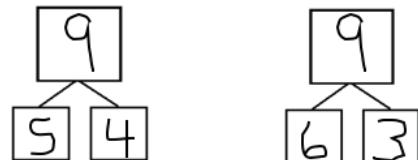


KEY CONCEPT OVERVIEW

During the next few days, our math class will make progress toward the goal of fluently adding and subtracting numbers between 1 and 10. We will learn how to break apart a total into two parts, or **addends**. For example, 9 can be broken apart into 5 and 4, since $5 + 4 = 9$. Students will begin to understand that a number can be broken apart in multiple ways.

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

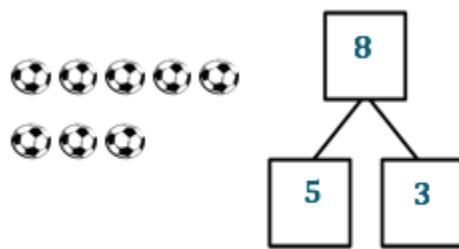
- Quickly spot a group of five within a larger group of items, and then **count on** from five to find the total number of items.
- Show different ways to break apart a total and draw a matching **number bond**.
- Say what the total is when adding *one more* to a number; for example, “One more than 7 is 8.”



SAMPLE PROBLEM

(From Lesson 1)

Draw a number bond for the number 8 that has 5 as one part.



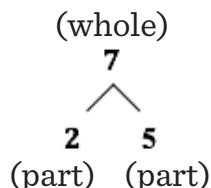
Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Invite your child to show you how to count the Math Way (counting from left to right starting with the pinky of the left hand).
- Play “Math Way” Fingers Flash: Partner A quickly flashes a number (from 1 to 10) the Math Way with his fingers, and then hides them behind his back. Partner B says the number she saw. For a challenge, Partner B tells how many more Partner A needs to make ten.
- Play “Penny Parts”: Invite your child to organize a group of 6–10 pennies into two groups, placing five pennies in one group. Then ask your child to draw a number bond that shows how the pennies are grouped. For example, if the total is 8 pennies, then the parts are 5 and 3. For an added challenge, separate the pennies two different ways with the same total, and draw a number bond to match each way; for example, 5 and 3, and 4 and 4.

**MODELS**

Number Bond: A model that shows the relationship between a number (whole) and its parts.



Counting On: To count up from one addend, or number, to the total. For example, in $6 + \underline{\hspace{1cm}} = 8$, we can start at 6 and “count on” two more to reach the total of 8.

Addend: A number that is added to another number(s); for example, in $3 + 4 = 7$, 3 and 4 are addends.

KEY CONCEPT OVERVIEW

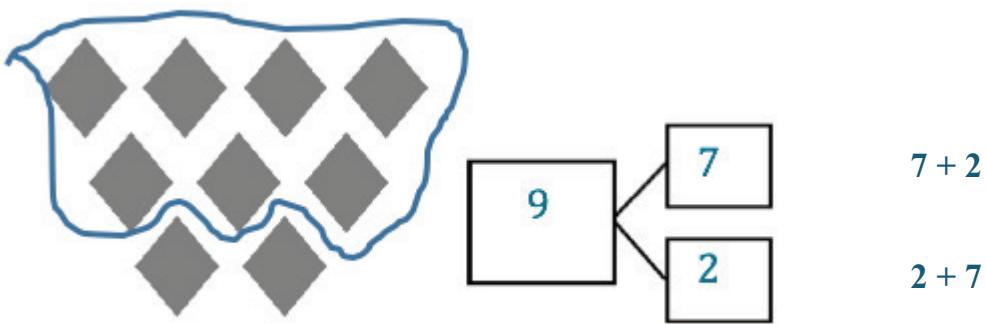
During the next week, our math class will be learning how to show all the **number pairs or partners** “inside” the numbers 6, 7, 8, 9, and 10 (e.g., 7: 6 and 1, 5 and 2, 4 and 3). Students will use number bonds and addition **expressions** to model how two parts make a total. They will count on from the first addend, or part, to find the total.

