bond. Put the number of dogs in one part and the number of balls in the other part.

Look at the picture. Tell a story about the birds going home to your neighbor. Draw a number bond, and write numbers that match your story.
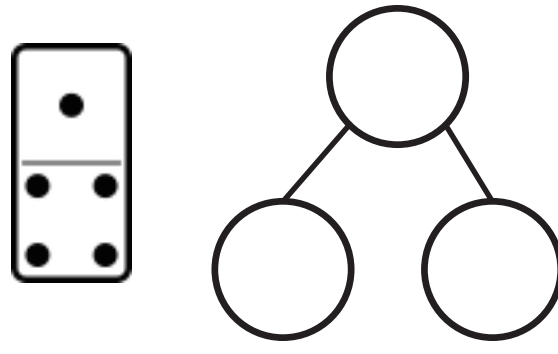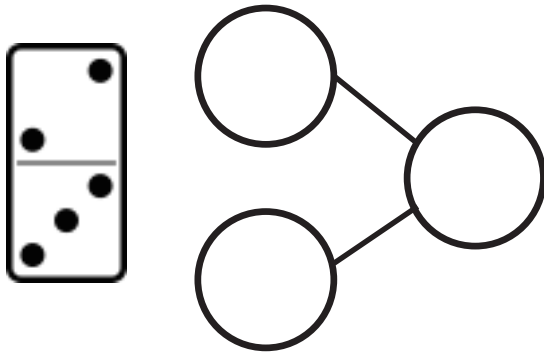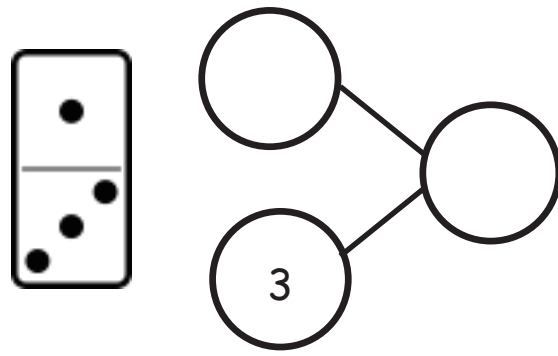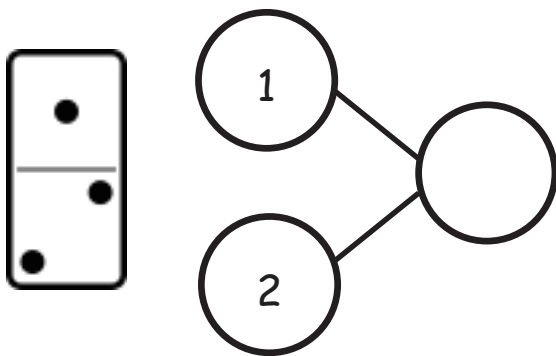

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Lesson 3:   Represent composition story situations with drawings using numeric number bonds.

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Fill in the missing number.

0, 1, 2, 3, 4, _____	_____, 4, 3, 2, 1, 0
0, 1, 2, 3, _____, 5	5, _____, 3, 2, 1, 0
0, 1, 2, _____, 4, 5	5, 4, _____, 2, 1, 0
0, 1, _____, 3, 4, 5	5, 4, 3, _____, 1, 0
0, _____, 2, 3, 4, 5	5, 4, 3, 2, _____, 0
_____, 1, 2, 3, 4, 5	5, 4, 3, 2, 1, _____
0, _____, 2, 3, 4, 5	0, 1, 2, 3, _____, 5
0, 1, _____, 3, 4, 5	5, 4, _____, 2, 1, 0
0, 1, 2, _____, 4, 5	0, 1, _____, 3, 4, 5
0, 1, 2, 3, _____, 5	_____, 1, 2, 3, 4, 5

Lesson 3:   Represent composition story situations with drawings using numeric
number bonds.

Name _____   Date _____

Fill in the number bond to match the domino.

