

# Eureka Math™ Homework Helper

2015–2016

## Grade 1 Module 1 *Lessons 1–39*

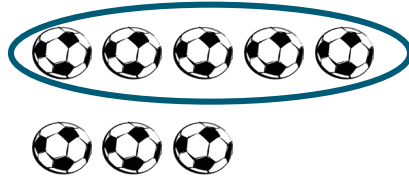
*Eureka Math, A Story of Units®*

**Published by the non-profit Great Minds.**

Copyright © 2015 Great Minds. No part of this work may be reproduced, distributed, modified, sold, or commercialized, in whole or in part, without consent of the copyright holder. Please see our [User Agreement](#) for more information. “Great Minds” and “Eureka Math” are registered trademarks of Great Minds.

## G1-M1-Lesson 1

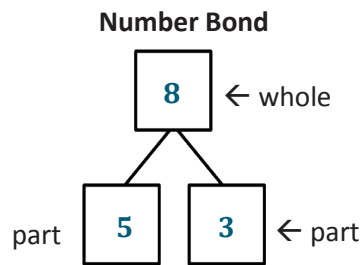
1. Circle 5. Then, make a number bond.



I circled 5 balls, and there are 3 more.

I can count on from 5 to find the total.

Fiiiive, 6, 7, 8.

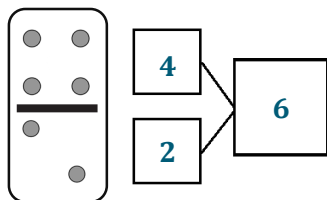


I can make a number bond for the soccer balls.

5 and 3 are the parts.

The whole, or total, is 8.

2. Make a number bond for the domino.



I see 4 dots and 2 dots, so 4 and 2 are the parts.

There are a total of 6 dots.

## G1-M1-Lesson 2

1. Circle 2 parts you see. Make a number bond to match.

I see a group of 4 and a group of 3.  
My parts are 4 and 3.

whole

7

4 3

part part

2. How many fruits do you see? Write at least 2 different number bonds to show different ways to break apart the total.

9

6 3

I see 6 small pieces of fruit and 3 large pieces of fruit.

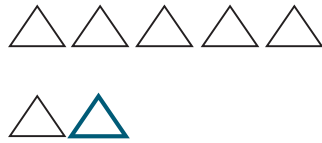
I also see 5 apples and 4 strawberries.

9

5 4

## G1-M1-Lesson 3

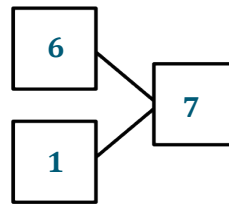
Draw one more in the 5-group. In the box, write the numbers to describe the new picture.



There were 6, and  
I drew 1 more.  
Now there are 7.

1 more than 6 is 7.

$$6 + 1 = \underline{7}$$



## G1-M1-Lesson 4

By the end of first grade, students should know all their addition and subtraction facts within 10.

The homework for Lesson 4 provides an opportunity for students to create flashcards that will help them build fluency with all the ways to make 6 (6 and 0, 5 and 1, 4 and 2, 3 and 3).

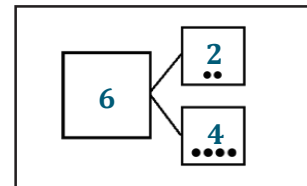
- Some of the flashcards may have the full number bond and number sentence.

**Front:** Number Sentence

$$2 + 4 = 6$$

In this number sentence, the parts are 2 and 4. The total is 6.

**Back:** Number Bond



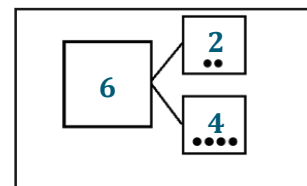
- Others may have the number bond and just the expression.

**Front:** Expression

$$2 + 4$$

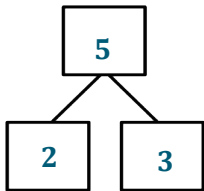
2 + 4? Hmmmm...  
Twooooo, 3, 4, 5, 6.  
The total is 6.

**Back:** Number Bond



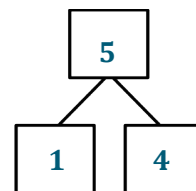
## G1-M1-Lesson 5

1. Make 2 number sentences. Use the number bonds for help.



$$\boxed{3} \quad \bigcirc + \quad \boxed{2} = \boxed{5}$$

3 and 2 are the parts in one of my number bonds, so I know  $3 + 2 = 5$ .



$$\boxed{5} = \boxed{1} \quad \bigcirc + \quad \boxed{4}$$

This number bond has the parts 1 and 4, and the whole is 5. I can write my number sentence starting with the whole,  $5 = 4 + 1$ .

2. Fill in the missing number in the number bond. Then, write addition number sentences for the number bond you made.

A number bond diagram with a top box containing the number 5. Two lines branch down from the 5 to two separate boxes below, containing the numbers 5 and 0.

0 needs 5 more to make 5.

$$\boxed{5} = \boxed{5} \quad \bigcirc + \quad \boxed{0}$$

One sentence can start with my biggest part.

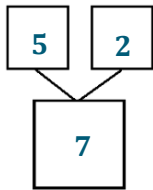
$$\boxed{5} = \boxed{0} \quad \bigcirc + \quad \boxed{5}$$

The other one can start with my smallest part.

In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 7 (7 and 0, 6 and 1, 5 and 2, 4 and 3).

## G1-M1-Lesson 6

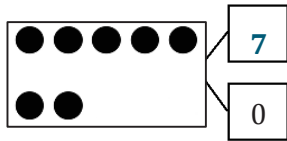
1. Show 2 ways to make 7. Use the number bond for help.



$$\begin{array}{ccc} \boxed{5} & \oplus & \boxed{2} \\ \boxed{2} & \oplus & \boxed{5} \end{array}$$

When I just write  $5 + 2$ , without writing the full number sentence, it's called an expression. See, it doesn't have an equal sign!

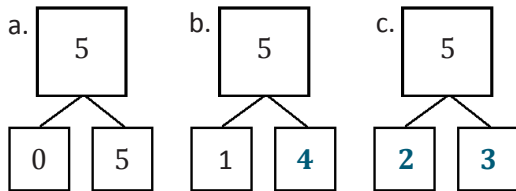
2. Fill in the missing number in the number bond. Write 2 addition sentences for the number bond.



$$\begin{array}{ccc} \boxed{7} & \oplus & \boxed{0} = \boxed{7} \\ \boxed{7} = \boxed{0} & \oplus & \boxed{7} \end{array}$$

When I add the equals symbol and total, it's called a number sentence.

3. These number bonds are in an order, starting with the smallest part first. Write to show which number bonds are missing.



I made all the number bonds for 5.