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

- Make number bond flashcards.
- Fill in the missing number in a number bond. Then write an addition **number sentence** for the number bond; for example, $4 + 3 = 7$.
- Use an expression to write a number bond that makes 8, and draw a matching picture of 8 items arranged in two parts.
- Write expressions and number bonds to show all the different ways to make 9 from two parts.

SAMPLE PROBLEM *(From Lesson 7)*

Circle 7. How many more does 7 need to make 9?



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

- Ask your child to count from 10 to 20 and back, first the regular way, then the **Say Ten** way, as shown below:
Regular way: 8, 9, 10, 11, 12, 13, 14... (If your child is struggling, consider using a **Rekenrek** or another abacus for support.)
Say Ten way: 8, 9, 10, ten 1, ten 2, ten 3, ten 4...
- Invite your child to use toys (such as building blocks), cereal pieces, or pennies to show the parts of a number that make a total. For example, 6 red cubes and 3 blue cubes make 9 cubes. Challenge your child to draw a number bond to match each combination.
- Target Practice: Partner A picks a target number from 7 to 9. Partner B rolls a die, looks at the number, and tells how many more to make the target number. For example, if the target number is 7, and Partner B rolls a 3, then the answer is 4.

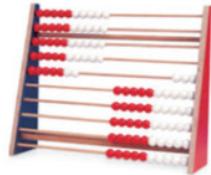
TERMS

Expression: A statement with numbers and symbols (such as + and –) that represents a single value and has no equal sign (=); for example, $2 + 1$ or $5 - 3$.

Number pairs or partners: Pairs of numbers that add up to a given number; for example, 3 and 5 are a pair or partners that make 8.

Number sentence: A statement with numbers and symbols (such as + and –) that can be true or false; for example, $2 + 1 = 3$.

Rekenrek: A Slavonic abacus with rows of 10 beads. Each row has a group of 5 red and 5 white beads. The color groupings help students form mental images of numbers.



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

EUREKA MATH™ TIPS FOR PARENTS

GRADE 1 | MODULE 1 | TOPIC C | LESSONS 9–13

KEY CONCEPT OVERVIEW

During the next week, our math class will be learning how to solve various word problems in which there is a change to either the whole or a part. Students will learn to solve problems using a drawing, a number bond, and a number sentence. Students will continue to use **5-group cards** to help them count on to solve problems.

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

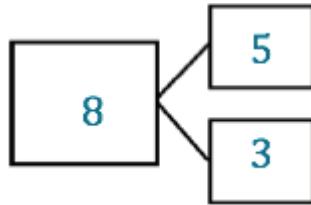
- Draw a picture to match a math story.
- Write a number sentence to tell a math story. Then, write a number bond to match the sentence and story.
- Use 5-group cards to count on to find the missing part, or unknown, in a number sentence.
- Match the number sentence to the math story. Draw a picture or use 5-group cards to solve.

SAMPLE PROBLEM

(From Lesson 13)

Use the number sentence to draw a picture, and fill in the number bond to match.

$$5 + 3 = 8$$



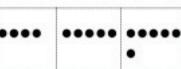
Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Play “Mystery Number”! Create a math story with an unknown part for your child to solve. For example, “Nine bears were playing tag at noon. Before noon, only six bears were playing. How many bears joined in at noon?” Encourage your child to draw a picture and/or a number bond to illustrate what is happening in the story and to help find the unknown number; for example, $6 + \underline{\hspace{1cm}} = 9$.
- Play “Ten and Tuck”! Ask your child to show 10 fingers. Instruct him to tuck 3 (bending down the pinky, ring finger, and middle finger of the right hand). Ask your child how many fingers are up (7) and how many are tucked (3). Then, invite him to say the matching number sentence aloud in three ways: first, beginning with the larger part ($7 + 3 = 10$); then, beginning with the smaller part ($3 + 7 = 10$); and finally, beginning with the whole, or total ($10 = 3 + 7$ or $10 = 7 + 3$).
- Be a math storyteller! With your child, create number sentence cards with basic addition facts up to 10, such as $3 + 5 = 8$, $6 = 2 + 4$, and so on. Then play a math story game. Partner A picks a number sentence card and tells a story to match it. Partner B draws a math picture to show what is happening in the story and solves the problem. For an extra challenge, cover either the total or the second addend of the number sentence with a sticky note before creating the story and solving the problem.