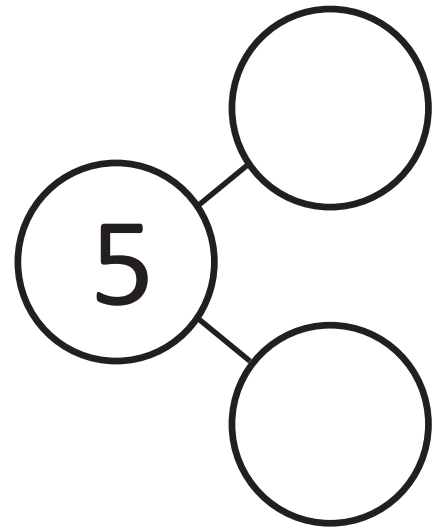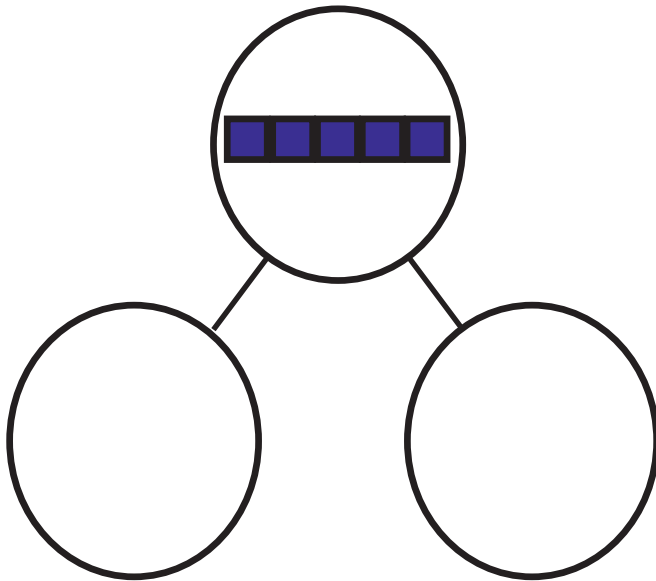Fill in the domino with dots, and fill in the number bond to match.

Lesson 3:   Represent composition story situations with drawings using numeric number bonds.

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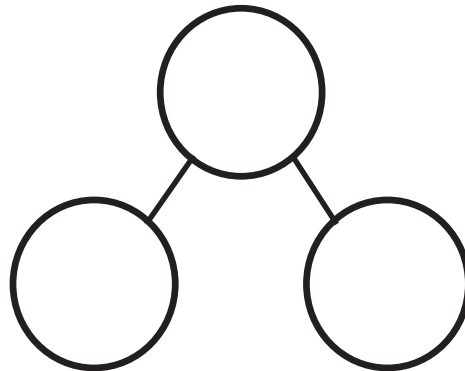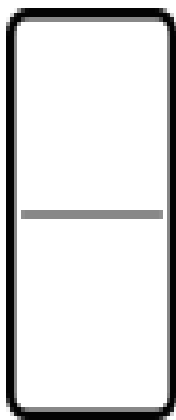
Name _____   Date _____

Draw and write the numbers to complete the number bonds.

Lesson 4:   Represent decomposition story situations with drawings using numeric number bonds.

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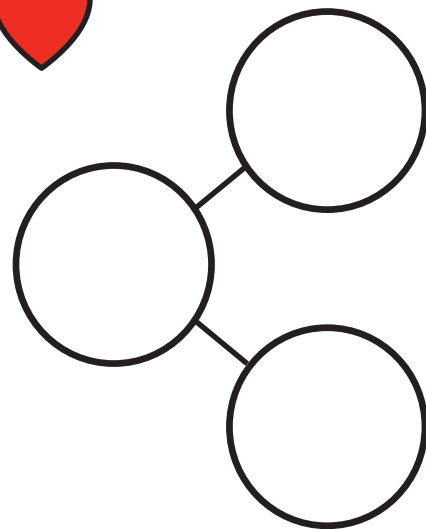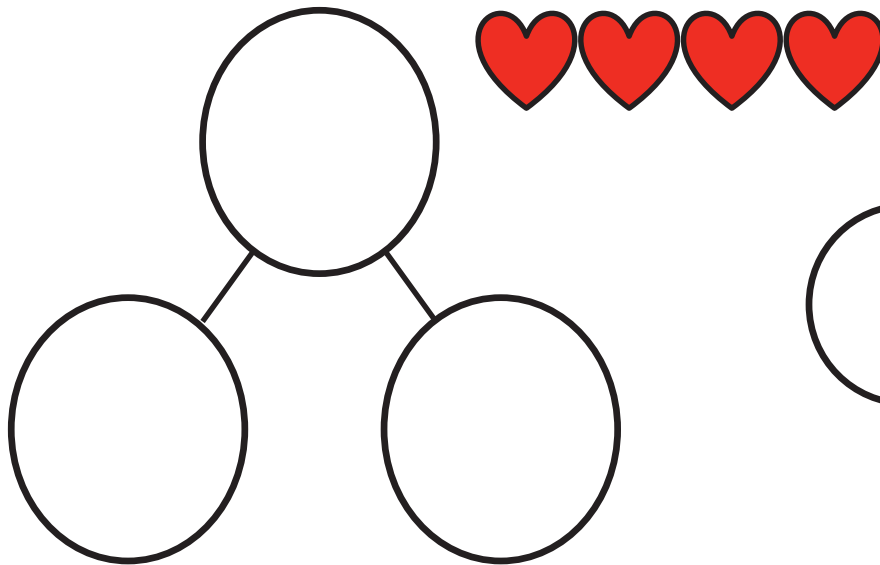
Look at the picture. Tell your neighbor a story about the dogs standing and sitting. Draw a number bond, and write numbers that match your story.