4. Use the expression to write a number bond, and draw a picture that makes 8.

Expression



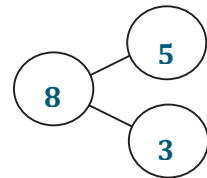
Picture



I can use my picture to *count on* and find the total.  
Fiiiiive.....

...6, 7, 8.  
My total is 8.

Number Bond

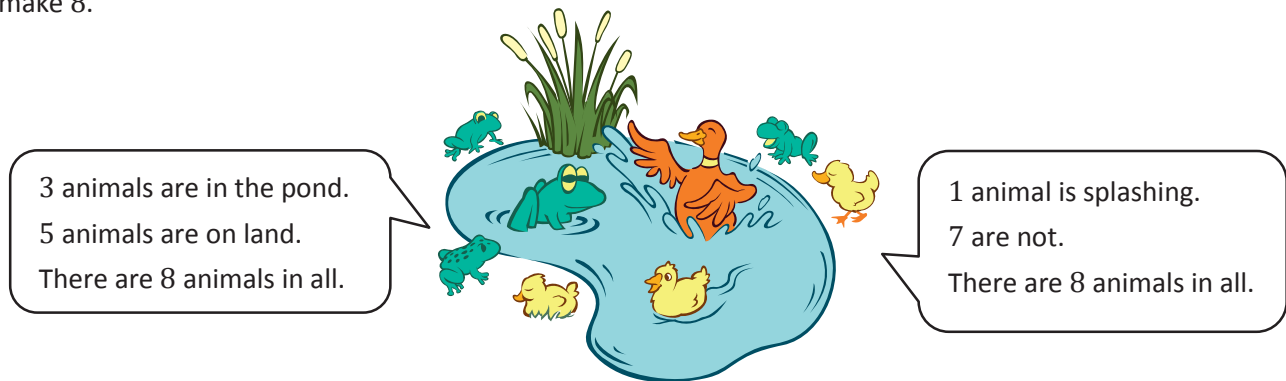


In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 8 (8 and 0, 7 and 1, 6 and 2, 5 and 3, 4 and 4).

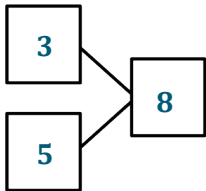


## G1-M1-Lesson 7

Use the pond picture to help you write the expressions and number bonds to show all of the different ways to make 8.



Number Bond



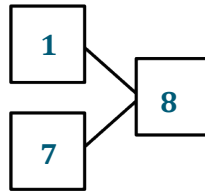
Expressions

$$\boxed{3} + \boxed{5}$$

$$\boxed{5} + \boxed{3}$$

This number bond and expressions show one way to make 8.

Number Bond



Expressions

$$\boxed{1} + \boxed{7}$$

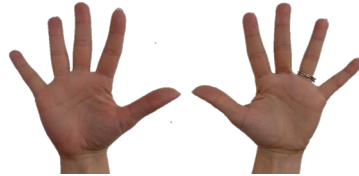
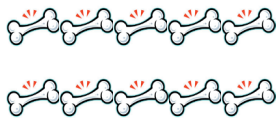
$$\boxed{7} + \boxed{1}$$

This number bond and expressions show another way to make 8.

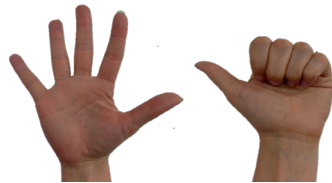
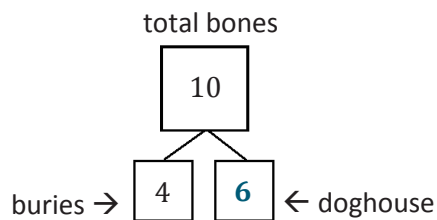
In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 9 (9 and 0, 8 and 1, 7 and 2, 6 and 3, 5 and 4).

## G1-M1-Lesson 8

1. Rex found 10 bones on his walk. He can't decide which part he wants to bring to his doghouse and which part he should bury. Help show Rex his choices by filling in the missing part of the number bonds.



My 10 fingers can represent the 10 bones.



If Rex buries 4 bones, he'll put 6 in his doghouse.

2. Write all the adding sentences that match this number bond.

$$\boxed{4} + \boxed{6} = \boxed{10}$$

$$\boxed{10} = \boxed{4} + \boxed{6}$$

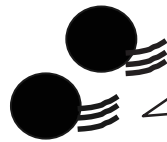
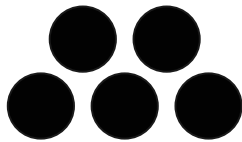
$$\boxed{6} + \boxed{4} = \boxed{10}$$

$$\boxed{10} = \boxed{6} + \boxed{4}$$

In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 10 (10 and 0, 9 and 1, 8 and 2, 7 and 3, 6 and 4, 5 and 5).

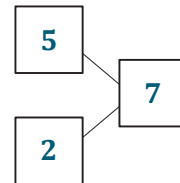
### G1-M1-Lesson 9

1. a. Use the picture to tell a math story.



There were 5 balls.  
2 more rolled over.  
Now there are 7 balls.

b. Write a number bond to match your story.



c. Write a number sentence to tell the story.

$$\boxed{5} + \boxed{2} = \boxed{7}$$

d. Now there are 7 balls.

2. Marcus has 5 red blocks and 3 yellow blocks. How many blocks does Marcus have?

red □ □ □ □ □

yellow □ □ □

I can draw a math picture and number bond to match the story!

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

Marcus has 8 blocks.

Then I can answer the question with a number sentence and word sentence.

## G1-M1-Lesson 10

1. a. Use your 5-group cards to solve.

I see 4 little tortoises and 3 big tortoises.

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

My 5-group cards can help me add. I just start at 4 and *count on* 3 more. Fooooour..., 5, 6, 7.

$$\boxed{4} + \boxed{3} = \boxed{7}$$

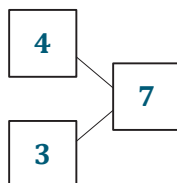
My number sentence shows that 4 little tortoises plus 3 big tortoises equals 7 total tortoises.

2. Kira has 3 cats and 4 dogs. Draw a picture to show how many pets she has.

cats                      dogs

My math picture can be just circles!

$$\boxed{3} + \boxed{4} = \boxed{7}$$



In my number bond, the parts are 4 and 3. The total is 7.

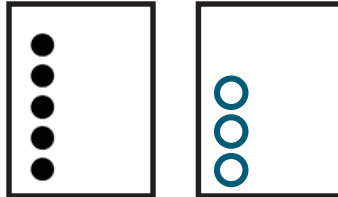
My number sentence shows that 3 cats plus 4 dogs equals 7 pets!

Kira has   7   pets.

## G1-M1-Lesson 11

1. Use the 5-group cards to count on to find the missing number in the number sentence.

$$\boxed{5} + \boxed{?} = \boxed{8}$$



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

5 plus “the mystery number” equals 8.  
Hmmm.....

