Grade 1

EUREKA MATH™

Homework Helpers

What does this painting have to do with math?
Turn this book over to find out.

EUREKA MATH™

From the non-profit Great Minds®

Homework Helpers

Eureka Math Grade 1

Special thanks go to the Gordan A. Cain Center and to the Department of Mathematics at Louisiana State University for their support in the development of *Eureka Math*.

Published by the non-profit Great Minds

Printed in the U.S.A.
This book may be purchased from the publisher at eureka-math.org
10 9 8 7 6 5 4 3 2 1

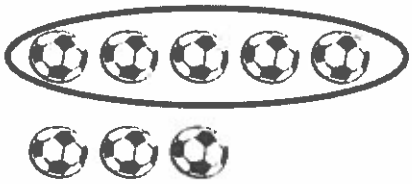
ISBN 978-1-63255-824-4

Homework Helpers

Grade 1
Module 1

G1-M1-Lesson 1

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

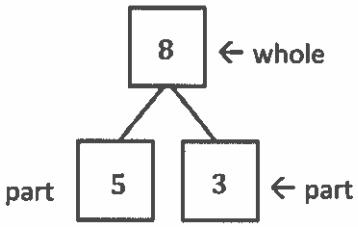


I circled 5 balls, and there are 3 more.

I can count on from 5 to find the total.

Fiiiive, 6, 7, 8.

Number Bond

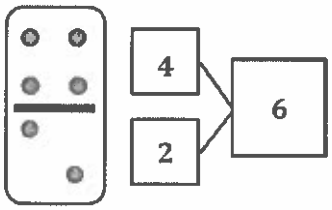


I can make a number bond for the soccer balls.

5 and 3 are the parts.

The whole, or total, is 8.

2. Make a number bond for the domino.

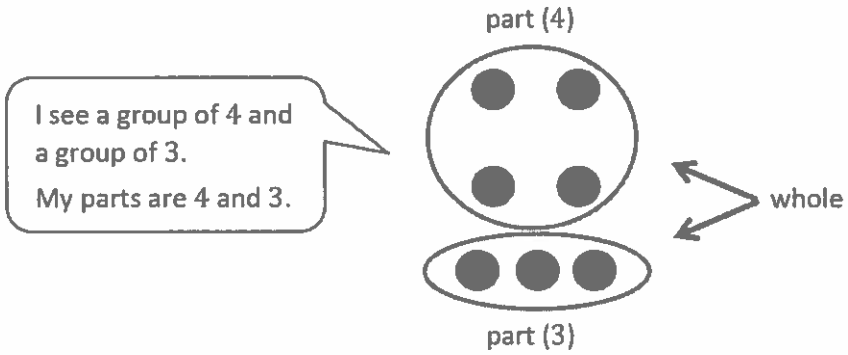


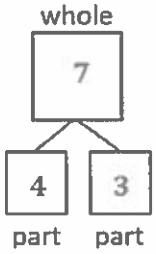
I see 4 dots and 2 dots, so 4 and 2 are the parts.

There are a total of 6 dots.

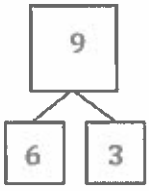
G1-M1-Lesson 2

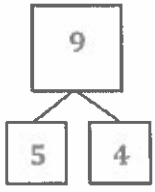
1. Circle 2 parts you see. Make a number bond to match.





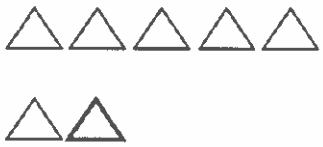
2. How many fruits do you see? Write at least 2 different number bonds to show different ways to break apart the total.





G1-M1-Lesson 3

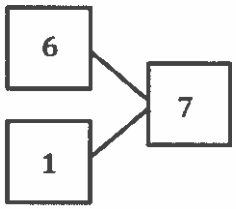
Draw one more in the 5-group. In the box, write the numbers to describe the new picture.



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

1 more than 6 is 7.

6 + 1 = 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).

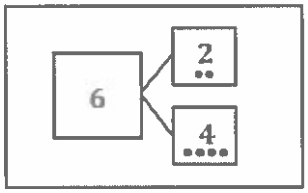
- Some of the flashcards may have the full number bond and number sentence.

Front: Number Sentence

$2 + 4 = 6$

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

Back: Number Bond



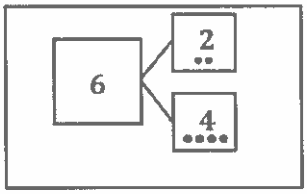
- Others may have the number bond and just the expression.

Front: Expression

$2 + 4$

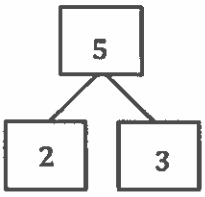
2 + 4? Hmmmm... Twooooo, 3, 4, 5, 6. The total is 6.

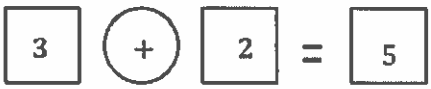
Back: Number Bond



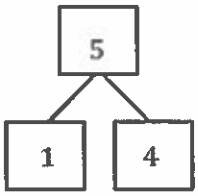
G1-M1-Lesson 5

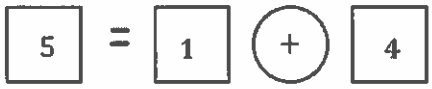
1. Make 2 number sentences. Use the number bonds for help.





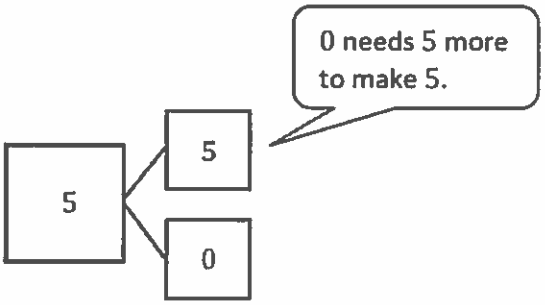
3 and 2 are the parts in one of my number bonds, so I know $3 + 2 = 5$.



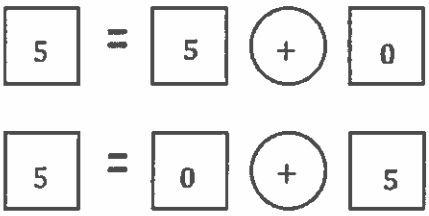


This number bond has the parts 1 and 4, and the whole is 5. I can write my number sentence starting with the whole, $5 = 4 + 1$.

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



0 needs 5 more to make 5.



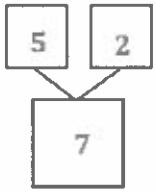
One sentence can start with my biggest part.

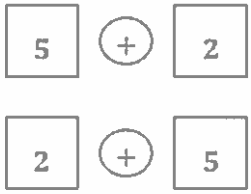
The other one can start with my smallest part.

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.

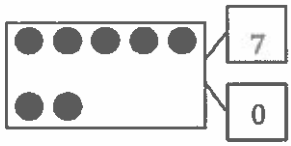


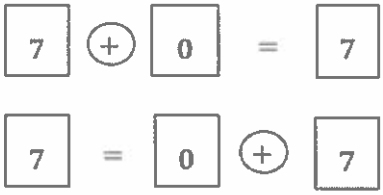


When I just write 5 + 2, without writing the full number sentence, it's called an expression.

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.

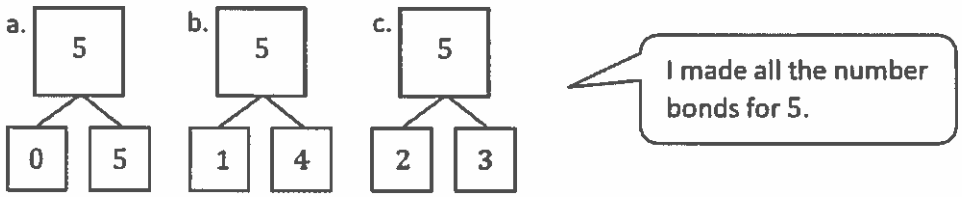




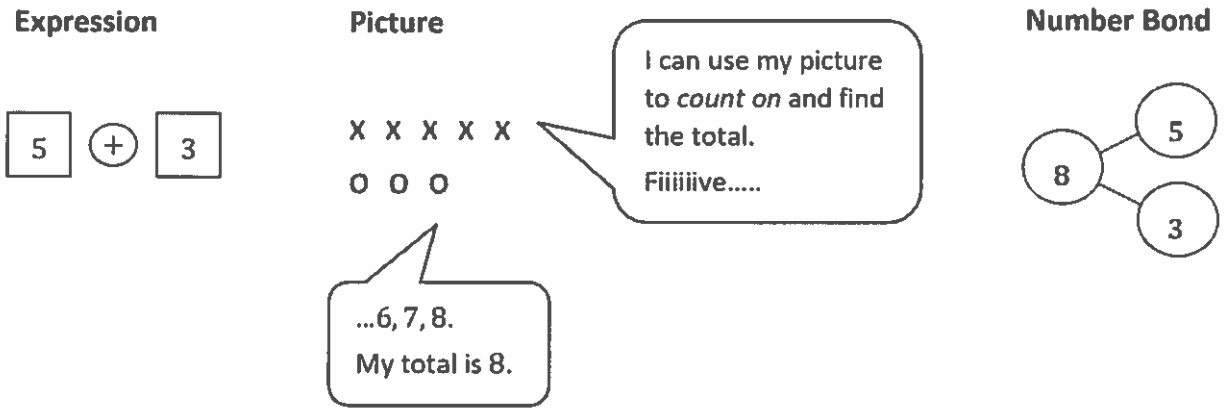
When I add the equals symbol and total, it's called a number sentence.

EUREKA MATH

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



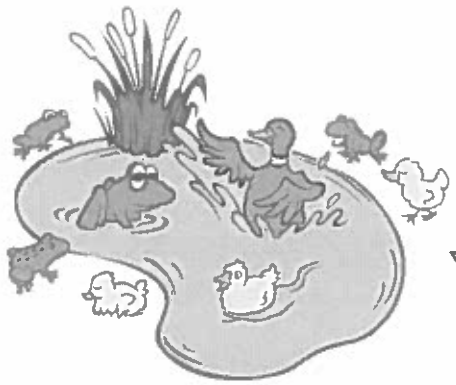
4. Use the expression to write a number bond, and draw a picture that makes 8.



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

G1-M1-Lesson 7

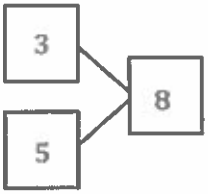
Use the pond picture to help you write the expressions and number bonds to show all of the different ways to make 8.



3 animals are in the pond.
5 animals are on land.
There are 8 animals in all.

1 animal is splashing.
7 are not.
There are 8 animals in all.

Number Bond



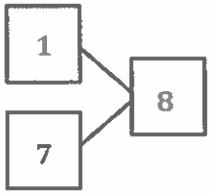
Expressions

3 + 5

5 + 3

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

Number Bond



Expressions

1 + 7

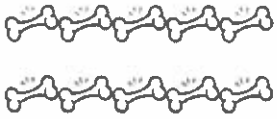
7 + 1

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

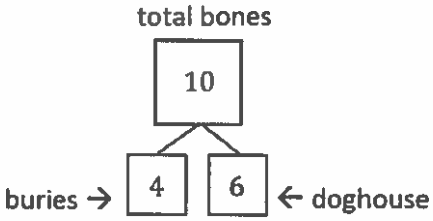
In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 9 (9 and 0, 8 and 1, 7 and 2, 6 and 3, 5 and 4).

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.

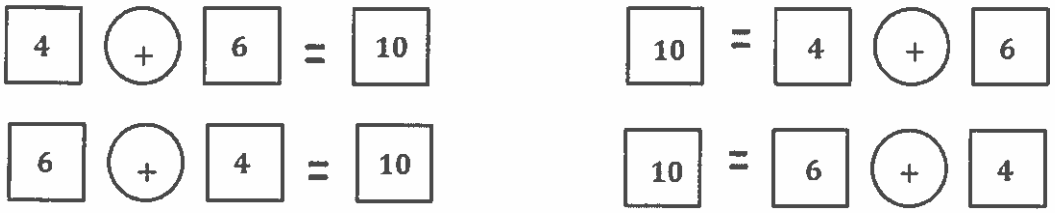


My 10 fingers can represent the 10 bones.



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

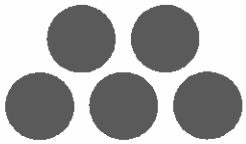
2. Write all the adding sentences that match this number bond.



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).

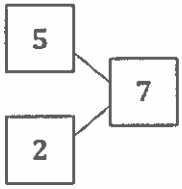
G1-M1-Lesson 9

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.