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Lesson 4:   Represent decomposition story situations with drawings using
                  numeric number bonds.

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Draw lines to make a bond of 4.

make a bond of 4

Lesson 4: Represent decomposition story situations with drawings using numeric number bonds.

1

Name _____   Date _____

Finish the number bonds. Finish the sentence.

| 3 | is | ⬚ | and | ⬚ |

2   1

| ⬚ | is | ⬚ | and | ⬚ |

4
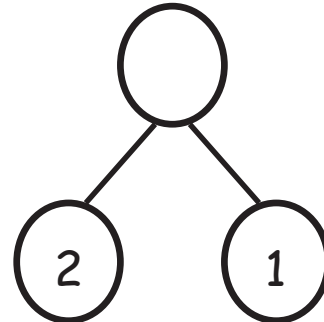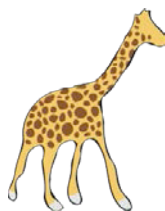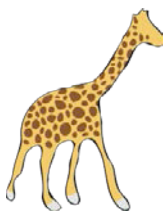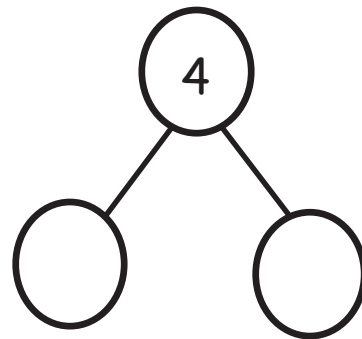
Tell an adult a story about the
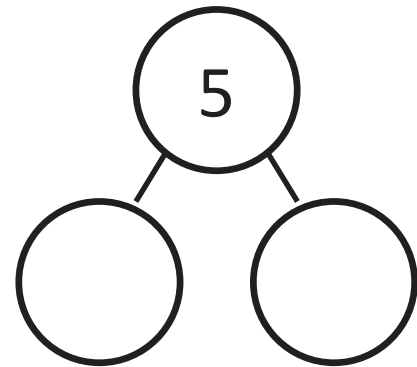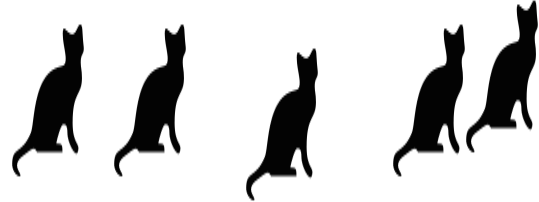animals, and then make a number
sentence and number bond about it.

| ⬚ | is | ⬚ | and | ⬚ |

Lesson 4:   Represent decomposition story situations with drawings using
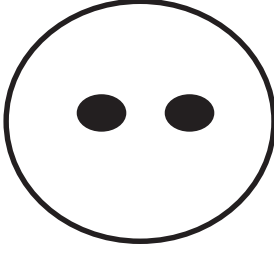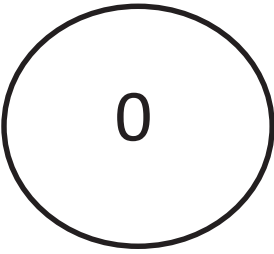numeric number bonds.