I can draw dots as I *count on* to 8.  
Fiiiiive..., 6, 7, 8.

I drew 3 more dots.  
“The mystery number” is 3.

2. Match the number sentence to the math story. Draw a picture, or use your 5-group cards to solve.

Larry had 3 books. His brother gave him some more. Now he has 9 books. How many books did Larry’s brother give him?

**had**                      **brother**



Larry’s brother gave him 6 books.

$$\boxed{4} + \boxed{?} = \boxed{7}$$

$$\boxed{3} + \boxed{?} = \boxed{9}$$

I can draw 3 circles to show how many books Larry had. Then I can draw more until there are 9.

I drew 6 more circles, so his brother must have given him 6 books.

This number sentence matches the story because 3 books plus “the mystery number” of books equals 9 total books.

## G1-M1-Lesson 12

1. Use your 5-group cards to count on to find the missing number in the number sentences.

$$\boxed{5} + \boxed{?} = \boxed{9}$$

The mystery number is  $\boxed{4}$



I can *count on* from 5 to find the mystery number. Fiiiiive..., 6, 7, 8, 9.

I counted on 4 more, so the mystery number is 4.

2. Shana had 5 hats. Then she bought some more. She has 8 hats now. How many hats did she buy?

5 plus “the mystery number” equals 8. Hmm...

I can start at 5 and draw dots as I *count on* to 8. Fiiiiive..., 6, 7, 8.



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

I drew 3 more dots. The “mystery number” is 3.

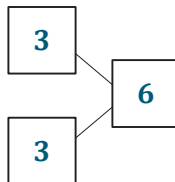
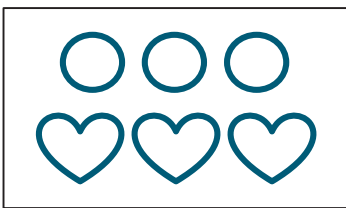
Shana bought 3 hats.

## G1-M1-Lesson 13

Use the number sentences to draw a picture, and then fill in the number bond to tell a math story.

1.  $3 + 3 = 6$

Hmmm... What story could I tell to match the number sentence  $3 + 3 = 6$ ?

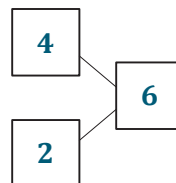


I have an idea! I baked 3 round cookies and 3 heart-shaped cookies. I baked 6 cookies in total. I can draw the cookies to show my story.

I can make a number bond to match my story!

2.  $4 + ? = 6$

Hmmm... this problem has a mystery number. I know a story that would match! My brother had 4 marbles. Then he found some marbles under the couch. Now he has 6 marbles. How many marbles did he find?



I can draw 4 circles for the marbles he had. Then I can draw some more circles until I have 6 marbles.

## G1-M1-Lesson 14

Count on to add.

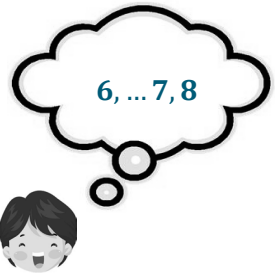
To add  $6 + 2$ , I don't have to count all my fingers. I can just start at 6 and *count on* 2 fingers!

Siiiiix...



..., 7, 8

Write what you say when you count on.



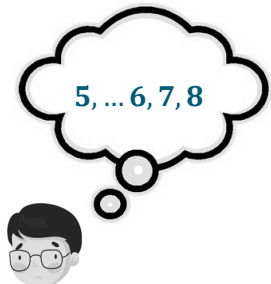
a.  $\boxed{6} + \boxed{2} = \boxed{8}$

There are 2 missing numbers for this problem. I can make up my own *count on* problem!

Fiiive...



...6, 7, 8.



b.  $\boxed{8} = \boxed{5} + \boxed{3}$



## G1-M1-Lesson 15

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

1.

$$\boxed{5} + \boxed{2} = \boxed{7}$$

I'll start at 5 and *count on* 2 fingers. Fiiiiive...

...6, 7.



Show the shortcut you used to add.

$$\boxed{5} + \boxed{2} = \boxed{7}$$



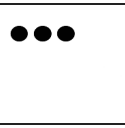
I used my fingers as a shortcut, so I'll draw them!

2.

$$\boxed{6} + \boxed{3} = \boxed{9}$$

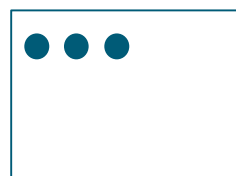
I'll start at 6 and count the three dots on my five group card. Siiiiix...

7, 8, 9.



Show the shortcut you used to add.

$$\boxed{6} + \boxed{3} = \boxed{9}$$

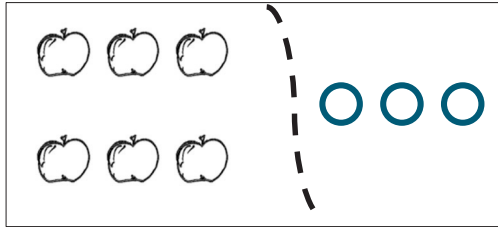


I used my 5-group cards as a short-cut. I can draw the card.

## G1-M1-Lesson 16

1. Use simple math drawings. Draw more to show  $6 + ? = 9$ .

I can start at 6 and count on as I draw. I'll stop when I get to 9. Siiiiiiiix...



= 9

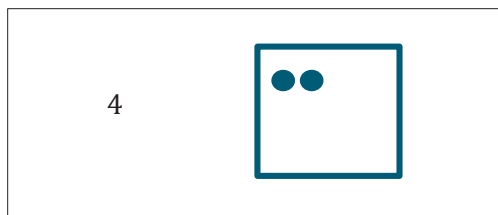
...7, 8, 9.

6 + 3 = 9

I drew 3 more circles, so  $6 + 3 = 9$ .

2. Use your 5-group cards to solve  $4 + ? = 6$ .

I can start at 4 and draw the dots that are on the back of a 5-group card. Fooour...



= 6

...5, 6.

4 + 2 = 6

I drew 2 dots, so  $4 + 2 = 6$ .

### G1-M1-Lesson 17

1. Match the equal dominoes. Then, write true number sentences.

There are 10 dots on each of these dominoes.

$3 + 3 = 6 + 0$

I can write a true number sentence for the dominoes.  
9 and 1 makes 10. 5 and 5 also makes 10.  
So,  $9 + 1$  equals  $5 + 5$ .

$9 + 1 = 5 + 5$

2. Find the expressions that are equal. Use the equal expressions to write true number sentences.

$2 + 3$  and  $1 + 4$  both equal 5.