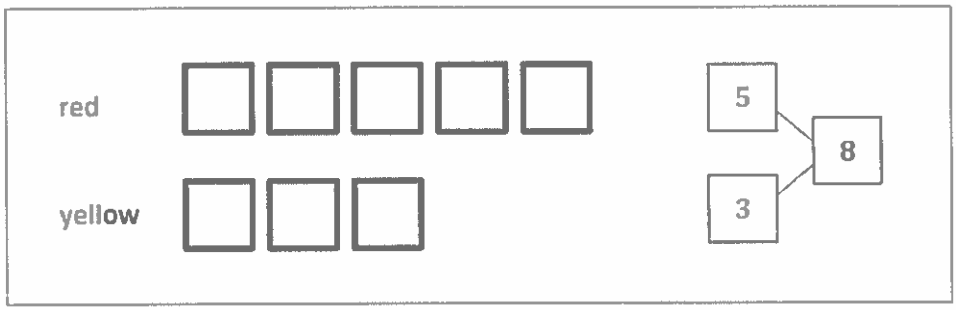


c. Write a number sentence to tell the story.

5 + 2 = 7

d. Now there are 7 balls.

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



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

5 + 3 = 8

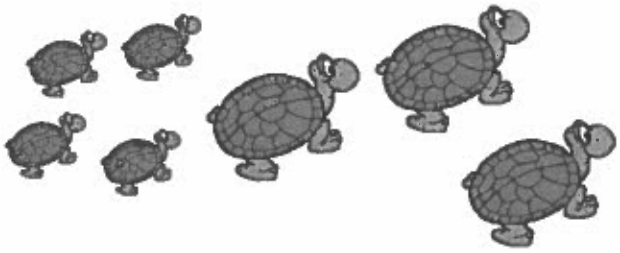
Marcus has 8 blocks.

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

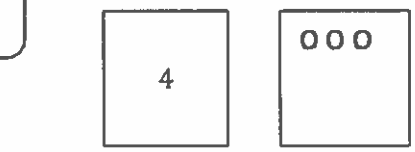
G1-M1-Lesson 10

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

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



I see 4 little tortoises and 3 big tortoises.



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

4 + 3 = 7

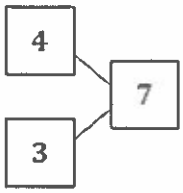
My number sentence shows that 4 little tortoises plus 3 big tortoises equals 7 total tortoises.

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!

3 + 4 = 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.

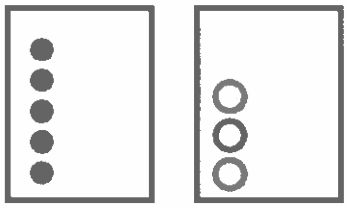
G1-M1-Lesson 11

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

5	+	?	=	8

5 plus "the mystery number" equals 8.

Hmmm.....



I can draw dots as I *count on* to 8.

Fiiiiive..., 6, 7, 8.

5	+	3	=	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.

4	+	?	=	7

3	+	?	=	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.

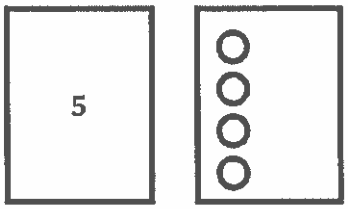
This number sentence matches the story because 3 books plus "the mystery number" of books equals 9 total books.

G1-M1-Lesson 12

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

5 + ? = 9

The mystery number is 4

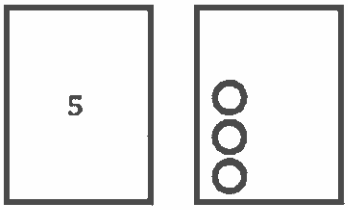


I can *count on* from 5 to find the mystery number.
Fiiiiiive..., 6, 7, 8, 9.
I counted on 4 more, so the mystery number is 4.

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.
Hmmm...

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



5 + 3 = 8

I drew 3 more dots.
The "mystery number" is 3.

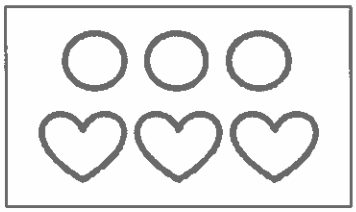
Shana bought 3 hats.

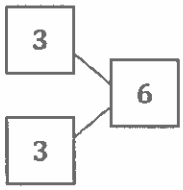
G1-M1-Lesson 13

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 $3 + 3 = 6$?



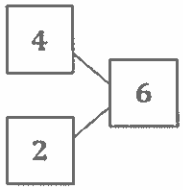


I have an idea! I baked 3 round cookies and 3 heart-shaped cookies. I baked 6 cookies in total. I can draw the cookies to show my story.

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. 6 + 2 = 8

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

Fiiiive...

...6, 7, 8.

b. 8 = 5 + 3

G1-M1-Lesson 15

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

1.

5 + 2 = 7

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

Show the shortcut you used to add.

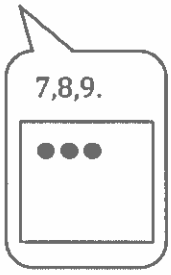
5 + 2 = 7

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

2.

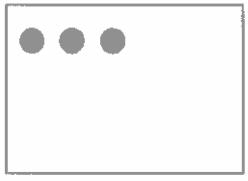
6 + 3 = 9

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



Show the shortcut you used to add.

6 + 3 = 9

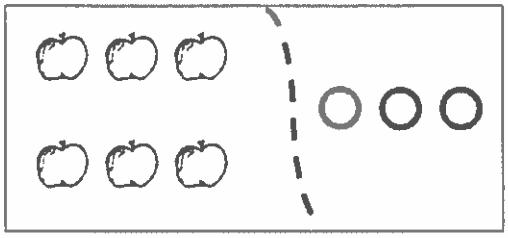


I used my 5-group cards as a short-cut. I can draw the card.

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

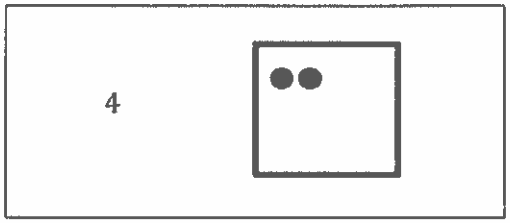
...7, 8, 9.

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.

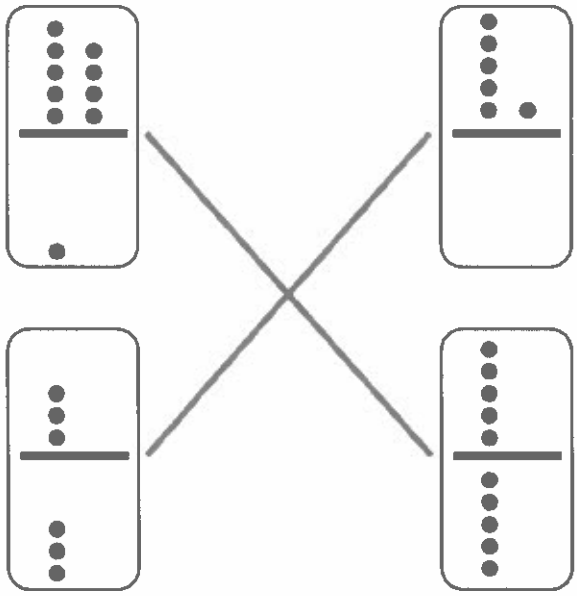
4 + 2 = 6

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

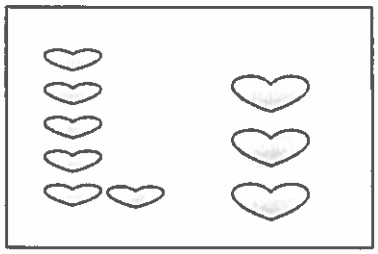
a. $2 + 3 = 1 + 4$

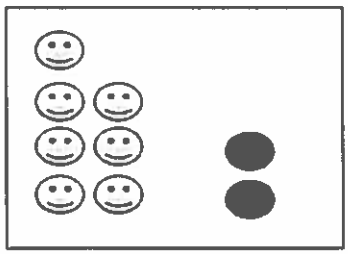
b. $3 + 1 = 2 + 2$

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.





6 + 3 = 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

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.

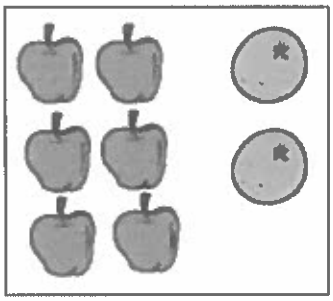
7 + 1 = 4 + 4

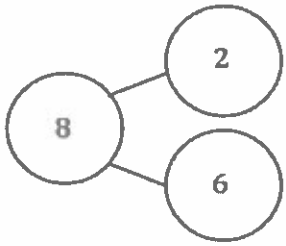
4 + 3 = 5 + 2

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.



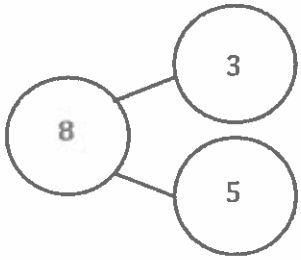


$\underline{2} + \underline{6} = \underline{8}$

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

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

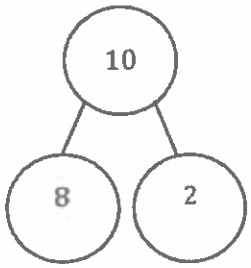
2. Write the number sentences to match the number bonds.



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

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

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.



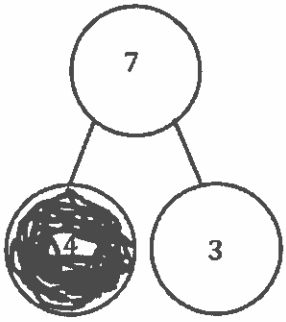
$\underline{8} + \underline{2} = \underline{10}$

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

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.

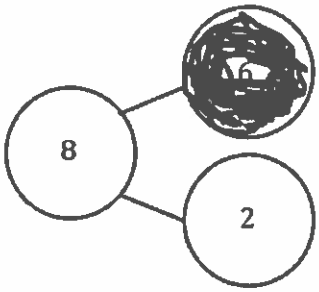
G1-M1-Lesson 20

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



4	+	3	=	7

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



6 + 2 = 8

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

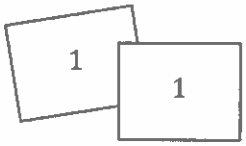
G1-M1-Lesson 21

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

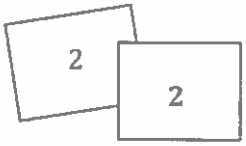
$4 + 4 = 8$

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.



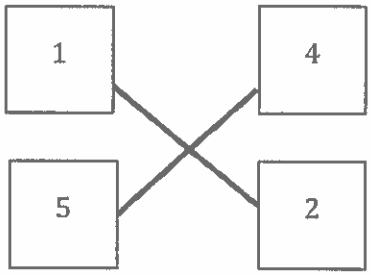
$1 + 1 = 2$



$2 + 2 = 4$

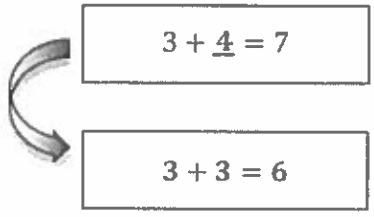
I know my doubles facts: $1 + 1 = 2$. $2 + 2 = 4$. The next one would be $3 + 3 = 6$. It's just like counting by 2s: 2, 4, 6.

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

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 7	5 + 3 8
6 + 2 8	6 + 3 9
7 + 2 9	7 + 3 10
8 + 2 10	

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 7	3 + 5 8	3 + 6 9
4 + 4 8	4 + 5 9	4 + 6 10
5 + 4 9	5 + 5 10	
6 + 4 10		

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.

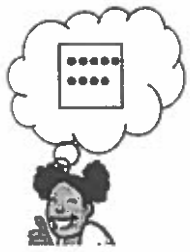
G1-M1-Lesson 24

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

5 + 1 = 6	5 + 2 = 7	2 + 3 = 5
3 + 3 = 6	10 = 1 + 9	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

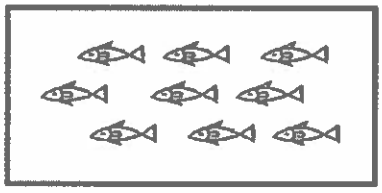
3 + 3 and 4 + 4 are related facts. 4 + 4 is the next doubles fact.

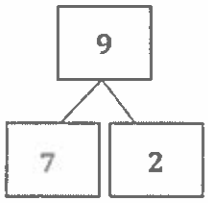
3 + 4 is a double +1 fact. The doubles fact is 3 + 3 = 6. 4 is 1 more than 3, so I know 3 + 4 = 7.