12
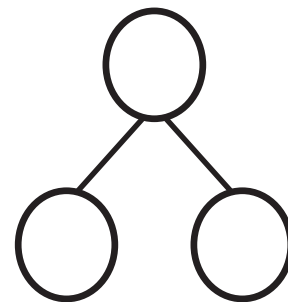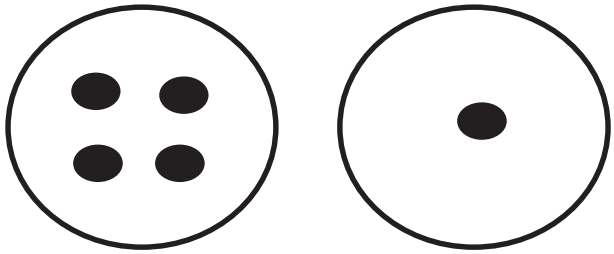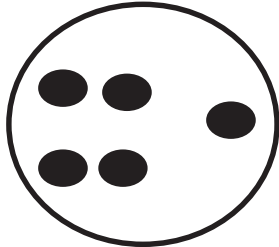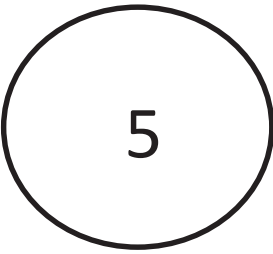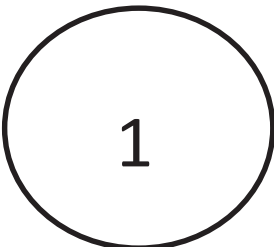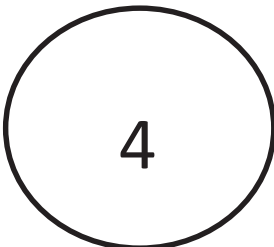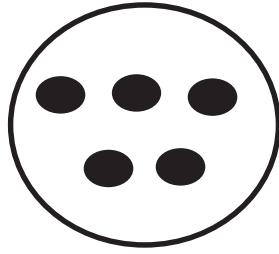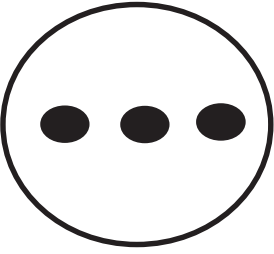
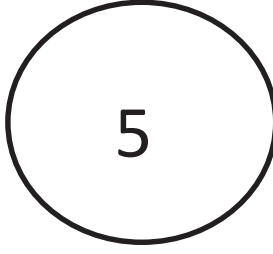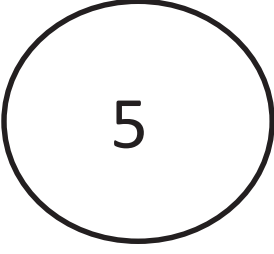Name _____   Date _____

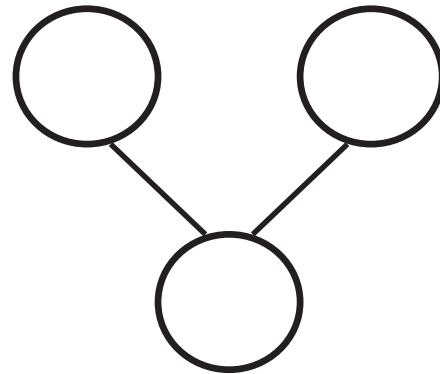Write numbers to fill in the number bonds.

Draw lines to make a bond of 5.

make a bond of 5

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Lesson 5:   Represent composition and decomposition of numbers to 5 using
                 pictorial and numeric number bonds.

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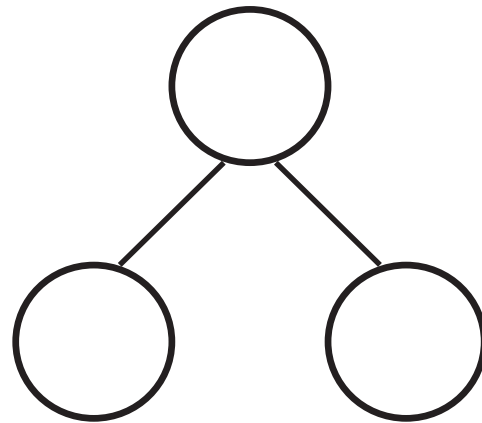
1

Name _____   Date _____

There are 2 pandas in a tree. 2 more are walking on the ground. How many pandas are there? Fill in the number bond and the sentence.