$2 + 3$        $3 + 1$        $2 + 2$        $1 + 4$

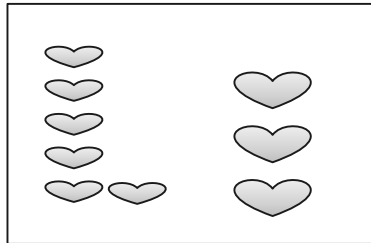
a.  $2 + 3 = 1 + 4$

b.  $3 + 1 = 2 + 2$

I can use these equal expressions to make a true number sentence.

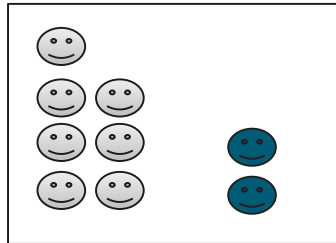
## G1-M1-Lesson 18

1. The pictures below are not equal. Make the pictures equal, and write a true number sentence.



$$\underline{6 + 3}$$

=



$$\underline{7 + 2}$$

I know that  $6 + 3$  equals 9. I can count 7 smiley faces. If I draw 2 more smiley faces, I can make a true number sentence because  $7 + 2$  also equals 9.

2. Circle the true number sentence(s), and rewrite the false sentence(s) to make it true.

$$6 + 0 = 4 + 2$$

$$5 + 1 = 6 + 1$$

$$\underline{5 + 2 = 6 + 1}$$

I know that  $5 + 1$  is 6, and  $6 + 1$  is 7. 6 is not equal to 7. I can make this number sentence true by changing  $5 + 1$  to  $5 + 2$  so it equals 7.

3. Find the missing parts to make the number sentences true.

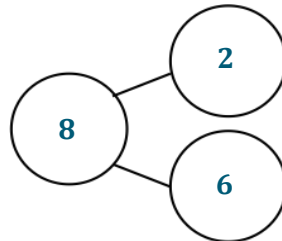
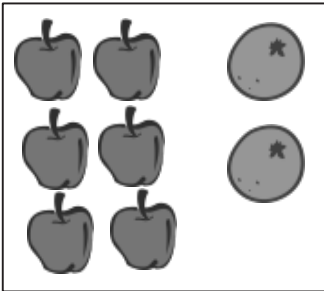
$$7 + 1 = 4 + \underline{4}$$

$$4 + 3 = \underline{5} + 2$$

I know that  $7 + 1$  equals 8. So, the other side must also equal 8 for this to be a true number sentence. I know my doubles:  $4 + 4 = 8$ . The missing part is 4.

## G1-M1-Lesson 19

1. Use the picture to write a number bond. Then, write the matching number sentences.

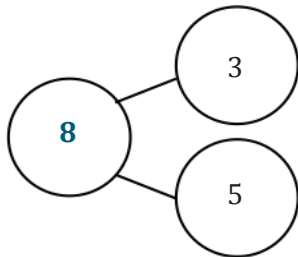


$$\underline{2} + \underline{6} = \underline{8}$$

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

I can add in any order, but it is easier to start at 6 and count on 2. Siiiiix, seven, eight! I love the counting on strategy!

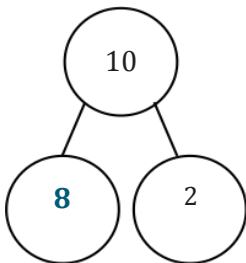
2. Write the number sentences to match the number bonds.



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

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

For both number sentences, the parts are 3 and 5, and the total is 8. The order of the addends doesn't matter when I solve.



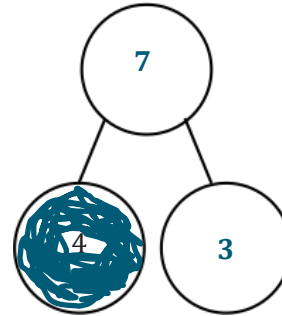
$$\underline{8} + \underline{2} = \underline{10}$$

$$\underline{2} + \underline{8} = \underline{10}$$

Since 10 is the total and one part is 2, I know the other part must be 8. I know my partners to 10, and I can add them in any order, 8 + 2 or 2 + 8.

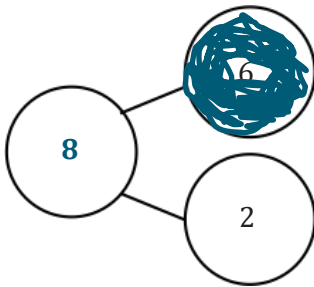
## G1-M1-Lesson 20

1. Color the larger part, and complete the number bond. Write the number sentence, starting with the larger part.



$$\boxed{4} + \boxed{\quad} = \boxed{7}$$

$4 + 3$  is the same amount as  $3 + 4$ . It's a lot faster for me to count on from the larger addend: foouuur, five, six, seven.



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

When I start with the larger addend, 6, I don't have to count on as much: Siiii, seven, eight!

## G1-M1-Lesson 21

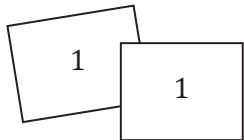
1. Draw the 5-group card to show a double. Write the number sentence to match the card.



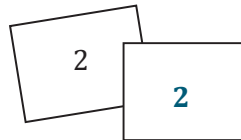
$$4 + 4 = 8$$

I can add the same number two times, like  $4 + 4 = 8$ . This is called a doubles fact. I can picture flashing doubles fingers in my mind... 4 and 4 makes 8.

2. Fill in the 5-group card in order from least to greatest, double the number, and write the number sentences.



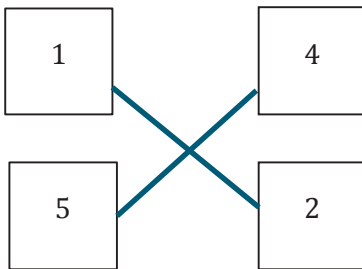
$$1 + 1 = 2$$



$$2 + 2 = 4$$

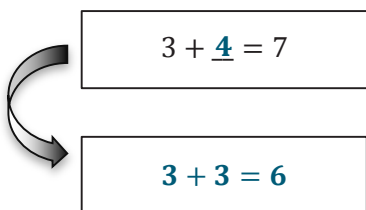
I know my doubles facts:  $1 + 1 = 2$ .  $2 + 2 = 4$ . The next one would be  $3 + 3 = 6$ . It's just like counting by 2s: 2, 4, 6.

3. Match the top cards to the bottom cards to show doubles plus 1.



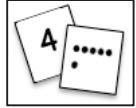
Since I know that  $4 + 4 = 8$ , then I know my doubles plus 1,  $4 + 5 = 9$ . I can picture the 5-group cards to help me solve. The doubles plus 1 fact has just 1 more dot!

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



$3 + 4$  is related to  $3 + 3$  because it's making doubles and adding 1 more. There is a doubles fact hiding inside  $3 + 4$ .

## G1-M1-Lesson 22



Solve the problems without counting all. Color the boxes using the key.

Step 1: Color the problems with “+ 1” or “1 +” blue (B).