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?





7 + 2 = 9

9 − 7 = 2

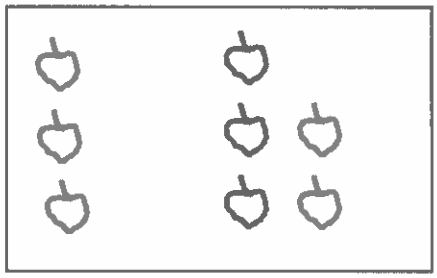
Jane caught 2 fish after lunch.

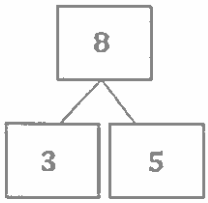
I can use counting on and an addition sentence to solve. Seeeven, eight, nine!

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?





3 + 5 = 8

8 − 3 = 5

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.

EUREKA MATH

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 = 2 ○○

5 + 2 = 7

2. Use the number path to help you solve.

9 – 6 = 3

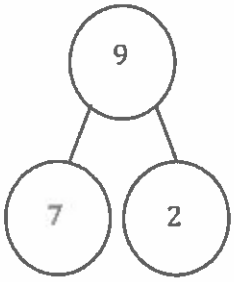
6 + 3 = 9

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.

1	2	3	4	5	6	7	8	9	10



$9 - 2 = 7$

$2 + 7 = 9$

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. $9 - 1 =$ 8		X
b. $8 - 7 =$ 1	X	

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.

$8 - 5 = \_3\_$

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.

$9 - 7 = \_2\_$

$7 + 2 = 9$

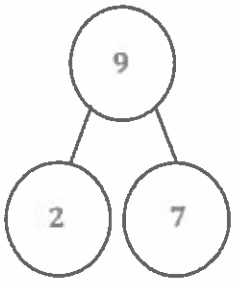
9 and 7 are close together, too. It's faster to count on when the numbers are close together. $7 + 2 = 9$.

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?



9 - 2 = 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.

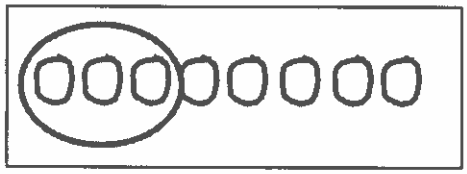
In the number bond, I can show 9 is the total number of cars. The part that was taken out is 2. The part that is still left is 7.

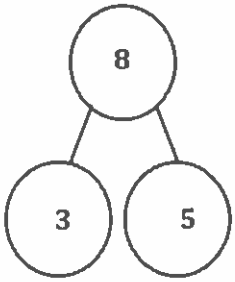
9 – 2 = 7.

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?





8 - 3 = 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.

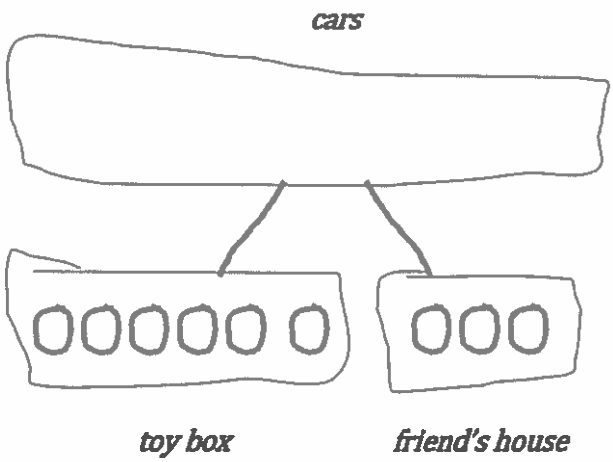
$$8 - 3 = 5.$$

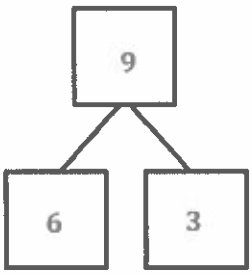
The statement for my answer is 5 *crayons are not red*.

G1-M1-Lesson 30

Solve the math stories. 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?





6 + 3 = 9

9 - 6 = 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.

$$6 + 3 = 9.$$

$$9 - 6 = 3.$$

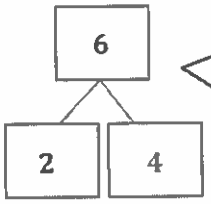
G1-M1-Lesson 31

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.

6 − ☐ = 2

6 − 2 = 4

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.

__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?

3	+		=	10
10	−	3	=	7

b.

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

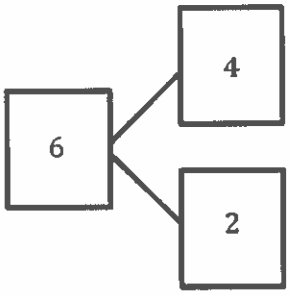
5	+	4	=	9
9	−	5	=	4

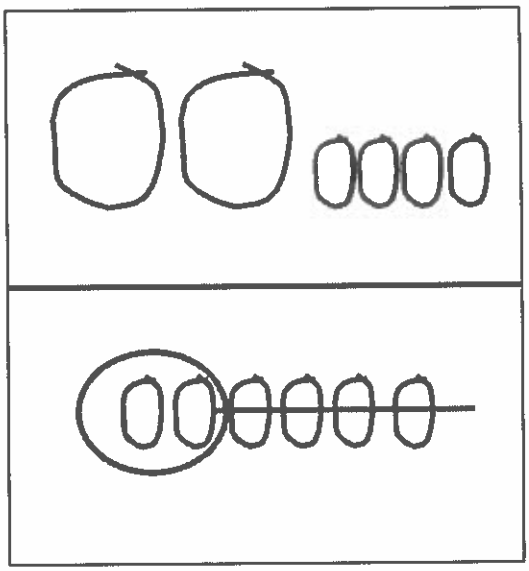
For the first math story, I can draw 5 circles for the red flowers, and then I can count on and draw until I have 9 circles. I see that there are 4 yellow flowers. This story goes with the second box of number sentences. I can tell because the total number of flowers is 9 flowers. 5 plus 4 equals 9,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





2 + 4 = 6

6 - 4 = 2

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 = 4

5 – 0 = 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 – 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 – 0 = 10

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

9 – 0 = 9

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.

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

9 – 1 = 8

0 = 8 – 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.

G1-M1-Lesson 34

1. Cross off to subtract.

6 - 5 = 1

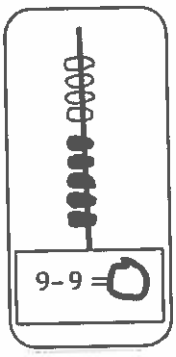
2. Make a 5-group drawing like those above. Show the subtraction.

1 = 5 - 4

5 - 5 = 0

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

7 - 6 = 1



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

8 - 7 = 1

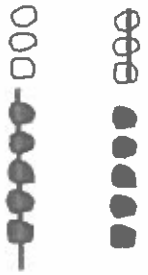
5. Fill in the missing numbers. Visualize your 5-groups to help you

7 - 6 = 11 = 8 - 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.

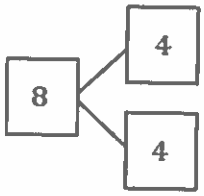


To subtract 3, I can just cross off the three white dots. They are an easy group to see, and then I will be left with a group of 5. I don't have to count those dots because I know there are 5 black dots in my 5-group drawing.

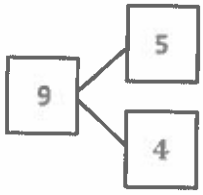
$8 - 5 = \underline{3}$

$8 - 3 = \underline{5}$

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



I can take away the 5 black dots all at once, and then I can see I have 4 left without counting.



$8 - 4 = \underline{4}$

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.

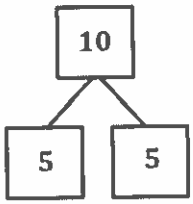
$8 - \underline{5} = 3$

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

$\underline{8} - 3 = 5$

EUREKA MATH

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.

$7 - \underline{2} = 5$

$6 - \underline{3} = 3$

doubles

5-groups

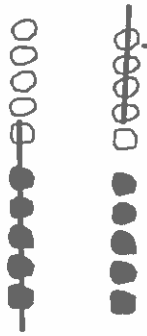
I can imagine my 5-group drawing. 7 is made with a group of 5 and a group of 2. The missing part is 2. I'll draw a line to the 5-groups box.

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. $10 - 6 = 4$.

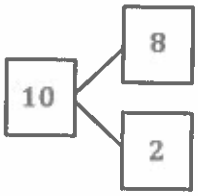


To take away the other part, I can cross off 4 from the end. That would leave me with 6. $10 - 4 = 6$.

$10 - 6 = \underline{4}$

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

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

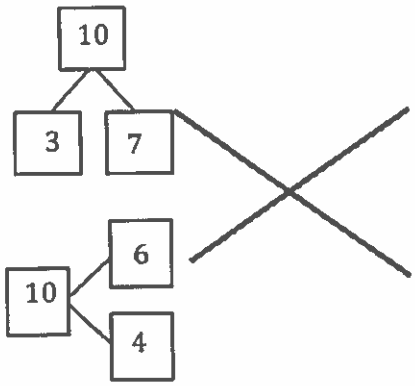


I don't need to make a math drawing. I know that 8 and 2 make 10. In my number bond, I know the total is 10 and the two parts are 8 and 2. To write my related subtraction sentence, I need to subtract the other part. $10 - 2 = 8$.

$10 - 8 = \underline{2}$

$\underline{10 - 2 = 8}$

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.



$10 - 6 = \underline{4}$

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

$10 - 7 = \underline{3}$

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

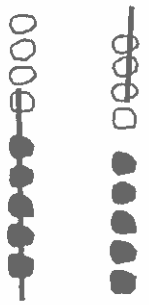
I know my partners to 10. 3 and 7 make 10. 4 and 6 make 10.

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.

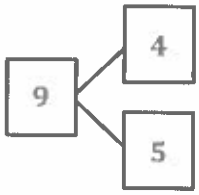


To take away the other part, I can cross off 3 from the end. That would leave me with 6. 9 – 3 = 6.

9 – 6 = 3

9 – 3 = 6

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

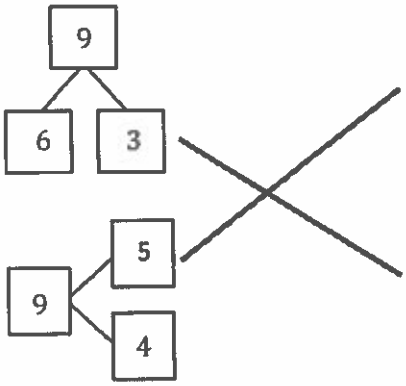


I don't need to make a math drawing. I know that 5 and 4 make 9. In my number bond, I know the total is 9 and the two parts are 4 and 5. To write my related subtraction sentence, I need to subtract the other part. 9 – 5 = 4.

9 – 4 = 5

9 – 5 = 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.



9 − 4 = 5

9 − 5 = 4

9 − 3 = 6

9 − 6 = 3

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					

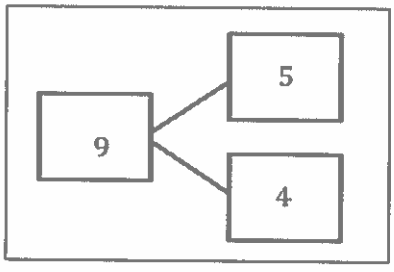
5 and 5 = 10 is a double fact and uses a 5-group. Both addends are 5.

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

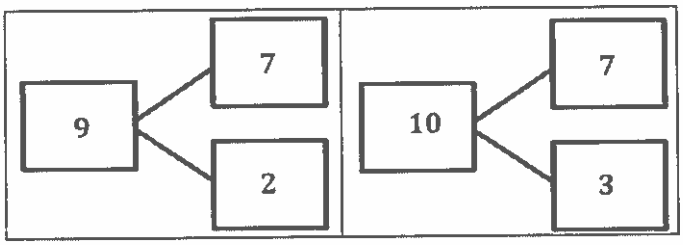
Solve the unshaded addition problems below. Write the two subtraction facts that would have the same number bond. To help you practice your addition and subtraction facts even more, make your own number bond flash cards.