☐ and ☐ make ☐

Tell a story about the penguins. Fill in the number bond and the sentence to match your story.
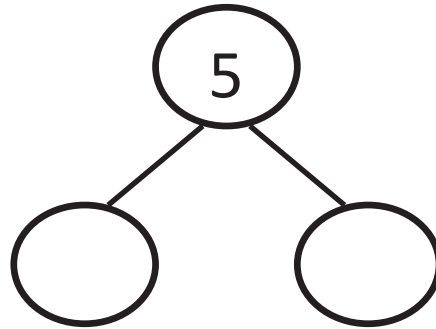

☐ and ☐ make ☐

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Lesson 5:   Represent composition and decomposition of numbers to 5 using pictorial and numeric number bonds.
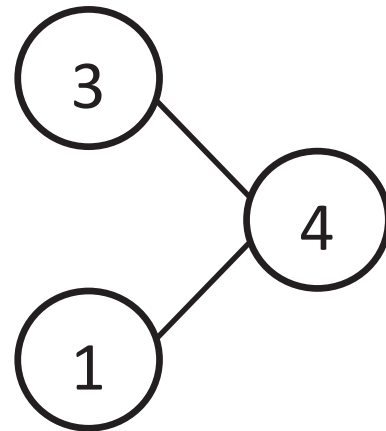
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Name _____   Date _____

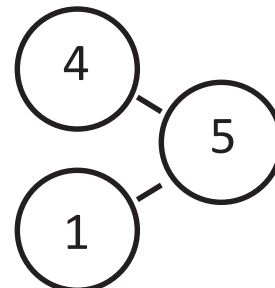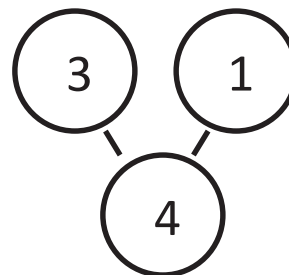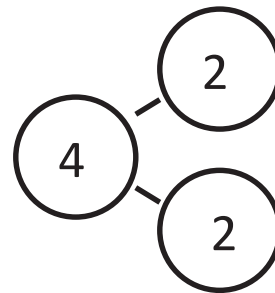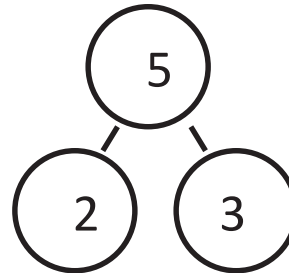Fill in the number bond. Tell a story about the birds to your friend.

Tell a story that matches the number bond. Draw pictures that match your story.

Tell a story. Draw pictures and a number bond that match your story.

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Lesson 6:   Represent number bonds with composition and decomposition
story situations.

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The squares below represent cube sticks. Draw a line to match the number bond to the cube stick.

Lesson 6:   Represent number bonds with composition and decomposition story situations.
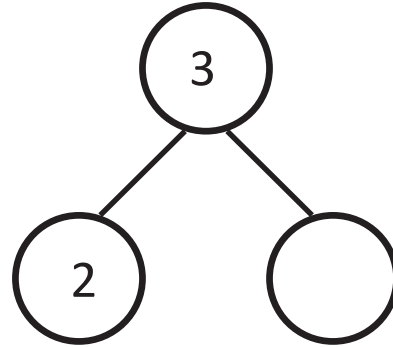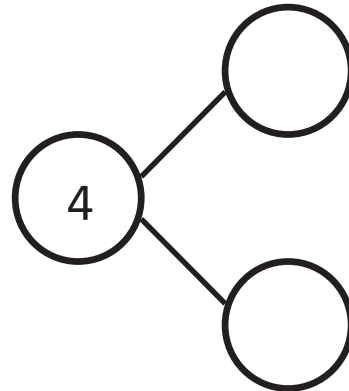
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Name _____   Date _____

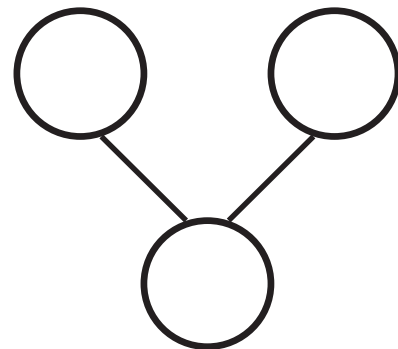Tell a story. Complete the number bonds. Draw pictures that match your story and number bonds

Draw some balls for your story.

Draw some crayons for your story.