Step 2: Color the remaining problems with “+ 2” or “2 +” green (G).

Step 3: Color the remaining problems with “+ 3” or “3 +” yellow (Y).

a. $8 + 1 = \underline{9}$ B	b. $9 + \underline{1} = 10$ B	c. $3 + 5 = \underline{8}$ Y	d. $5 + 3 = \underline{8}$ Y
e. $6 + \underline{2} = 8$ G	f. $4 + \underline{3} = 7$ Y	g. $6 + 1 = \underline{7}$ B	h. $\underline{2} + 8 = 10$ G

In parts c and d, it's like when we added in a different order. The total is the same!

In parts a and b, I can add 1 each time, and the total goes up by 1. It's just the next counting number!

In parts e and h, I can think of counting on by 2 each time.



## G1-M1-Lesson 23

Fill in the missing box, and find the totals for all of the expressions. Use your completed addition chart to help you.

$5 + 2$ <b>7</b>	$5 + 3$ <b>8</b>
$6 + 2$ <b>8</b>	$6 + 3$ <b>9</b>
$7 + 2$ <b>9</b>	$7 + 3$ <b>10</b>
$8 + 2$ <b>10</b>	

I can see which expressions equal 8. They make a diagonal line. Look, totals for 9 and 10 do the same thing!

I know that  $8 + 2$  is the missing expression in this column because these are  $+2$  facts. When I look at the first addend, I see it increases by 1 each time: 5, 6, 7, ... so 8 comes next!

$3 + 4$ <b>7</b>	$3 + 5$ <b>8</b>	$3 + 6$ <b>9</b>
$4 + 4$ <b>8</b>	$4 + 5$ <b>9</b>	$4 + 6$ <b>10</b>
$5 + 4$ <b>9</b>	$5 + 5$ <b>10</b>	
$6 + 4$ <b>10</b>		

The totals at the bottom of each column are 10. They look like a staircase!

I know to write  $4 + 6$  in this box. In each row, the first addend stays the same, but the second addend increases by 1, so  $4 + 4$ ,  $4 + 5$ ,  $4 + 6$ . The totals increase by 1, too: 8, 9, 10.

## G1-M1-Lesson 24

1. Solve and sort the number sentences. One number sentence can go in more than one place when you sort.

$$5 + 1 = \underline{6}$$

$$5 + 2 = \underline{7}$$

$$2 + 3 = \underline{5}$$

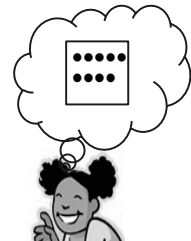
$$3 + 3 = \underline{6}$$

$$10 = 1 + \underline{9}$$

$$\underline{9} = 5 + 4$$

Doubles	Doubles +1	+1	+2	Mentally visualized 5-groups
$3 + 3 = 6$	$2 + 3 = 5$	$5 + 1 = 6$	$5 + 2 = 7$	$5 + 1 = 6$
$4 + 4 = 8$	$9 = 5 + 4$	$10 = 1 + 9$	$8 + 2 = 10$	$5 + 2 = 7$
	$3 + 4 = 7$			$9 = 5 + 4$

I can see the 5-group card. I see a row of 5 dots on the top and 4 dots on the bottom.



Look at the Doubles +1 facts! I can put them in order, and they build:  $2 + 3$ ,  $3 + 4$ ,  $4 + 5$ . The totals increase by 2 each time: 5, 7, 9.

2. Write your own number sentences, and add them to the chart.

$$4 + 4 = 8$$

$$8 + 2 = 10$$

$$3 + 4 = 7$$

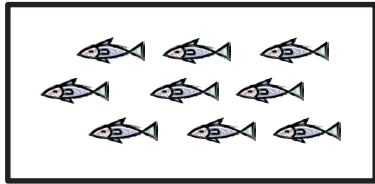
$3 + 3$  and  $4 + 4$  are related facts.  $4 + 4$  is the next doubles fact.

$3 + 4$  is a double +1 fact. The doubles fact is  $3 + 3 = 6$ . 4 is 1 more than 3, so I know  $3 + 4 = 7$ .

## G1-M1-Lesson 25

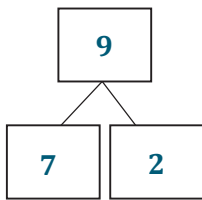
1. Break the total into parts. Write a number bond and addition and subtraction number sentences to match the story.

Jane caught 9 fish. She caught 7 fish before she ate lunch. How many fish did she catch after lunch?



$$\begin{array}{c} \boxed{7} \quad \oplus \quad \boxed{2} = \boxed{9} \\ \boxed{9} \quad \ominus \quad \boxed{7} = \boxed{2} \end{array}$$

I can use counting on and an addition sentence to solve. See even, eight, nine!

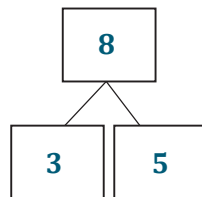
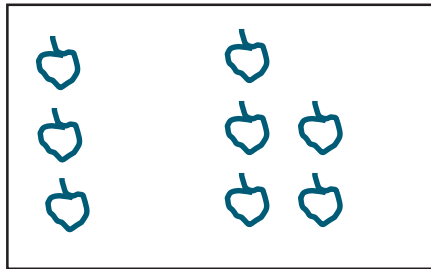


Jane caught 2 fish after lunch.

Since I know the whole and one part, I can also use subtraction to find the other part.

2. Draw a picture to solve the math story.

Jenna had 3 strawberries. Sanjay gave her more strawberries. Now, Jenna has 8 strawberries. How many strawberries did Sanjay give her?



$$\begin{array}{c} \boxed{3} \quad \oplus \quad \boxed{5} = \boxed{8} \\ \boxed{8} \quad \ominus \quad \boxed{3} = \boxed{5} \end{array}$$

Sanjay gave her 5 strawberries.

8 stands for the total number of strawberries Jenna has. 3 stands for the strawberries Jenna had at first. I know the total and one part. I need to find the other part.

Both of my number sentences match my number bond! Addition and subtraction both have parts and a whole.

## G1-M1-Lesson 26

1. Use the number path to solve.

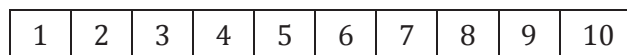
To solve  $7 - 5$ , I can think “5 plus something equals 7.” I can start at 5 and count up until I get to 7. It takes 2 hops to get to 7, so  $7 - 5 = 2$ . That’s the same as thinking  $5 + 2 = 7$ .



$$7 - 5 = \underline{2}$$

$$5 + \underline{2} = 7$$

2. Use the number path to help you solve.



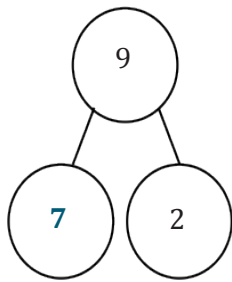
$$9 - 6 = \underline{3}$$

$$6 + \underline{3} = 9$$

Now that I have practiced, I don’t actually have to circle the number on the number path and draw the arrows. I can just use my pencil point to imagine the hops. To solve  $9 - 6$ , I’m going to start at 6 and count up until I get to 9. That’s like solving my missing addend problems.  $6 + 3 = 9$ , so  $9 - 6 = 3$ .