TERMS

5-group cards: An image with up to 2 rows of 5 dots. Students learn many ways to break apart numbers to 10 into smaller numbers. With 5-group cards, special attention is drawn to 5 in numbers 6–10.

numerals	
5-groups	

KEY CONCEPT OVERVIEW

During the next week, our math class will continue to count on when adding. Students will be taught two specific strategies, or shortcuts, to help them count on efficiently. They may use their 5-group cards and tap to count on, or use their fingers to count on from a given number.

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

- Count on to add.
- Use 5-group cards or fingers to count on to solve addition problems. Show which shortcut (cards or fingers) was used to add.
- Use simple math drawings, and “draw more” to solve; for example, “Draw two more items to solve $4 + ? = 6$.”

SAMPLE PROBLEM *(From Lesson 15)*



Use your 5-group cards or your fingers to count on to solve.

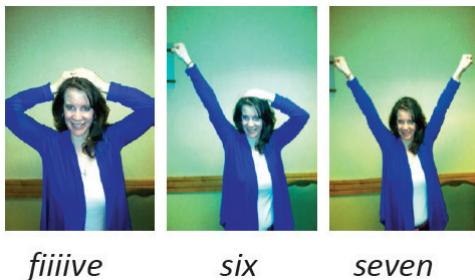
$$5 + 3 = \underline{8}$$

Show which shortcut you used to add. (e.g., “Five, 6, 7, 8. I touch the number on each card as I count!”)

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

- Play “Slam Partners to 6”: Use playing cards or homemade cards with numbers from 0–6. Ask your child to arrange the cards in order from 0 to 6, and place them in front of her on the table or floor. Shout out a number from 0–6 and encourage your child to “slam” (or tap) the partner card your number needs to make 6. For example, if you say “five,” your child should slam the 1 card. Invite your child to shout, for example, “five and one make six” as he “slams” the appropriate partner card. Continue playing until all possible partners to 6 have been found. When your child shows a strong understanding of partners to 6, increase the total to 7, and eventually to 8, 9, and 10.
- Play “Count On Cheers”: Say a number aloud; for example, five. Invite your child to repeat the number while touching his head, then counting on 2 as he raises his hands in the air, one at a time. Alternately, your child might count on with shadow-boxing punches or other arm motions. Extend the game by challenging your child to count on by different numbers.



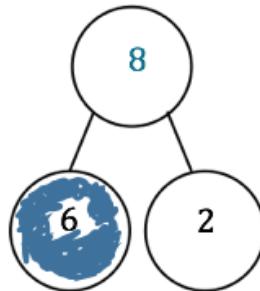
- Play “Missing Part to Make 10”: Use 5-group cards or homemade cards numbered 1–10. Partner A places a card against her forehead, without looking at the number on the card. Partner B tells how many more are needed to make 10. Then, Partner A guesses the number on the card. Take turns playing each role. If needed, remind your child to use fingers to help with counting on.

KEY CONCEPT OVERVIEW

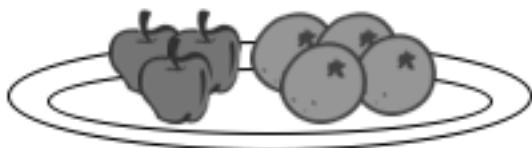
During the next week, our math class will continue to learn about the equal sign, expanding our knowledge by using the equal sign to write true number sentences; for example, $4 + 3 = 3 + 4$. When added together, the two numbers make the same total, regardless of their order. Students will learn to add efficiently by starting with the larger addend, and then counting on: “I can count on 2 from 7 when I solve $2 + 7$.”