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



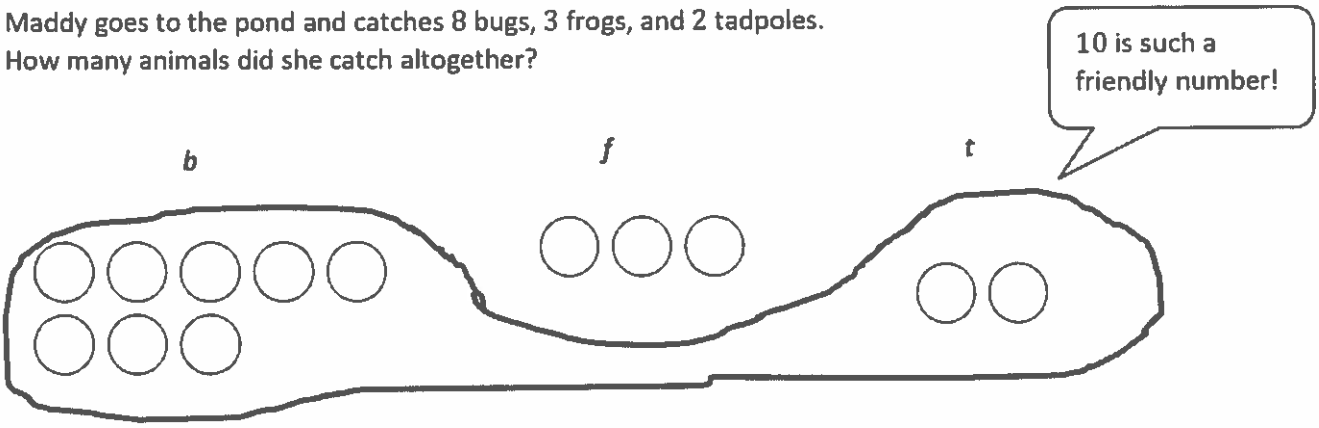
Homework Helpers

Grade 1 Module 2

G1-M2-Lesson 1

Read the math story. Make a simple math drawing with labels. Circle 10 and solve.

Maddy goes to the pond and catches 8 bugs, 3 frogs, and 2 tadpoles.
How many animals did she catch altogether?



$8 + 3 + 2 = 13$

$8 + 2 = 10$

$10 + 3 = 13$

I have 10 and 3 more. That makes 13 animals!

I can make ten by adding 8 and 2. I can make one group with 8 and 2, just like we put a string around them in class!

Maddy caught 13 animals.

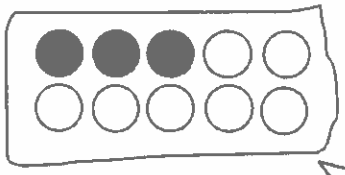
G1-M2-Lesson 2

1. Circle the numbers that make ten. Draw a picture. Complete the number sentence.

(3) + 4 + (7) = □

10

4 + 3 + 7



X X X X

4 + 10 = 14

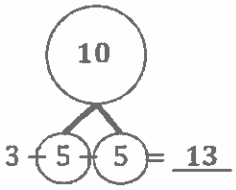
I can rearrange the numbers to show the make ten strategy!

When I add amounts in different orders, I get the same total.

I can complete the new number sentence that shows how I just made ten. Both number sentences have the same total, 14.

I can draw a group of 3 and 7 first because I know they make ten. I can circle the group of ten just like we did with the string.

2. Circle the numbers that make ten, and put them into a number bond. Write a new number sentence.



3 + (5) + (5) = 13

3 + 10 = 13

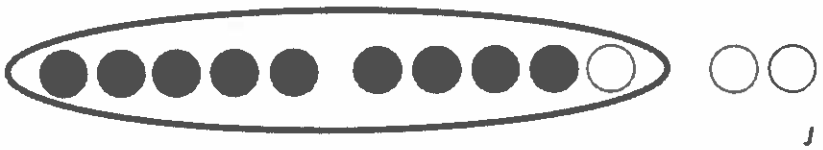
I can draw a number bond to show how I will make ten from two numbers.

Here is my new number sentence. 10 and 3 more equals 13.

G1-M2-Lesson 3

Draw, label, and circle to show how you made ten to help you solve.
Complete the number sentences.

1. Todd has 9 raisins, and Jenny has 3. How many raisins do they have altogether?



T J

I can make ten by putting 1 of Jenny's raisins in Todd's pile. Todd's pile had 9 raisins, but now it has 10. When I make 10 with Todd's 9 raisins and 1 of Jenny's raisins, there are 2 raisins left in Jenny's pile.

I can draw 9 filled-in circles to show how many raisins Todd has and 3 open circles to show how many raisins Jenny has.

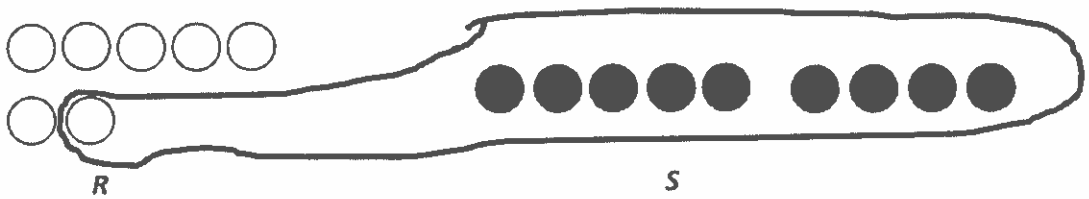
9 and 3 equals 12.

10 and 2 equals 12.

Todd and Jenny have 12 raisins altogether.

Look! 9 and 3 is the same as 10 and 2. They both make 12.

2. There are 7 children sitting on the rug and 9 children standing. How many children are there in all?



R S

I can label my drawings, *R* for "rug" and *S* for "standing."

I'm noticing a pattern! Every time I make 10 today, the other addend is left with 1 less. 7 becomes 6.

$9 + 7 = 16$

$10 + 6 = 16$

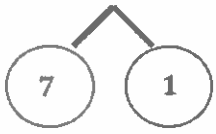
Making ten is more efficient than counting on 7 to add!

There are 16 children in all.

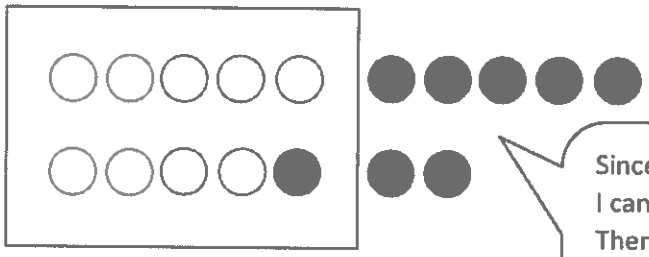
G1-M2-Lesson 4

1. Solve. Make math drawings using the ten-frame to show how you made 10 to solve.

$8 + 9 = \underline{17}$



$\underline{10} + \underline{7} = \underline{17}$

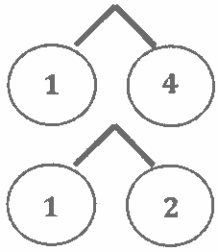


Since 9 is the bigger addend, I can draw 9 circles first. Then, I can draw 8 filled-in circles. I can make a ten! It has a frame around it. That's why we call it a ten-frame!

2. Match the number sentences to the bonds you used to help you make ten.

$9 + 3 = \_\_\_\_$

$\_\_\_\_ = 9 + 5$

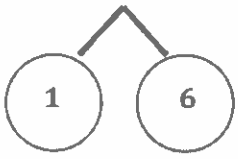


I can break 3 apart into 1 and 2. I know that 9 and 1 make ten! $9 + 3$ is the same as $10 + 2$.

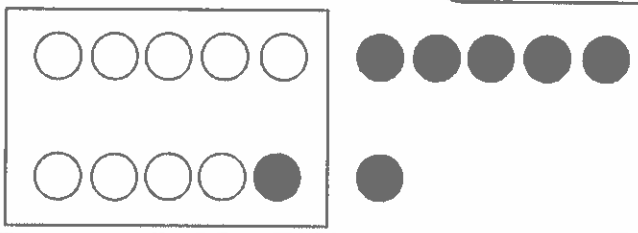
3. Show how the expressions are equal.

Use number bonds to make ten in the $9 +$ *fact* expression within the true number sentence. Draw to show the total.

$10 + 6 = 9 + 7$



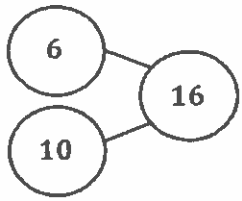
9 needs 1 more to make ten! My number bond helps me to see that when I take 1 from 7 to make ten, the other number is 1 less. $10 + 6$ is easy to solve!



G1-M2-Lesson 5

1. Solve the number sentences. Use number bonds to show your thinking. Write the 10 + fact and new number bond.

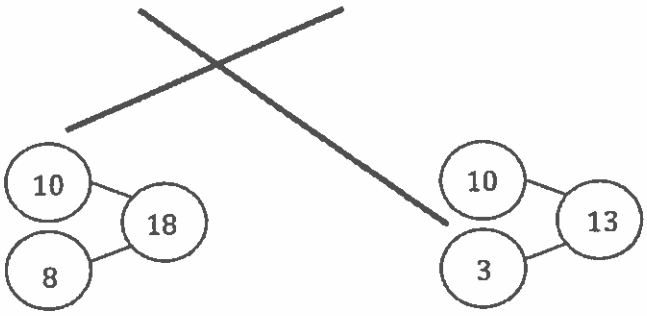
$9 + 7 = \underline{16}$ $\underline{10} + \underline{6} = \underline{16}$



9 + 7 is equal to 10 + 6, but when I draw my number bond, it's much easier to solve when one part is 10.

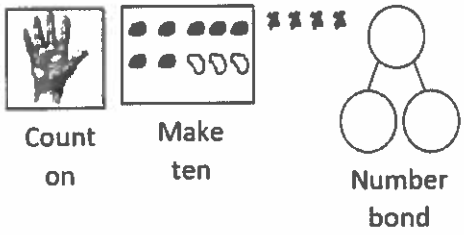
Solve. Match the number sentence to the 10 + number bond.

$9 + 4 = \underline{13}$ $9 + 9 = \underline{18}$

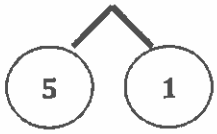


When I make number bonds with ten as one part, I can solve quickly, because 10 is a friendly number and I know my 10 + facts!

2. Use an efficient strategy to solve the number sentences.



$6 + 9 = \underline{15}$ $10 + 5 = 15$



I can use the make ten strategy to solve quickly. It would take too long to count on 6.

$9 + 2 = \underline{11}$

It's easy for me to count on 2 to solve. Niiine, 10, 11.

G1-M2-Lesson 6

1. Solve. Use your number bonds. Draw a line to match the related facts. Write the related 10 + fact.

9 + 4 = 13	9 + 8 = 17
17 = 8 + 9	4 + 9 = 13

10 + 7 = 17

10 + 3 = 13

I don't always have to start with the first number when I'm adding, as long as I add all of the parts. I can start with 4 or 9. Either way my total is 13.

2. Complete the addition sentences to make them true.

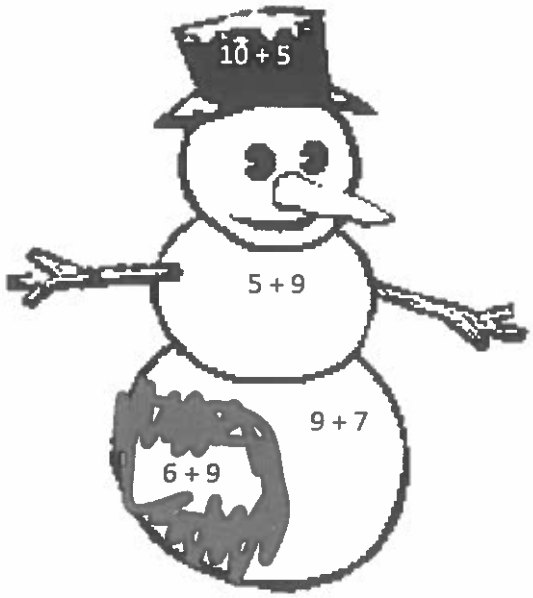
15 = 9 + 6

10 + 9 = 19

10 + 7 = 17

I know that if the total is 19 and one part is 10, then the other part must be 9.
10 and 9 make 19. 9 and 10 make 19, too!

3. Find and color the expression that is equal to the expression on the snowman's hat. Write the true number sentence.



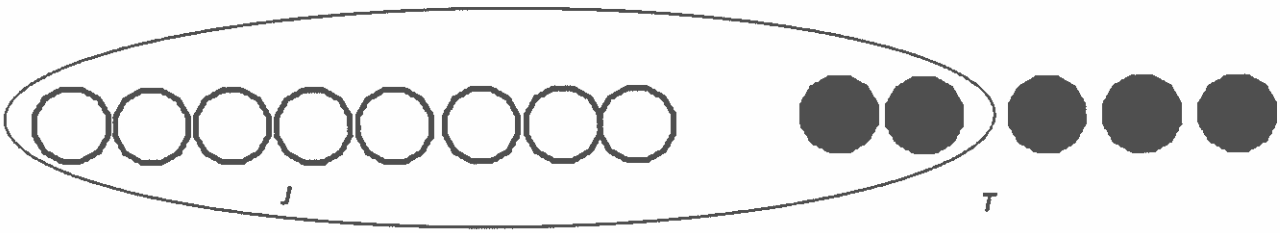
10 + 5 = 6 + 9

To solve 6 + 9, I like to make ten with the 9. I can imagine breaking apart the 6 into 5 and 1 since 9 needs 1 to make ten!