## G1-M1-Lesson 27

1. Use the number path to complete the number bond, and then write an addition and a subtraction sentence to match.



$$\underline{9 - 2 = 7}$$

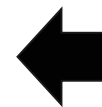
$$\underline{2 + 7 = 9}$$

I can count back from 9 using 2 hops. I get to 7. That means 7 is the missing part of the number bond.  $9 - 2 = 7$  and  $2 + 7 = 9$ .

2. Solve the number sentences. Pick the best way to solve. Check the box.



Count on



Count back

a.  $9 - 1 = \underline{8}$



b.  $8 - 7 = \underline{1}$



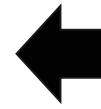
For  $9 - 1$ , it's faster to count back, since that would just be 1 hop back.  $9 - 1 = 8$ .  
8 and 7 are close together though, so it's faster to count on from 7.  
 $7 + 1 = 8$ , so that's just 1 hop forward.

3. Solve the number sentence. Pick the best way to solve. Use the number path to show why.

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



Count on



Count back



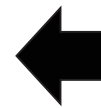
I counted on because it needed fewer hops.

8 and 5 are numbers that are close together. It's faster to count on when the numbers are close together. I'll start at 5 and count 3 hops to get to 8.

4. Make a math drawing or write a number sentence to show why this is best.

$$9 - 7 = \underline{2}$$






$$7 + 2 = 9$$

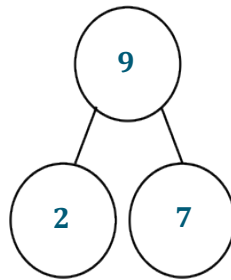
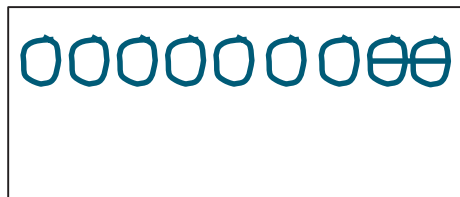
9 and 7 are close together, too. It's faster to count on when the numbers are close together.  $7 + 2 = 9$ .

If the numbers were far apart, like  $9 - 2$ , I would have counted back.

## G1-M1-Lesson 28

Read the story. Make a math drawing to solve.

Bob buys 9 new toy cars. He takes 2 out of the bag. How many cars are still in the bag?



$$\underline{9} - \underline{2} = \underline{7}$$

7 cars are still in the bag.

I can draw 9 circles for the 9 toy cars. Then I can cross off 2 because Bob took 2 out of his bag. There are 7 circles left. Those are the 7 cars that are still in the bag.

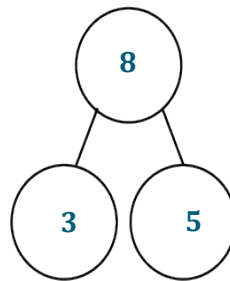
In the number bond, I can show 9 is the total number of cars. The part that was taken out is 2. The part that is still left is 7.

$$9 - 2 = 7.$$

## G1-M1-Lesson 29

Read the math stories. Make math drawings to solve.

Tom has a box of 8 crayons. 3 crayons are red. How many crayons are not red?



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

5 crayons are not red.

I can draw 8 circles for the 8 crayons. I can circle the 3 crayons that are red. That leaves 5 crayons that are not red.

In the number bond, I can show 8 is the total number of crayons. The part that is red is 3. The part that is not red is 5.

$$8 - 3 = 5.$$

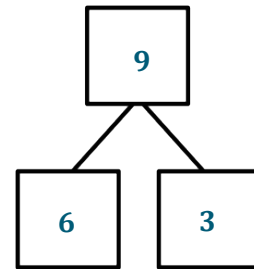
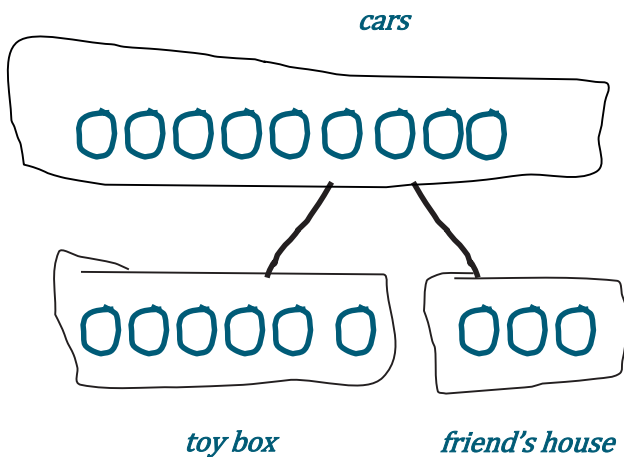
The statement for my answer is 5 crayons are not red.



## G1-M1-Lesson 30

Solve the math story. Draw and label a picture number bond to solve. Circle the unknown number.

Lee has a total of 9 cars. He puts 6 in the toy box and takes the rest to his friend's house. How many cars does Lee take to his friend's house?



$$\underline{6} + \underline{3} = 9$$

$$9 - \underline{6} = \underline{3}$$

Lee takes   3   cars to his friend's house.

I can draw 9 circles for the 9 cars. I put 6 circles in the toy box, and then I count on as I draw more cars in the box that says "friend's house." That's 3 more cars. Lee takes 3 cars to his friend's house.

In the number bond, I can show 9 is the total number of cars. The part that he puts in the toy box is 6, and the part that he takes with him is 3.

$$6 + 3 = 9.$$

$$9 - 6 = 3.$$

## G1-M1-Lesson 31

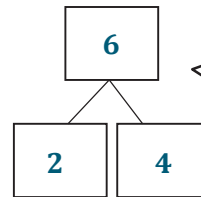
The sample problem below shows two possible number sentences. Both are considered reasonable and correct. If your child chooses to write the first number sentence, suggest that he/she draw a box around the solution.

Make a math drawing, and circle the part you know. Cross out the unknown part. Complete the number sentence and number bond.

A store had 6 shirts on the rack. Now, there are 2 shirts on the rack. How many shirts were sold?



I know how to make a quick math drawing! I can circle 2 dots since there are 2 shirts left. I can draw a line through 4 shirts. My line looks like one big subtraction sign!



When I solve with subtraction, I can still use a number bond to think of addition. If 6 is the total and 2 is one part, the other part must be 4.

$$\boxed{6} - \boxed{4} = \boxed{2}$$

I can write 6 minus the mystery box because I don't know how many shirts were sold. But I know that 2 shirts ended up on the rack. 6 minus something is 2.

$$\boxed{6} - \boxed{2} = \boxed{4}$$

4 shirts were sold.