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

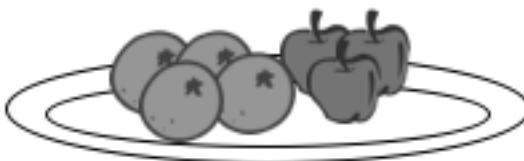
- Write an expression that matches the groups. If different groups have the same amount, write an equal sign between the expressions (see Sample Problem).
- Circle the true number sentences, and rewrite the false sentences to make them true.
- Find the missing part to make each number sentence true.
- Color the larger part, and complete the number bond. Write the number sentence, starting with the larger part (e.g., $6 + 2 = 8$).

**SAMPLE PROBLEM** *(From Lesson 17)*

Write the expression under each plate. Add the equal sign to show they are the same amount.



$3 + 4$

 $=$ 

$4 + 3$

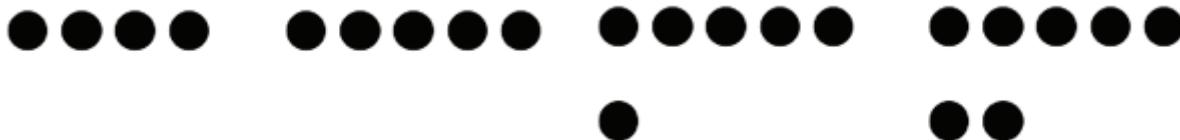
Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Play “Red Light/Green Light”: When you say, “green light,” your child begins running in place and counting aloud by tens, starting at zero. When your child reaches 100, say, “red light.” Your child stops counting and freezes. When you say, “green light,” your child begins running in place again, this time counting backwards from 100 by tens until reaching 0. Continue counting, and say, “red light,” at various places. Change the counting direction each time you stop.
- Play “Make it Equal”: Show your child a group of objects organized into two parts, such as a group of five pennies with two showing heads and three showing tails. Invite your child to write an expression that shows how many pennies there are ($2 + 3$). Rearrange the group of pennies, with four showing heads and one showing tails, and ask your child to write the expression ($4 + 1$). Talk about how the two expressions your child wrote are the same and how they are different. Continue the activity with groups of 6, 7, 8, 9, and 10 pennies, arranging each group into two parts of various amounts.
- Practice **5-group** addition. (This can be done with dominoes, dice, or playing cards instead of 5-group cards.) Hold up a 5-group card, and ask your child to identify the quantity; for example, 3. Then hold up a second 5-group card, and ask your child to identify that quantity; for example, 4. Hold the cards side by side, and ask a series of addition questions; for example, “What is the total? (7). What is the number sentence, starting with the bigger part? ($4 + 3 = 7$) What is the number sentence, starting with the smaller part?” ($3 + 4 = 7$) Continue with various number combinations.

TERMS

5-group: A math drawing with up to 2 rows of 5 dots. Five-groups draw special attention to the 5 in numbers 6–10.



KEY CONCEPT OVERVIEW

During the next few days, our math class will be learning strategies to help us fluently solve addition problems up to 10. We will learn how to use the **addition chart** to explore patterns and make connections between addition facts.

You can expect to see homework that asks your child to:

- Recognize facts about **doubles** ($3 + 3 = 6$) and **doubles plus 1** ($3 + 4 = 7$).
- Use the addition chart to see how adding the same number to several numbers in order affects the total. For example, when we use 2 as the addend ($3 + 2 = 5$, $4 + 2 = 6$, $5 + 2 = 7$, and so on), the totals increase by 1. Each total is one more than the previous total.
- Use the addition chart to find problems with the same total, such as $6 + 2 = 8$, $5 + 3 = 8$, and $4 + 4 = 8$. Notice the patterns on the chart!