G1-M2-Lesson 7

Draw, label, and circle to show how you made ten to help you solve. Write the number sentences you used to solve.

John has 8 tennis balls. Toni has 5. How many tennis balls do they have in all?



I can make ten with 8 by taking 2 from the group of 5. I'll draw a circle around it to show my group of ten.

When I make ten, I have 3 left. I can make a new number sentence, $10 + 3 = 13$.

$8 + 5 = 13$

$10 + 3 = 13$

John and Toni have 13 tennis balls in all.

If $8 + 5 = 13$ and $10 + 3 = 13$, then I know that $8 + 5$ is the same as $10 + 3$.

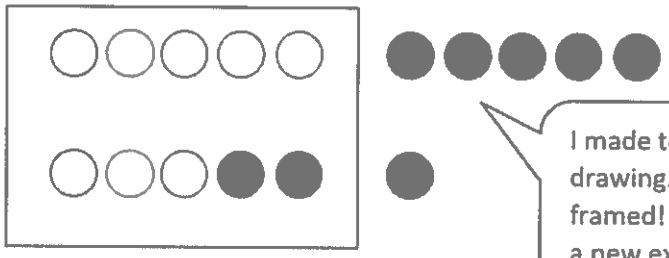
G1-M2-Lesson 8

1. Solve. Make math drawings using the ten-frame to show how you made ten to solve.

$8 + 8 = \underline{16}$

8 needs 2 to make ten. So I broke apart the second 8 into 2 and 6.

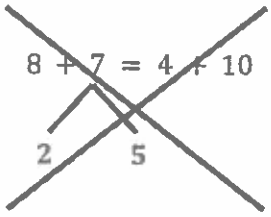
$\underline{10} + \underline{6} = \underline{16}$



I made ten first in my drawing. The ten is framed! My picture shows a new expression, 10 + 6.

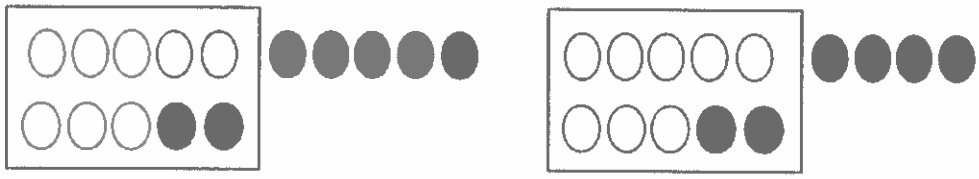
2. Make math drawings using ten-frames to solve. Circle the true number sentences. Write an X to show number sentences that are not true.

$8 + 7 = 4 + 10$



$10 + 4 = 6 + 8$

When I have 8 as one addend, I will always break apart the second addend with 2 as one of the parts! That's how I make ten!

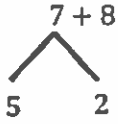


My picture shows the 7 in two places, because I have broken apart 7 into 2 and 5. My number bond shows this!

G1-M2-Lesson 9

1. Use number bonds to show your thinking. Write the 10 + fact.

$7 + 8 = \underline{15}$

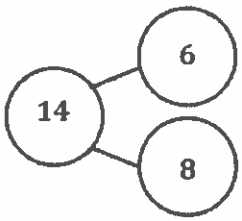


$\underline{15} = 10 + \underline{5}$

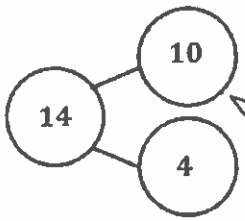
If I solve 8 + 7 by counting on, it will take awhile. I can make ten instead. I can take 2 from 7 to make ten with 8.

2. Complete the addition sentences and the number bonds.

$14 = \underline{6} + 8$



$10 + 4 = \underline{14}$

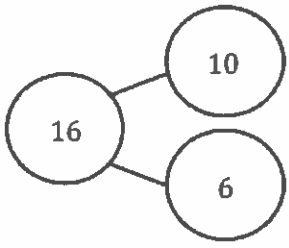


I can solve more efficiently when I use my 10 + facts. This number bond was faster to complete.

3. Draw a line to the matching number sentence. You may use a number bond or 5-group drawing to help you.

$13 = 8 + 5$

Ben has 8 green grapes and 3 purple grapes. How many grapes does he have?



$11 = 10 + 1$

$8 + 8 = 16$

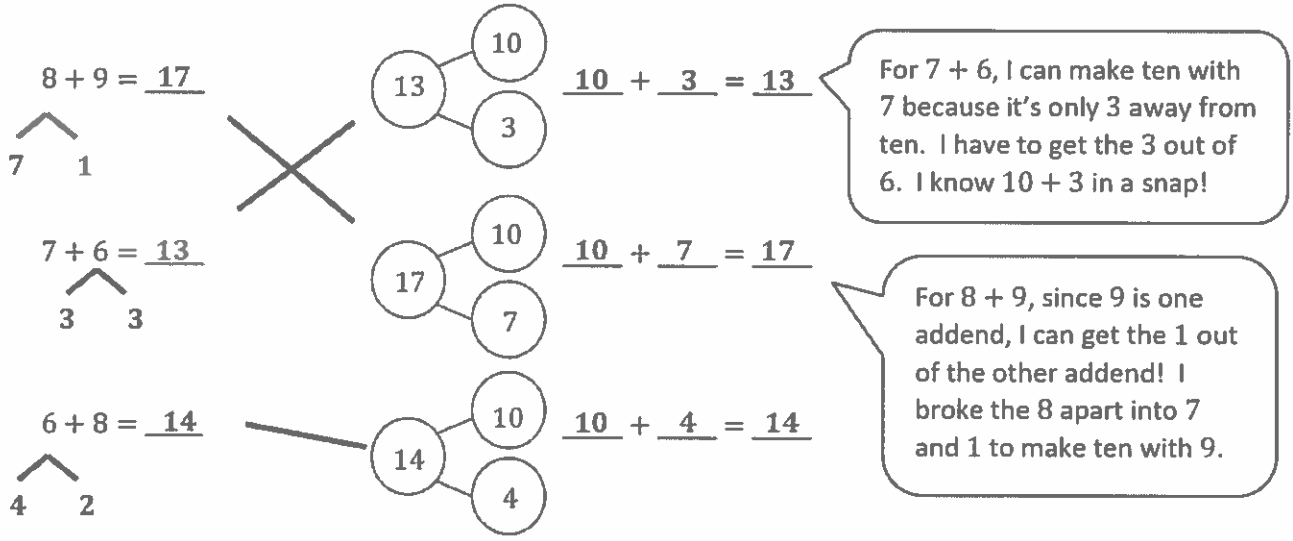
$10 + 3 = 13$

It was more efficient for me to count on here. I just thought Eiiight, 9, 10, 11.

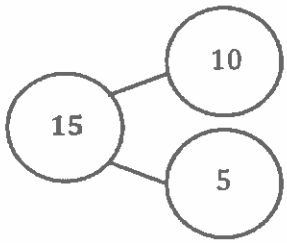
I like to use the make ten strategy when the second addend is more than 3 like in 8 + 5. I can break apart 5 to make an easier problem, 10 + 3.

G1-M2-Lesson 10

1. Solve. Match the number sentence to the ten-plus number bond that helped you solve the problem. Write the ten-plus number sentence.



2. Complete the number sentences so they equal the given number bond.



15 = 9 + 6

8 + 7 = 15

15 = 7 + 8

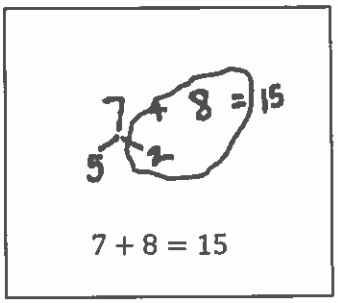
Since 9 + 6 = 15 and 10 + 5 = 15, I can say the true number sentence: 9 + 6 = 10 + 5.

G1-M2-Lesson 11

Look at the student work. Correct the work. If the answer is incorrect, show a correct solution in the space below the student work.

Jeremy had 7 big rocks and 8 little rocks in his pocket. How many rocks does Jeremy have?

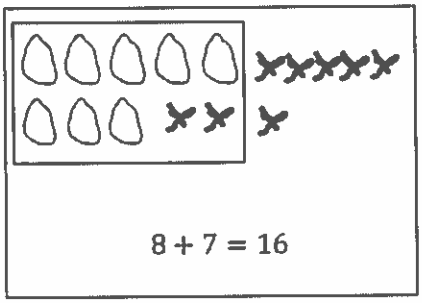
Mia's Work



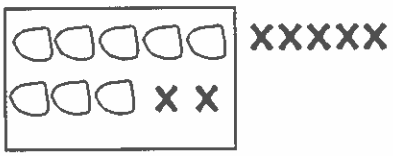
$7 + 8 = 15$

Mia used the make ten strategy and drew a number bond to break apart 7 into 5 and 2. She circled 8 and 2 because they make ten!

Joe's Work



$8 + 7 = 16$



$8 + 7 = 15$

Joe drew nice 5-groups at first, but I think he lost track of his count. His picture shows that 7 can be broken apart into 2 and 6. That's not possible! I can correct this by breaking apart 7 into 5 and 2 like Mia!

Pranav's Work

$10 + 5 = 15$

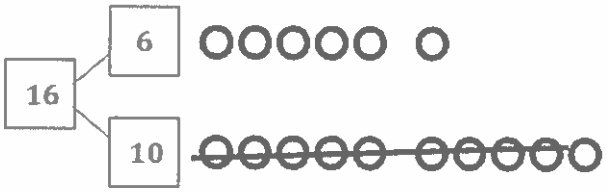
Pranav drew the rocks in neat 5-groups. His strategy was to make 10 from 8 by breaking 7 into 5 and 2. He made a frame to show 10.

G1-M2-Lesson 12

1. Make a simple math drawing. Cross off from the 10 ones or the other part in order to show what happens in the story.

   Bill has 16 grapes. 10 are on the vine, and 6 are on the ground.

   Bill eats 9 grapes from the vine. How many grapes does Bill have left?



The story says Bill eats 9 grapes from the vine. There are 10 grapes on the vine. I can take away 9 grapes from the ten all at once.

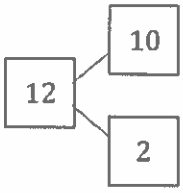
There is 1 left from the 10 and 6 left from the other part. He still has 7 grapes!

Bill has 7 grapes left.

2. Use the number bond to fill in the math story. Make a simple math drawing. Cross off from the 10 ones or the other part in order to show what happens.

The number bond has 12 in the total, so she must have had 12 carrots.

This 10 represents the carrots on her plate. I'll draw 10 circles.



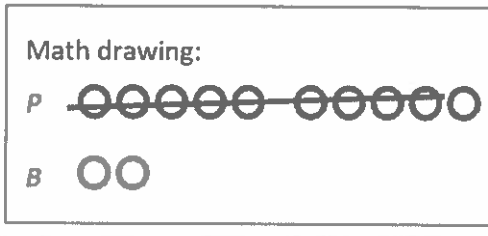
Naya has 12 carrots.

10 are on her plate, and 2 are in the bag.

She ate 9 of the carrots on her plate.

How many carrots does she have now?

Math drawing:

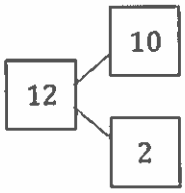


This 2 must represent the carrots in the bag. I'll draw 2.

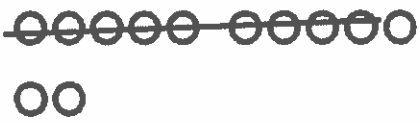
Naya has 3 carrots now.

3. Use the number bond below to come up with your own math story. Include a simple math drawing. Cross out from 10 ones to show what happens.

I can tell a story that matches this number bond:
"There are 12 friends in my karate class. 10 are girls. 2 are boys. 9 of the girls left. How many friends are still there?"



Math drawing:



There were 12 friends at first, and then 9 left, so my number sentence is $12 - 9 = 3$.

Number Sentence:

$12 - 9 = 3$

My statement is a "word sentence" to answer the question, "How many friends are still there?"

Statement:

3 friends are still there.