Both of my number sentences match my number bond! Addition and subtraction both have parts and a whole.

### G1-M1-Lesson 32

1. Match the math stories to the number sentences that tell the story. Make a math drawing to solve.

a.

There are 9 flowers in a vase.  
5 are red.  
The rest are yellow.  
How many flowers are yellow?

$$\boxed{3} + \boxed{7} = \boxed{10}$$

$$\boxed{10} - \boxed{3} = \boxed{7}$$

b.

There are 10 apples in a basket.  
3 are red.  
The rest are green.  
How many apples are green?

$$\boxed{5} + \boxed{4} = \boxed{9}$$

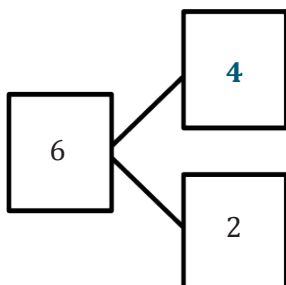
$$\boxed{9} - \boxed{5} = \boxed{4}$$


For the first math story, I can draw 5 circles for the red flowers, and then I can count on and draw until I have 9 circles. I see that there are 4 yellow flowers. This story goes with the second box of number sentences. I can tell because the total number of flowers is 9 flowers. 5 plus 4 equals 9, and 9 take away 5 equals 4.

For the second math story, I can draw 10 circles for the 10 apples. Then I can circle the 3 that are red. That leaves 7 green apples. This goes with the first box of number sentences. 3 plus 7 equals 10. 10 minus 3 equals 7.


2. Use the number bond to tell an addition and subtraction math story with pictures. Write an addition and subtraction number sentence.

For my addition math story, I can draw 2 big pears and 4 little pears. There are 2 big pears and 4 little pears. How many pears do I have in all? That goes with the number sentence 2 plus 4 equals 6.





---



$$\begin{array}{r} 2 \\ \hline \end{array} + \begin{array}{r} 4 \\ \hline \end{array} = \begin{array}{r} 6 \\ \hline \end{array}$$
  

$$\begin{array}{r} 6 \\ \hline \end{array} - \begin{array}{r} 4 \\ \hline \end{array} = \begin{array}{r} 2 \\ \hline \end{array}$$

For my subtraction math story, I can draw 6 pears. There are 2 pears left. How many pears did I eat? I can circle the 2 pears that are left and then cross out the pears that I ate. That shows that I ate 4 pears. 6 minus 4 equals 2.

## G1-M1-Lesson 33

1. Show the subtraction. If you want, make a 5-group drawing for each problem.



$$5 - 1 = \underline{4}$$

$$5 - 0 = \underline{5}$$

I wasn't sure about  $5 - 1$ , so I drew it out, but I know  $5 - 0$  is 5, so I don't need to draw.

2. Show the subtraction. If you want, make a 5-group drawing like the model for each problem.



$$7 - \underline{1} = 6$$

I am going to draw this one to solve it.

I know  $10 - 0 = 10$ , so I am not going to draw this one.

$$10 - \underline{0} = 10$$

3. Write the subtraction number sentence to match the 5-group drawing.



$$\underline{9} - \underline{0} = \underline{9}$$

4. Fill in the missing number. Visualize your 5-groups to help you.

$$9 - \underline{1} = 8 \quad 0 = 8 - \underline{8}$$

I can imagine 9 circles in my mind. How much do I take away to have 8 left? Just 1. I can erase 1 of my 9 in my mind, and I would have 8 left.

This one is tricky, but I can solve it. 8 minus something has to equal 0. Both sides of the equal sign have to be the same amount.  $8 - 8$  is the same amount as 0.

## G1-M1-Lesson 34

1. Cross off to subtract.



$$6 - 5 = \underline{1}$$

2. Make a 5-group drawing like those above. Show the subtraction.



$$1 = 5 - \underline{4}$$

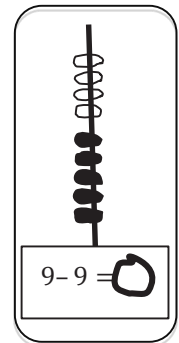


$$5 - \underline{5} = 0$$

3. Make a 5-group drawing like the model for each problem. Show the subtraction.



$$7 - \underline{6} = 1$$



4. Write the subtraction number sentence to match the 5-group drawing.



$$\underline{8} - \underline{7} = \underline{1}$$

5. Fill in the missing numbers. Visualize your 5-groups to help you

$$7 - \underline{6} = 1 \quad 1 = 8 - \underline{7}$$

### G1-M1-Lesson 35

1. Solve the sets of number sentences. Look for easy groups to cross off.

To take away 5, it's easiest to cross off the whole group of 5 black dots. I don't have to count them. Then I have 3 white dots left.

To subtract 3, I can just cross off the three white dots. They are an easy group to see, and then I will be left with a group of 5. I don't have to count those dots because I know there are 5 black dots in my 5-group drawing.

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

2. Subtract. Make a math drawing for each problem like the ones above. Write a number bond.

$8 - 4 = \underline{4}$

I know 4 and 4 are doubles that make 8, so  $8 - 4 = 4$ .

$9 - 5 = \underline{4}$   
 $9 - \underline{4} = 5$

I can imagine my 5-group drawing with 5 black dots and 3 white dots. That's 8.

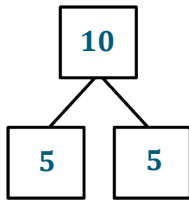
3. Solve. Visualize your 5-groups to help you.

$8 - \underline{5} = 3$

If I imagine 8, there is a group of 5 and a group of 3.

$\underline{8} - 3 = 5$

4. Complete the number sentence and number bond for each problem.



$10 - 5 = \underline{5}$

5. Match the number sentence to the strategy that helps you solve.

$7 - \underline{2} = 5$

$6 - \underline{3} = 3$



I can imagine my 5-group drawing. 7 is made with a group of 5 and a group of 2. The missing part is 2. I'll draw a line to the 5-groups box.

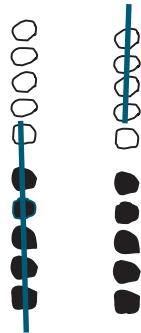
The 5-group that makes 6 is 5 and 1. That won't help me much. Let me think of the double that makes 6... 3 and 3. Yes,  $6 - 3$  is 3. Doubles helped me solve this problem. I'll draw a line to the doubles box.



## G1-M1-Lesson 36

1. Solve the sets of number sentences. Look for easy groups to cross off.

I can find the 6 in 10 really easily. 6 is made of 5 black dots and 1 white dot. I can cross that off all at once. That leaves me with 4.  
 $10 - 6 = 4$ .