SAMPLE PROBLEM *(From Lesson 21)*

Solve the number sentence. Write the doubles fact that helped you solve the doubles plus 1.

$$\begin{array}{|c|} \hline 4 + 5 = 9 \\ \hline \end{array}$$
$$\begin{array}{|c|} \hline 4 + 4 = 8 \\ \hline \end{array}$$

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

- Encourage your child to use fingers to help visualize doubles facts. For example, to solve $3 + 3$, have your child wiggle both pinky fingers and say, “two,” then wiggle both pinkies and both ring fingers and say, “four,” and finally wiggle the pinky, ring, and middle finger on each hand and say, “six.”



- Make simple 5-group cards at home. Flash two cards at the same time. Ask your child to tell, without counting each dot separately, how many dots there are. Ask, “How do you know?”
- Play “Missing Part”: Use 5-group cards or homemade numeral cards from 0–10. Partner A places a card against her forehead without looking at the number on the card. Partner B tells how many more to make 10. Then, Partner A guesses the number on the card. Take turns playing each role. If needed, remind your child to use fingers to count on.

TERMS

Addition chart: A chart that helps students to identify patterns when adding and subtracting numbers 1–10.

Doubles: A number added to itself; for example, $3 + 3$ or $4 + 4$.

Doubles plus 1: A number added to itself plus one; for example, $3 + 4$ or $4 + 5$.

KEY CONCEPT OVERVIEW

During the next week, our math class will explore the meaning of subtraction as it relates to addition. Students will be taught to solve a subtraction problem efficiently by either counting on or **counting back** on the **number path**. For example, to solve $9 - 8$ it may be more efficient to think $8 + ? = 9$ and count on from 8 than it is to count back from 9.

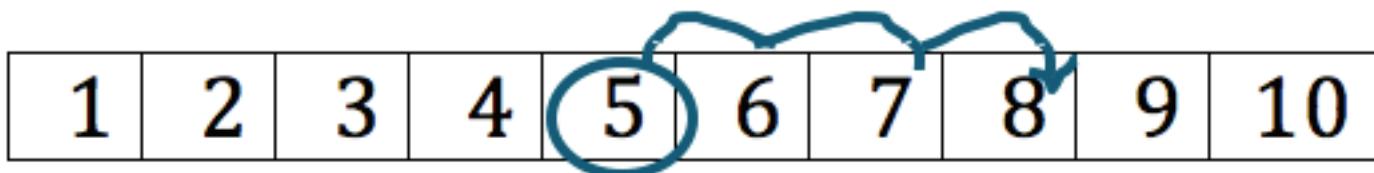
You can expect to see homework that asks your child to do the following:

- Read a math story, then break the total into parts. Write a number bond with addition and subtraction number sentences to match the story.
- Use the number path to solve a subtraction number sentence. Identify the addition sentence that can help you.
- Use the number path to complete the number bond, and write an addition and a subtraction sentence to match the number bond.

SAMPLE PROBLEM

(From Lesson 27)

Rewrite the subtraction number sentence as an addition number sentence. Use the number path if you want to.



$$8 - 5 = \underline{3} \quad 5 + 3 = 8$$

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

- Play “X-Ray Vision”: Place nine counters (e.g., pennies or beans) on the floor or table next to an opaque container. Ask your child to close his eyes while you place one counter in the container. Tell your child to open his eyes. Ask, “Can you use your x-ray vision to tell how many counters are inside the container? Now say the number sentence that combines the counters inside and outside the container.” For example, “One plus eight equals nine!” Continue the game, placing counters in the container in random order (e.g., 3, 5, 2, 6, 4), until you have shown all the partners to 9.
- Play “Number Bond Roll”: Use a pair of dice as parts of a number bond. Each partner rolls one die. Then each writes a number bond, addition sentence, and subtraction sentence for the two parts shown on the dice. For example, if Partner A rolls a 2 and Partner B rolls a 3, their number bonds would show 2 and 3 making 5, and their number sentences might be $2 + 3 = 5$ and $5 - 3 = 2$. When both partners have completed their number bonds and number sentences, they check each other’s work.