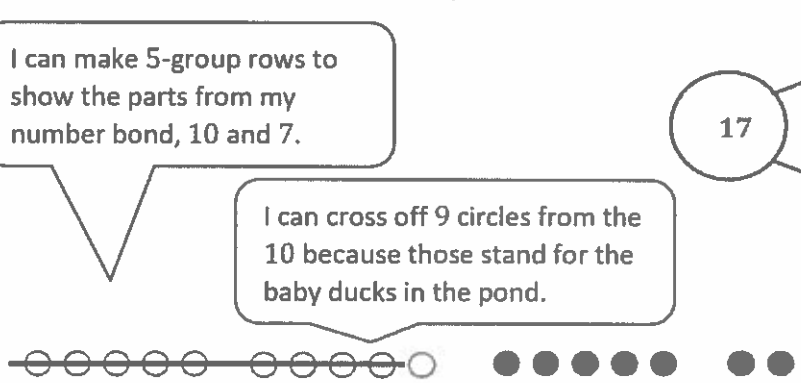
G1-M2-Lesson 13

1. Solve. Use 5-group rows, and cross out to show your work. Write number sentences.

   10 ducks are in the pond, and 7 ducks are on the land. 9 of the ducks in the pond are babies, and all the rest of the ducks are adults. How many adult ducks are there?

   I can make 5-group rows to show the parts from my number bond, 10 and 7.

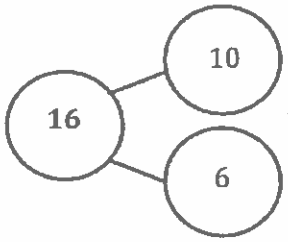
   I can cross off 9 circles from the 10 because those stand for the baby ducks in the pond.

   $17 - 9 = 8$

   There are 8 adult ducks.

2. Complete the number bond, and fill in the math story. Use 5-group rows, and cross out to show your work. Write number sentences.

   My number bond shows how many pigs were outside in the beginning of the story.

   There were 10 pigs lying in the mud and 6 pigs eating by the trough outside. 9 of the muddy pigs went inside the barn. How many pigs stayed outside?

   $16 - 9 = 7$

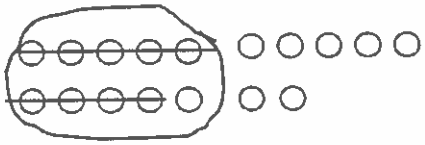
   I can always take away 9 from the ten. That leaves me with 1, which I can add to the other part, so $1 + 6 = 7$. That means $16 - 9 = 7$.

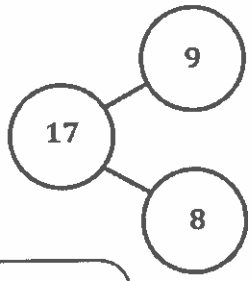
   There are 7 pigs outside.

G1-M2-Lesson 14

1. Draw and circle 10. Subtract and make a number bond.

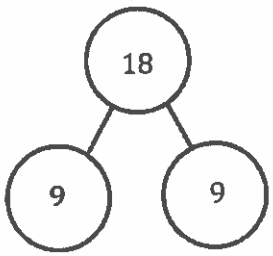
$17 - 9 = \underline{8}$





I can break apart 17 into 10 and 7. I can take 9 from the ten! It's called the take from ten strategy! Then, 1 and 7 make 8.

2. Complete the number bond, and write the number sentence that helped you.



$1 + 8 = 9$

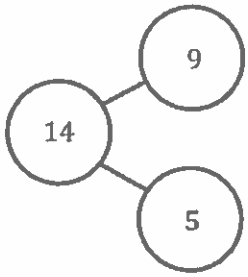
G1-M2-Lesson 15

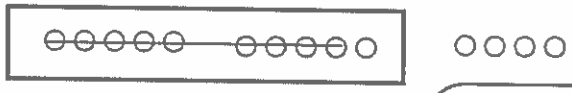
1. Write the number sentence for each 5-group row drawing.

I know that 15 is made of 10 and 5. When I take 9 from 10, I can see I have 6 circles left.

$15 - 9 = 6$

2. Draw 5-groups to complete the number bond, and write the 9-number sentence.





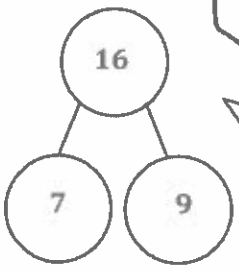
$14 - 9 = 5$

$9 + 5 = 14$

I can think of 14 as 10 and 4. I can take 9 from the ten inside the frame. There is 1 left in the frame and 4 on the other side, so that's 5.

3. Draw 5-groups to show making ten and taking from ten to solve the two number sentences. Make a number bond, and write two additional number sentences that would have this number bond.

$7 + 9 =$ ___

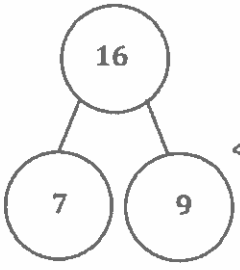


I can start with 9 and make 10 by taking 1 from the 7. I know that $7 + 9 = 10 + 6$.

$7 + 9 = 16$

$16 - 7 = 9$

$16 - 9 =$ ___



My number bond matches my 5-group drawing. When I cross out 9 circles, I have 7 circles left.

$16 - 7 = 9$

$9 + 7 = 16$

G1-M2-Lesson 16

1. Complete the subtraction sentences by using either the count on or take from ten strategy. Tell which strategy you used.

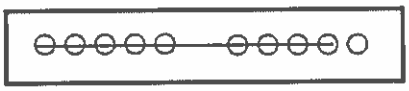
$11 - 9 = \underline{2}$

(9) 10 11

Since 9 is so close to 11, I can start at 9 and count on... niiiine, 10, 11.

☐ take from ten
☒ count on

$15 - 9 = \underline{6}$



○○○○○

I can break 15 into 10 and 5. Then I can take 9 from the ten. $1 + 5 = 6$.

☒ take from ten
☐ count on

---

2. Shelley collected 12 rocks. She painted 9 of them. How many of her rocks are not painted? Choose the count on or take from ten strategy to solve.

(9) 10 11 12

$9 + \underline{3} = 12$

3 of Shelley's rocks are not painted.

I chose this strategy:

☐ take from ten
☒ count on

3. The bakery has 16 loaves of bread. They sell 9 loaves before lunch. How many loaves do they have left? Choose the count on or take from ten strategy to solve.

$16 - 9 = \_7\_$

6 10

$10 - 9 = 1$

$1 + 6 = 7$

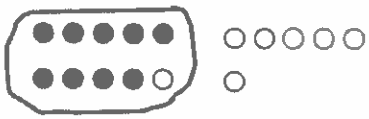
I chose this strategy:

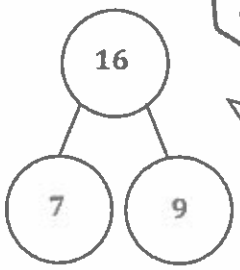
☒ take from ten

☐ count on

4. Draw 5-groups to show making ten and taking from ten to solve the two number sentences. Make a number bond, and write two additional number sentences that would have this number bond.

$7 + 9 = \_\_\_\_$



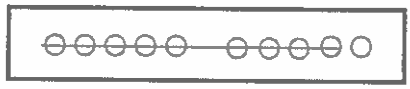


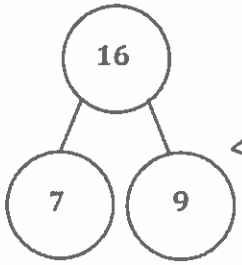
I can start with 9 and make a group of 10. I know that $7 + 9 = 10 + 6$.

$7 + 9 = 16$

$16 - 7 = 9$

$16 - 9 = \_\_\_\_$





My number bond matches my 5-group drawing. When I cross out 9 circles, I have 7 circles left.

$16 - 7 = 9$

$9 + 7 = 16$

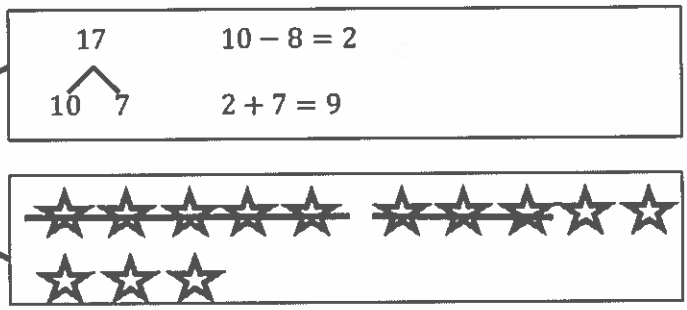
G1-M2-Lesson 17

I can take away 8 from the ten. $10 - 8 = 2$. Then, I can add 2 to the other part 7. 2 and 7 equals 9.

1. Match the number sentence to the picture or to the number bond.

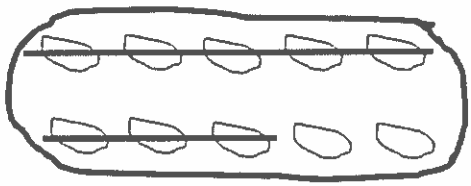
$13 - 8 = \underline{5}$

$17 - 8 = \underline{9}$



2. Draw and circle 10. Then subtract.

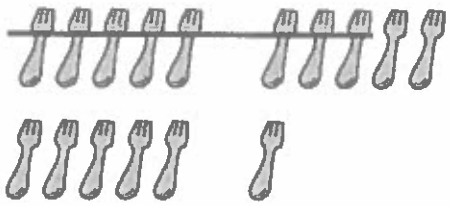
Kiera has 14 balls of clay. She gives 8 balls to her brother. How many balls of clay does Kiera keep?



I can draw the total balls of clay as 10 and 4. I can draw a line to take away 8 from the ten. I see that $2 + 4 = 6$.

Kiera keeps $\underline{6}$ balls of clay.

3. Use the picture to fill in the math story. Show a number sentence.



I can check this on my fingers. I have 10 fingers and 6 pretend fingers. When I take away 8 fingers from the ten, 2 are still up. I can add them onto my 6 pretend fingers. Now I have 8.

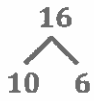
The 5-group drawing shows a total of 16 forks. I know that 8 forks were used for dinner because that's how many are crossed off.

There were 16 forks on the table. 8 forks were used for dinner. How many forks were left for dessert?

$16 - 8 = 8$

8 *forks were left for dessert.*

Try it! Can you show how to solve this problem with a number bond?



$10 - 8 = 2$

$2 + 6 = 8$

G1-M2-Lesson 18

1. Draw 5-group rows, and cross out to solve. Write the 2 + addition sentence that helped you add the two parts.

Sam had 17 markers on his desk. He used 8 markers for his art project. How many markers does Sam have left?

I can draw 5-group rows. 17 is 10 and 7. I can cross out 8 circles, just like when I hide 8 fingers. Now, I can see an addition sentence in my picture, 2 + 7 = 9.

$17 - 8 = \underline{9}$

$2 + 7 = 9$

Sam has __9__ markers left.

My 5-group rows are just like 10 real fingers and 7 pretend fingers. I can draw a frame around the ten.

2. Show making ten or taking from ten to solve the number sentences.

$5 + 8 = \underline{13}$

3 2

$8 + 2 = 10$

$10 + 3 = 13$

When I make ten with 8, I need to break apart the other number so I can add 2 to the 8. 8 + 2 = 10. Then, I add on the other part, so 10 + 3 = 13.

$13 - 8 = \underline{5}$

10 3

$10 - 8 = 2$

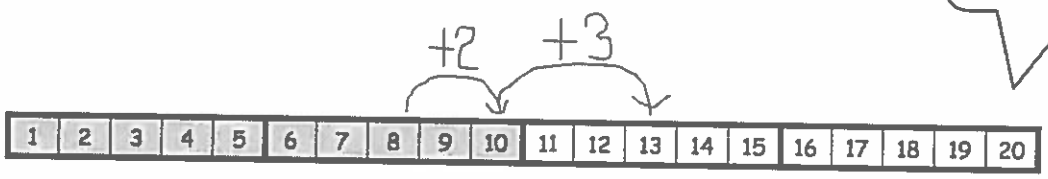
$2 + 3 = 5$

Every time I take from ten with 8, I add 2 to the other part, 2 + 3 = 5.

G1-M2-Lesson 19

1. Complete the subtraction sentence by using the take from ten strategy and count on.

I can use the number path to count up by making ten first.



$13 - 8 = \underline{5}$

10 3

$8 + \underline{5} = 13$

I can start at 8 and hop 2 squares to get to 10 and then hop 3 more to get to 13. $2 + 3 = 5$. That's just like when I take from the ten!
$10 - 8 = 2$, and $2 + 3 = 5$.