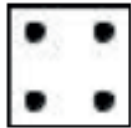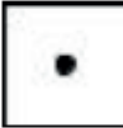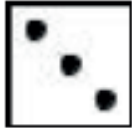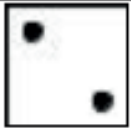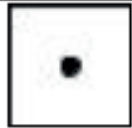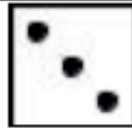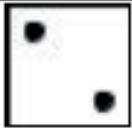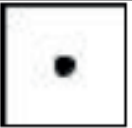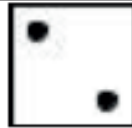Draw some shapes for your story.

On the back of your paper, draw a picture and make a number bond.

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Lesson 6:   Represent number bonds with composition and decomposition
story situations.

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Circle the number needed to make 5.

1			
2	* * * *	*	* *
3			
4			
5	* * *	* * * * *	*
6			
7			
8	*	* * * * *	* * * *
9			
10	1	3 4	2

Lesson 6: Represent number bonds with composition and decomposition story situations.

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EUREKA MATH™ TIPS FOR PARENTS

KEY CONCEPT OVERVIEW

During the next week, students will learn about the **number bond**, a math model they will use through Grade 5. Number bonds show how to **put together** parts to make a whole, or total, amount; for example, 2 and 3 make 5. At the same time, these models show how to take a whole apart: 5 is 3 and 2. Since the beginning of the year, students have been using objects and drawings to **take apart** and put together numbers. The number bond now gives them a way to record this work on paper.

You can expect to see homework that asks your child to do the following:

▪ Complete a number bond to match a picture.

▪ Use different colors to show two different parts of a whole, and use fingers and a number bond to show the **hidden partners**, or **number pairs**.

▪ Complete a sentence to match the number bond; for example, 3 and 1 make 4.

▪ Invent a story to complete a number bond and draw a picture to match.

SAMPLE PROBLEM *(From Lesson 3)*

Draw the shapes and write the numbers to complete each number bond.

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

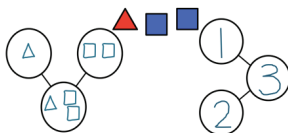▪ Invite your child to gather five small objects or toys and to tell you take apart/put together stories about them. For example, "There are 5 frogs. Two frogs sit on a log, and 3 frogs play in the water."

▪ Encourage your child to use small objects to show various number bonds for numbers 2 through 5. For example, if the whole is 4 beans, your child might break it apart into 3 beans and 1 bean. Be sure your child includes 0 as a part in some number bonds. For an added challenge, ask your child to increase the total number of beans gradually to 10. Perhaps set a timer to see how many number bonds she can make in a minute.

▪ Encourage your child to practice counting the **Say Ten** way to 20 (e.g., 8, 9, ten, ten 1, ten 2, ten 3, … 2 tens). If your child struggles, consider drawing a picture or using a **Rekenrek** as a visual support.

TERMS

Hidden partners or **number pairs/partners:** Pairs of numbers that add up to a given number. For example, the numbers 3 and 5 are partners, or pairs, that make 8.

**Put together:** To combine parts to make a whole; to add.

Say Ten counting: An East Asian method of counting that reinforces place value understanding by asking students to break two-digit numbers into tens and ones. In Grade 1, Say Ten counting extends to three-digit numbers up to 120.

eighteen	1 ten 8
forty-eight	4 tens 8
one hundred eighteen	11 tens 8 1 hundred 1 ten 8

Take apart: To separate a whole number (total) into parts. For example, "There are 5 children; 3 are girls, and 2 are boys." Note: Take apart problems are different from take away problems in that solving take apart problems does not involve removing any parts. This distinction can be challenging for children in the early years.

MODELS

Number Bond: A model showing the relationship between a number (whole) and its parts. Grade K students work with number bonds in various orientations.
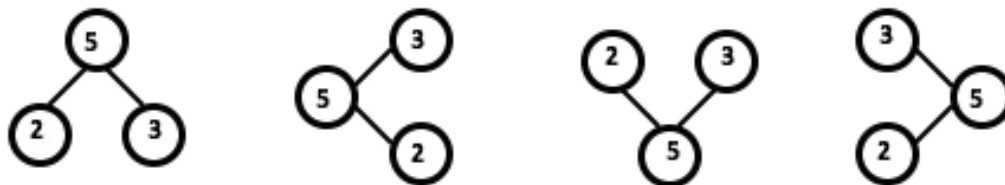
Rekenrek: A Slavonic abacus with rows of 10 beads. Each row has a group of five red and five white beads. The color groupings help students form mental images of numbers.