TERMS

Count back: To count backward, starting at the total, the number being subtracted from the total. For example, in $8 - 6 = \underline{\hspace{1cm}}$, we can start at 8 and “count back” 6 to reach the unknown part (2). Students can also count back to the known part (6) and keep track of how much they counted back (2) to identify the missing part.

KEY CONCEPT OVERVIEW

During the next week, our math class will connect subtraction to addition using various types of story problems. Students will be taught to make simple math drawings, such as circles, and number sentences to represent the problem and solution. They will draw number bonds to model the parts and whole in each problem.

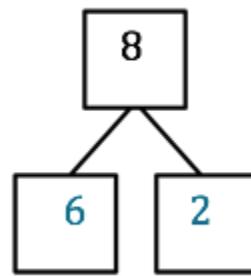
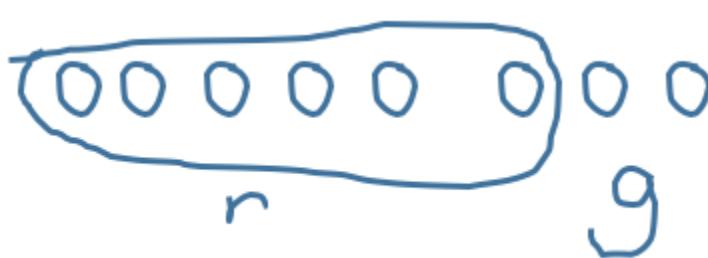
You can expect to see homework that asks your child to do the following:

- Read the story problem. Make a math drawing to solve the problem.
- Make a math drawing. Circle the known part and cross out the unknown part. Complete the number sentences and number bond to solve.
- Use simple math drawings to show how to solve a problem with addition and subtraction. Label the number bond.

SAMPLE PROBLEM *(From Lesson 32)*

Solve. Use simple math drawings to show how to solve with addition and subtraction. Label the number bond.

There are 8 apples. Six apples are red. The rest are green. How many apples are green?



$$\underline{2} + \underline{6} = 8$$

$$8 - \underline{6} = \underline{2}$$

2 apples are green

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

- Play “Beep Counting”: Say a sequence of three numbers, replacing one number with the word *beep* (e.g., “5, 6, beep”). When you finish the sequence, your child says the missing number (7). Start simple and move on to more complex counting, including forward and backward counting sequences. You might use the following sequences: 5, 6, beep; 17, 18, beep; 28, 29, beep; 2, 1, beep; 42, 41, beep; 62, 61, beep; 8, beep, 10; 58, beep, 60; beep, 55, 56; beep, 71, 72; 88, 87, beep; 91, beep, 89; 99, beep, 101; and 109, beep, 111.
- Play “Penny Drop”: Place six pennies in a clean, empty can, and tell your child that six pennies are in the can. Then ask your child to close her eyes and listen as you drop four more pennies in the can, one at a time. Ask your child to open her eyes and tell you how many pennies are now in the can. Challenge your child to provide one addition equation equal to the total number of pennies in the can (e.g., $6 + 4 = 10$). Then ask for a related subtraction equation (e.g., $10 - 4 = 6$). Play again until all the partners to 10 (1 and 9, 2 and 8, and so on) have been expressed.
- Practice “Say Ten counting”: Invite your child to count up and down between zero and 40 the Say Ten way. If he is proficient up to 40, start at 40 and quickly go up to 80. For an added challenge, have your child alternate between regular and Say Ten counting; i.e., ten 1, 12, ten 3, 14, ten 5, 16, and so on. If your child is struggling, consider using a Rekenrek or another abacus for additional support.