2. Choose the count on strategy or the take from ten strategy to solve.

$15 - 8 = \underline{7}$

10 5

$12 - 8 = \underline{4}$

(8) 9 10 11 12

I know 8 needs 2 to get to ten. 12 is $10 + 2$. I need 2 more to get to 12. I can add the 2 I need to get to ten and the 2 I need to get to 12 to find the answer.
$2 + 2 = 4$.

3. Use a number bond to show how you solved using the take from ten strategy.

Benny ate 8 apple slices. If he started with 17, how many apple slices does he have left?

$17 - 8 = \underline{9}$

10 7

$10 - 8 = 2$
$2 + 7 = 9$

Benny has 9 apple slices left.

4. Match the addition number sentence to the subtraction number sentence. Fill in the missing numbers.

$14 - 8 = \underline{6}$

$16 - 8 = \underline{8}$

$8 + \underline{8} = 16$

$8 + \underline{6} = 14$

I can start at 8 on the number path and hop 2 squares to get to 10 and then 4 more hops and I'm at 14. $2 + 4 = 6$

G1-M2-Lesson 20

1. Complete the number sentences to make them true.

$14 - 9 = \underline{5}$ $14 - 8 = \underline{6}$ $14 - 7 = \underline{7}$

I can make a picture in my mind. I can take away 9 from ten and then add 1 and 4. $1 + 4 = 5$

I can think of the number path and count on to make ten first. I can imagine starting at 8 and hopping 2 squares to get to ten. Then I can hop 4 more to get to 14. 2 and 4 make 6.

I can use the take from ten strategy with my fingers. I can drop 7 fingers, and I have 3 fingers left. I'll add those to my 4 pretend fingers. $3 + 4 = 7$

2. Read the math story. Use a drawing or a number bond to show how you know who is right.

Emma says that the expressions $16 - 7$ and $17 - 8$ are equal. Jordan says they are not equal. Who is right?

Emma is right.

$16 - 7 = \underline{9}$

10 6

$10 - 7 = 3$
$3 + 6 = 9$

$17 - 8 = \underline{9}$

10 7

$10 - 8 = 2$
$2 + 7 = 9$

When I take from the ten in each problem, I make easier number sentences, $3 + 6 = 9$ and $2 + 7 = 9$. Both expressions equal 9, so Emma is right; the expressions are equal!

Jordan and Emma are trying to find several subtraction number sentences that start with numbers larger than 10 and have an answer of 8. Help them figure out number sentences. They started the first one.

$17 - 9 = \underline{8}$	$18 - 10 = 8$
$16 - 8 = 8$	$15 - 7 = 8$

If I subtract 1 from the numbers in $17 - 9$, I'll have $16 - 8$. The difference doesn't change; it's still 8.

If I add 1 to the numbers in $17 - 9$, I'll have $18 - 10$. The difference doesn't change; it's still 8.

G1-M2-Lesson 21

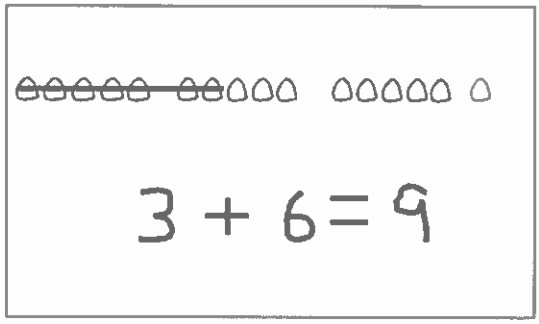
Oscar and Jayla both solved the word problems.
Write the strategy used under their work.
Check their work. If incorrect, solve correctly.
If solved correctly, solve using a different strategy.

Strategies:

- Take from 10
- Make 10
- Count on
- I just knew

There were 16 granola bars in the oven. 7 of them had nuts.
The rest were nut free. How many granola bars were nut free?

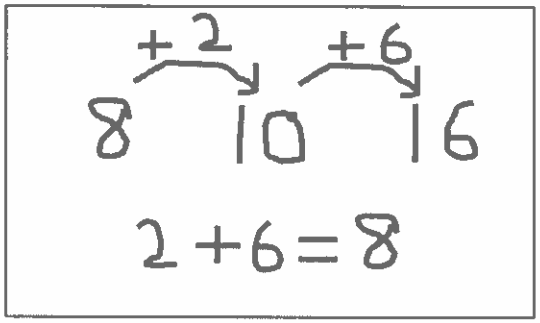
Oscar's Work



Oscar is correct! He drew the total, 16, in 5-group rows. Then, he crossed out 7. Look, there are 3 and 6 more left!

Jayla's Work

Jayla used a good strategy, but she didn't start at the correct number 7. She should have counted on 3 to get to 10 (see below).



a. Strategy: *Take from 10*

$16 - 7 = 9$

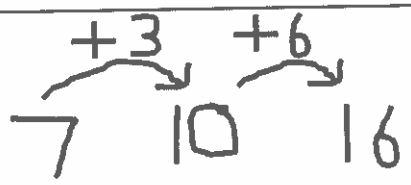
$7 + 3 = 10$

$10 + 6 = 16$

$3 + 6 = 9$

The make 10 strategy can be used to solve too. 7 needs 3 to make 10. 10 needs 6 to make 16.
3 + 6 = 9

b. Strategy: *Count on*



$3 + 6 = 9$

G1-M2-Lesson 22

Read the problem. Draw and label. Write a number sentence and a statement that matches the story. Remember to draw a box around your solution in the number sentence.

Lee has 16 pencils. 7 of the pencils are red, and the rest are green. How many green pencils does Lee have?

I can draw 16 circles in 5-group rows for the 16 pencils. I can circle 7 circles and label this part r because there are 7 red pencils. I can circle the part that is left and label this g because the rest of the pencils are green. I can quickly see the part labeled g is 9. There are 9 green pencils.

$16 - 7 = \boxed{9}$

I can subtract 7 from 16 to get the answer. My number sentence is $16 - 7 = 9$. I put a box around 9 because that was the number I did not know in the story.

I also could write $7 + 9 = 16$. That's another way to solve the problem. I would put a box around 9 since that's the unknown number in the story.

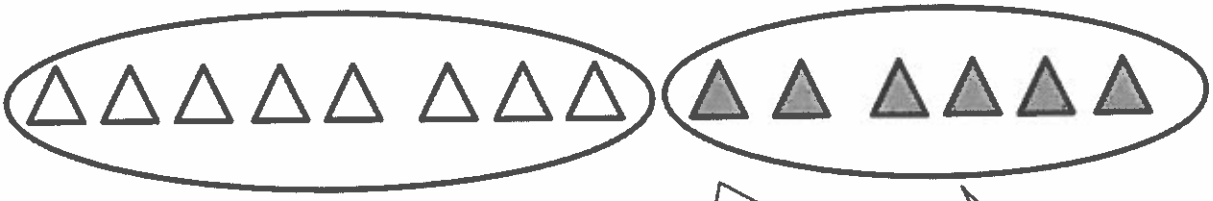
9 of the pencils are green.

My statement to answer the question is "9 of the pencils are green."

G1-M2-Lesson 23

Read the problem. Draw and label. Write a number sentence and a statement that matches the story.

Sue drew 8 triangles on Monday and some more triangles on Tuesday. Sue drew 14 triangles in total. How many triangles did Sue draw on Tuesday?



I can draw 8 triangles first. Those are the ones Sue drew on Monday. I can write *M* to label them.

Then I will keep drawing triangles until I have 14 triangles. I need 2 more triangles to make 10, and then I will draw 4 more to make 14 triangles. That's 6 triangles that Sue drew on Tuesday.

The T stands for Tuesday. I can color them in so I can tell which triangles I added.

Let me circle each part.

$8 + \boxed{6} = 14$

Sue drew 6 triangles on Tuesday.

This is my statement. It answers the question in the problem.

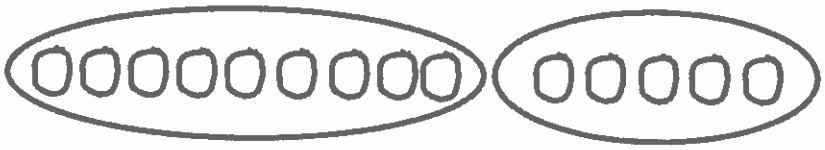
My number sentence is $8 + 6 = 14$. I put a box around 6 because that was the number I did not know in the story.

I *could* write $14 - 8 = 6$ since that's another way to get the answer. I would still put a box around the 6.

G1-M2-Lesson 24

Read the problem. Draw and label. Write a number sentence and a statement that match the story.

There were 14 pencils on the table. Some students borrowed pencils. There were 9 pencils left on the table. How many pencils did the students borrow?



The b stands for borrowed. These are pencils students borrowed.

The l stands for pencils LEFT on the table.

I can draw 14 circles for the 14 pencils. Then I can circle 9 of them. These are the 9 pencils left on the table. The rest are the pencils the students borrowed, so there are 5 pencils that students borrowed. I can circle that part too. This makes it easier to see both parts.

My number sentence is $14 - 5 = 9$. That shows that there were 14 pencils and 5 were borrowed, leaving 9 pencils left on the table. I could have said $9 + 5 = 14$ or $14 - 9 = 5$. Those would be correct, too. That's why it's important to put the rectangle around my answer in the number sentence.

$14 - \boxed{5} = 9$

*5 **pencils were borrowed.***

My statement to answer the question will be "5 pencils were borrowed."

G1-M2-Lesson 25

1. Circle "true" or "false."

Equation	True or False?
$9 + 1 = 5 + 4$	True / (False)

The two equations have to be the same amount.
$9 + 1 = 10$
$5 + 4 = 9$
They are not the same. I need to circle *false*.

2. Lola and Charlie are using expression cards to make true number sentences. Use pictures and words to show who is right.

Charlie picked $11 - 8$, and Lola picked $2 + 1$. Charlie says these expressions are not equal, but Lola disagrees. Who is right? Use a picture to explain your thinking.

The two expressions have to be the same amount. I can solve $11 - 8$ using the take from ten strategy. $10 - 8 = 2$, and then I add back the extra 1 from 11. $2 + 1 = 3$, so $11 - 8 = 3$.

$11 - 8 = 3$ *and* $2 + 1 = 3$.

10 1

$10 - 8 = 2$
$2 + 1 = 3$

$2 + 1$ is easy. That's 3. Since $11 - 8 = 3$ and $2 + 1 = 3$, the two expressions are equal. Lola is right.

Lola is right. $11 - 8 = 2 + 1$

3. The following addition number sentence is FALSE. Change one number in each problem to make a TRUE number sentence, and rewrite the number sentence.

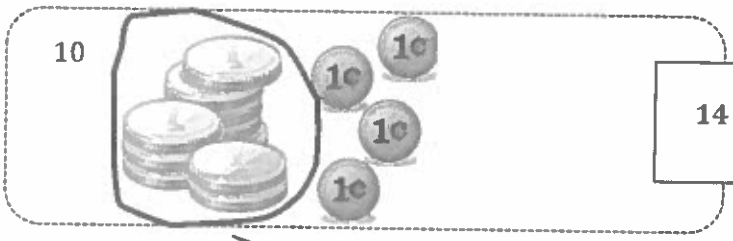
$10 + 5 = 8 + 6$ $\quad$ $\underline{10 + 5 = 9 + 6}$

$10 + 5 = 15$. But $8 + 6 = 14$. I can change the 8 to a 9 since $9 + 6 = 15$, just like $10 + 5$.

I could change the 5 to a 4 to make $10 + 4 = 8 + 6$ if I wanted. That would be another true number sentence.

G1-M2-Lesson 26

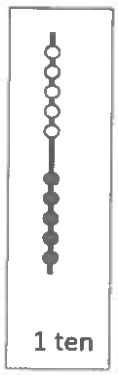
1. Circle ten. Write the number. How many tens and ones?

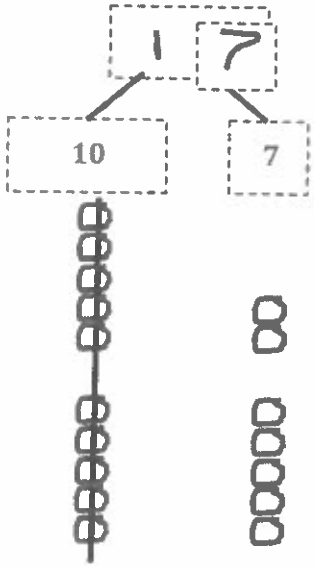


14 is the same as __1__ ten and __4__ ones.

This group of coins is a set of 10. I will circle it. There are only 4 other coins, so I do not have enough to make another ten. That's 1 ten and 4 ones, which is the same as 14.