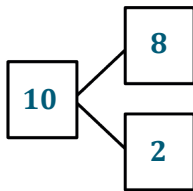


To take away the other part, I can cross off 4 from the end. That would leave me with 6.  $10 - 4 = 6$ .

$$10 - 6 = \underline{4}$$

$$\underline{10} - \underline{6} = \underline{4}$$

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

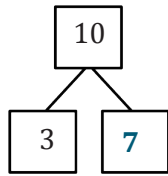


$$10 - 8 = \underline{2}$$

$$\underline{10} - \underline{2} = \underline{8}$$

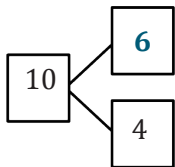
I don't need to make a math drawing. I know that 8 and 2 make 10. In my number bond, I know the total is 10 and the two parts are 8 and 2. To write my related subtraction sentence, I need to subtract the other part.  $10 - 2 = 8$ .

3. Complete the number sentence and number bond for each problem. Match the number bond to the related subtraction problem. Write the other related subtraction number sentence.



$$10 - 6 = \underline{4}$$

$$\underline{10} - \underline{4} = \underline{6}$$



$$10 - 7 = \underline{3}$$

$$\underline{10} - \underline{3} = \underline{7}$$

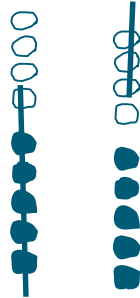
I know my partners to 10. 3 and 7 make 10. 4 and 6 make 10.

I have to look for the subtraction sentence that is taking away a part. I can match  $10 - 7$  with the first number bond. The missing part is 3. Then I will write a second subtraction sentence to show taking away the OTHER part. That would be  $10 - 3 = 7$ .

## G1-M1-Lesson 37

1. Make 5-group drawings and solve. Use the first number sentence to help you write a related number sentence that matches your picture.

I can find the 6 in 9 really easily. 6 is made of 5 black dots and 1 white dot. I can cross that off all at once. That leaves me with 3.  
 $9 - 6 = 3$ .

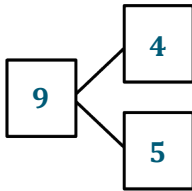


To take away the other part, I can cross off 3 from the end. That would leave me with 6.  $9 - 3 = 6$ .

$$9 - 6 = \underline{3}$$

$$\underline{9} - \underline{3} = \underline{6}$$

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

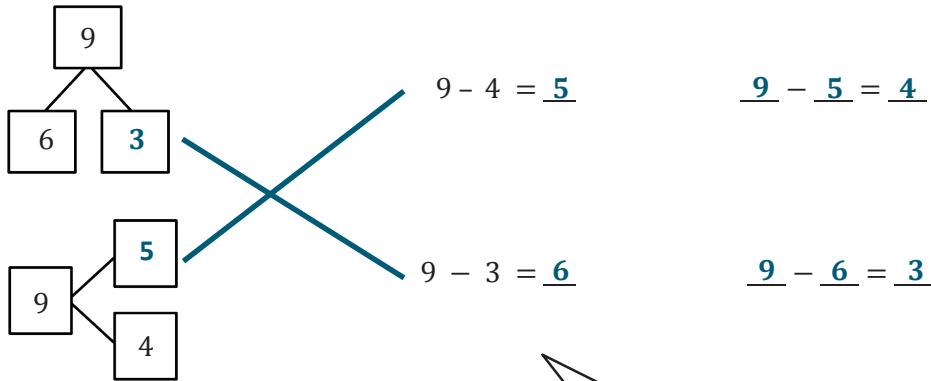


I don't need to make a math drawing. I know that 5 and 4 make 9. In my number bond, I know the total is 9 and the two parts are 4 and 5. To write my related subtraction sentence, I need to subtract the other part.  $9 - 5 = 4$ .

$$9 - 4 = \underline{5}$$

$$\underline{9} - \underline{5} = \underline{4}$$

3. Use 5-group drawings to help you complete the number bond. Match the number bond to the related subtraction problem. Write the other related subtraction number sentence.



I can think of my 5-group drawings to help me. When I picture 9 and I take out 4, that leaves me with 5. I could make a drawing if I want, but I don't need to. 9 is made of 5 and 4.

I have to look for the subtraction sentence that is taking away a part. I can match  $9 - 3$  with the first number bond. The missing part is 6. Then I will write a second subtraction sentence to show taking away the OTHER part. That would be  $9 - 6 = 3$ .

## G1-M1-Lesson 38

Find and solve the addition problems that are doubles and 5-groups.

Make subtraction flashcards for the related subtraction facts. (Remember, doubles will only make 1 related subtraction fact instead of 2 related facts.)

Make a number bond card, and use your cards to play Memory.

$5 + 0$	$5 + 1$	$5 + 2$	$5 + 3$	$5 + 4$	$5 + 5$
$6 + 0$	$6 + 1$	$6 + 2$	$6 + 3$	$6 + 4$	
$7 + 0$	$7 + 1$	$7 + 2$	$7 + 3$		
$8 + 0$	$8 + 1$	$8 + 2$			
$9 + 0$	$9 + 1$				
$10 + 0$					

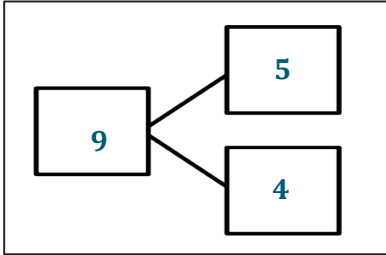
$5 + 5 = 10$  is a double fact and uses a 5-group. Both addends are 5.

$5 + 4$  uses a 5-group since 5 is one of the addends. I'll make the subtraction flashcards  $9 - 5 = 4$  and  $9 - 4 = 5$ . This row has more facts that use a 5-group.

$$5 + 4 = 9$$

$$9 - 4 = 5$$

5 and 4 are the parts that make 9.



$$9 - 5 = 4$$

### G1-M1-Lesson 39

Solve the unshaded addition problems below. Write the two subtraction facts that would have the same number bond. To help you practice your addition and subtraction facts even more, make your own number bond flash cards.

5 + 0	5 + 1	5 + 2	5 + 3	5 + 4	5 + 5
6 + 0	6 + 1	6 + 2	6 + 3	6 + 4	
7 + 0	7 + 1	7 + 2	7 + 3		
8 + 0	8 + 1	8 + 2			
9 + 0	9 + 1				
10 + 0					

5 + 4 uses a 5-group, since 5 is one of the addends. I'll make the subtraction flashcards  $9 - 5 = 4$  and  $9 - 4 = 5$ .

7 + 2 is 9. I can make two subtraction sentences, starting with the total of 9.  
 $9 - 7 = 2$  and  $9 - 2 = 7$ .

$9 - 7 = 2$	$9 - 2 = 7$
$10 - 7 = 3$	$10 - 3 = 7$