KEY CONCEPT OVERVIEW

During the next week, our math class will learn, use, and discuss strategies for fluent subtraction up to 10. We will learn methods that involve subtracting 0 and 1, subtracting the whole number (e.g., $5 - 5 = 0$), and subtracting one less than the whole number (e.g., $5 - 4 = 1$). We will also continue to use familiar 5-groups and partners to 10.

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

- Draw, use, or visualize 5-group drawings to model and solve subtraction sentences. (See image.)



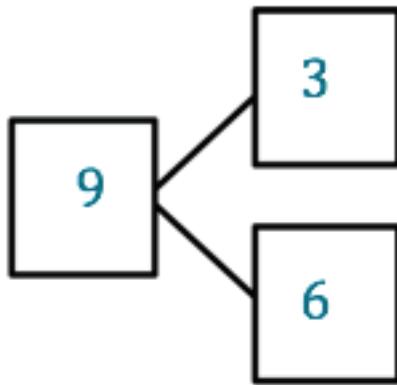
- Write subtraction number sentences to match 5-group drawings.
- Use doubles (e.g., $8 - 4 = 4$) and 5-groups (e.g., $8 - 5 = 3$) to solve subtraction problems.
- Complete number bonds, subtraction number sentences, and related subtraction sentences. For example, $9 - 5 = 4$ and $9 - 4 = 5$ are related subtraction sentences.

SAMPLE PROBLEM *(From Lesson 37)*

Subtract. Then write the related subtraction sentence. Make a math drawing if needed, and complete a number bond.

$$9 - 6 = 3$$

$$9 - 3 = 6$$



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

- When practicing subtraction facts, encourage your child to focus on the strategies used to solve. Did your child count on, count back, use a doubles fact, or use another strategy?
- Play 5-Group Flash. Flash a homemade 5-group card for a few seconds. Ask, “What number did you see?” (e.g., 3). Flash the card a second time. Ask, “What is the partner to 10?” (7)
- Play One Less or Two Less. Challenge your child to say one less or two less than a given number. For example, you say, “15; one less,” and your child responds, “14.” For an easier version of the game, alternate between “one less” and “two less” regularly. For a more challenging version, alternate between “one less” and “two less” at random intervals.

KEY CONCEPT OVERVIEW

During the next few days, our math class will explore the addition chart and look for patterns. We will learn to use the addition chart to solve subtraction problems and find related number sentences.

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

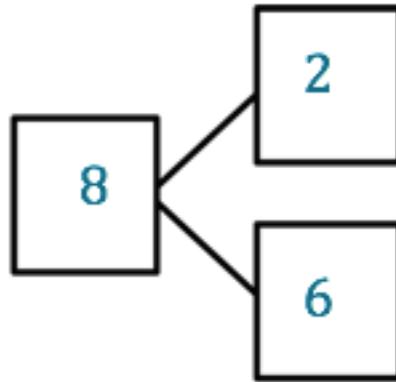
- Use the addition chart to create and solve related subtraction problems.
- Make subtraction flash cards and number bond cards to play a memory game.

SAMPLE PROBLEM

(From Lesson 38)

On your addition chart, shade an addition fact yellow. Then write a related subtraction sentence and its number bond.

$2 + 5$	$\boxed{2 + 6}$	$2 + 7$	$2 + 8$
$3 + 5$	$3 + 6$	$3 + 7$	
$4 + 5$	$4 + 6$		
$5 + 5$			



$$8 - 2 = 6$$

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

- Play What's the Difference? Partners place a deck of playing cards between them, facedown. Each partner flips over two cards and subtracts the smaller number from the larger number. The partner with the smallest difference keeps all four cards played in that round. The player with the most cards at the end of the game wins. (NOTE: Face cards are equivalent to 10, or you can remove them from the deck before playing. Aces are equivalent to 1.)
- Play a memory game by matching related addition facts with the subtraction cards made for your child's homework.