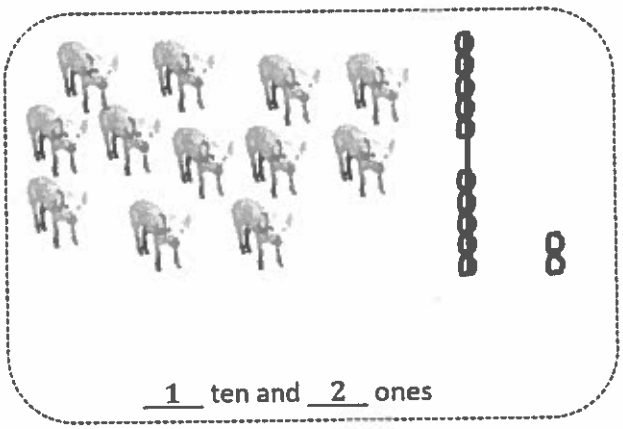
2. Use the Hide Zero pictures to draw the ten and ones shown on the cards.





17 is made of 10 and 7. I can show 10 on the longer card and 7 on the short card. I need to draw 10 dots on the line, or stick. That shows I have a full set of ten. Then I need to draw 7 dots next to it for the other 7.

3. Draw using 5-group columns to show the tens and ones.

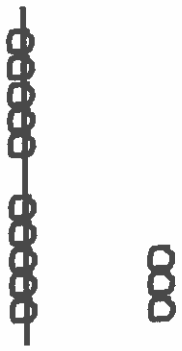


__1__ ten and __2__ ones

This is like the problem above. Let me count the pigs.... Hmm, there are 12 pigs. I'll add the dots to my line, or stick, first. There should be 10 on this since the line reminds us we have 1 full set of 10 to make 1 ten. Then I have to draw 2 more because 12 is 2 more than 10. That's 1 ten and 2 ones.

4. Draw your own examples using 5-group columns to show the tens and ones.

13



13 is the same as __1__ ten and __3__ ones.

I can line up 10 dots in a row. Then I put a line through them to show they are one ten. I need 13 altogether. I can draw 3 more dots in a new column. 13 is the same as 1 ten and 3 ones.

G1-M2-Lesson 27

1. Solve the problems. Write the answers to show how many tens and ones. If there is only one ten, cross off the "s."

$8 + 6 =$ | 1 | 4 |

Since it's just 1 ten, I can cross of the "s."

How many more do I need to get to 10 from 8? 2. When I use 2 from the 6, I still have to add 4 more. That's 1 ten and 4 ones to make 14.

__1__ ten~~s~~ and __4__ ones

This time I leave the "s." We say 0 tens.

$14 - 8 =$ | 0 | 6 |

$10 - 8 = 2$. If I take 8 from 10, I will have 2 and 4 left. $2 + 4 = 6$

__0__ tens and __6__ ones

2. Read the word problem. Draw and label. Write a number sentence and statement that matches the story. Rewrite your answer to show its tens and ones. If there is only 1 ten, cross of the "s."

Jack sees 5 birds on the birdhouse and 15 birds in the tree. How many birds does Jack see?

I can draw 15 circles for the birds in the tree and 5 more circles for the birds on the birdhouse. Altogether, there are 20 birds.

The *bh* stands for birds on the birdhouse.

The *t* stands for birds in the tree.

My number sentence matches my drawing.

$15 + 5 = \boxed{20}$

There are 20 birds.

20 is made of 2 tens with no ones left over.

__2__ tens and __0__ ones

G1-M2-Lesson 28

1. Solve the problems. Write your answers to show how many tens and ones.

$9 + 6 =$ | 1 | 5 |

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

$\underline{10} + \underline{5} = \underline{15}$

9 needs 1 more to make a ten. Then I need to add 5 more.
10 + 5 = 15. That's 1 ten and 5 ones.

2. Solve. Write the two number sentences for each step to show how you make a ten.

Ani had 9 flowers. She picks 5 new flowers. How many flowers does Ani have?

$\underline{9} + \underline{5} = \underline{14}$

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

$\underline{10} + \underline{4} = \underline{14}$

9 needs 1 more to make 10.
9 + 1 = 10
Since I took the 1 from 5, I have to add 4 more.
10 + 4 = 14

G1-M2-Lesson 29

Solve the problems. Write your answers to show how many tens and ones.
Show your solution in two steps:

Step 1: Write one number sentence to subtract from ten.

Step 2: Write one number sentence to add the remaining parts.

$$\boxed{1}\ \boxed{5} - 9 = 6$$

15 is made of 10 and 5. I can take 9 from 10 quickly. $10 - 9 = 1$

$10 - 9 = 1$

$1 + 5 = 6$

Then I can add 1 to the 5 I didn't touch. $1 + 5 = 6$

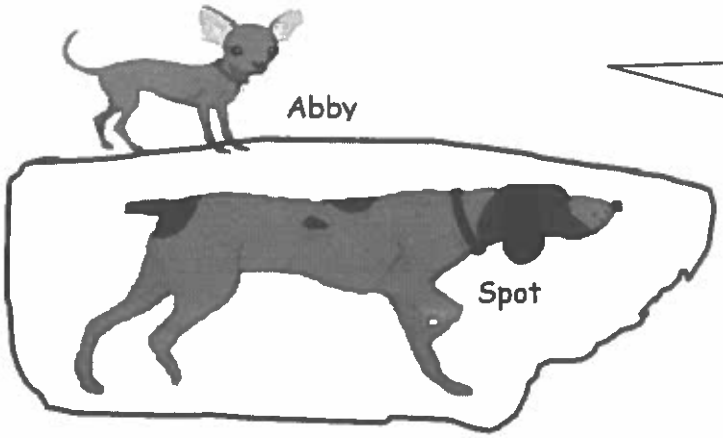
Homework Helpers

Grade 1 Module 3

G1-M3-Lesson 1

1. Follow the directions. Complete the sentence.

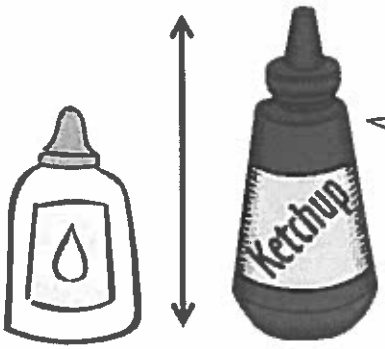
Circle the **longer** dog.



I can see that Spot is longer because Spot and Abby are lined up perfectly, and Spot is sticking out further than Abby.

Spot is longer than *Abby*.

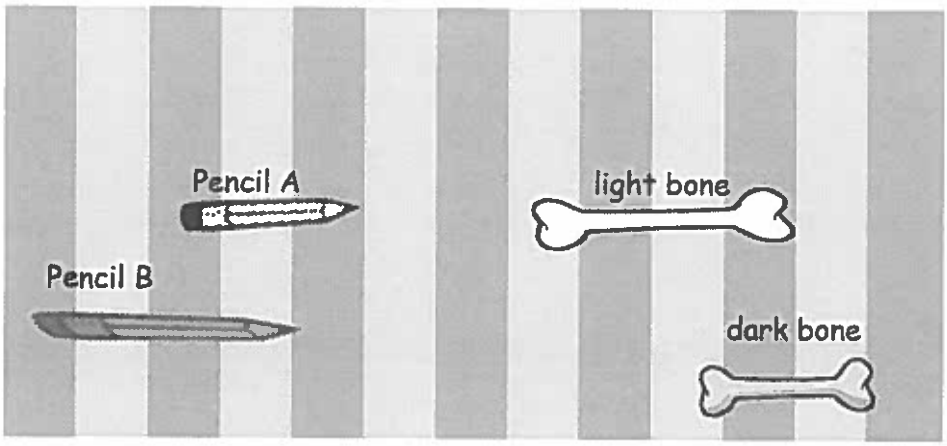
2. Write the words **longer than** or **shorter than** to make the sentence true.



The endpoints of the bottles are lined up. It's like they are standing on a table, which makes it easy to see. The glue is shorter!

The glue is *shorter than* the ketchup.

3.



Pencil B is ___*longer than*___ Pencil A.

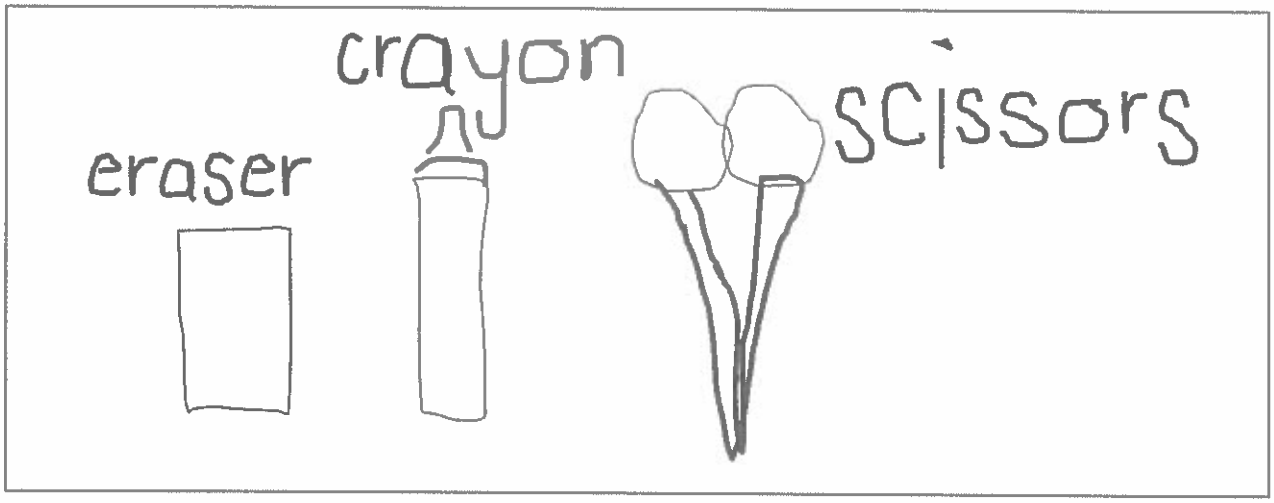
The dark bone is ___*shorter than*___ the light bone.

The end points are not lined up, but I can tell that Pencil B is longer because it crosses more than 3 stripes. Pencil A only crosses 2 stripes.

Circle true or false.

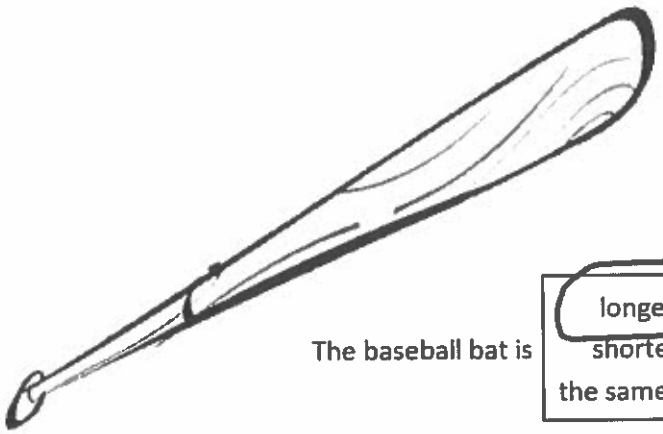
The light bone is shorter than Pencil A. **True** or **False**

4. Find 3 school supplies. Draw them here in order from **shortest** to **longest**. Label each school supply.



G1-M3-Lesson 2

1. Use the paper strip provided by your teacher to measure each picture. Circle the words you need to make the sentence true. Then, fill in the blank.



I can see if the paper strip is longer or shorter than the baseball bat by lining up the endpoint of the paper strip with the endpoint of the bat. Then I can compare them!

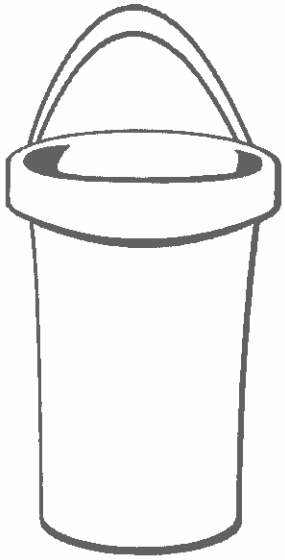
The baseball bat is (longer than / shorter than / the same length as) the paper strip.

The book is (longer than / shorter than / the same length as) the paper strip.

I know the baseball bat is longer than the paper strip, and the book is shorter than the paper strip, so the baseball bat must be longer than the book!

The baseball bat is *longer than* the book.

2. Complete the sentences with **longer than, shorter than,** or **the same length as** to make the sentences true.



The tube is *longer than* the bucket.

I used my paper strip to measure. The tube is longer than the paper. The bucket is shorter than the paper strip, so I know that the tube must be longer than the bucket.

Use the measurements from Problems 1 and 2. Circle the word that makes the sentences true.

3. The baseball bat is (**longer**/**shorter**) than the bucket.

If the baseball bat is longer than the paper strip, and the bucket is shorter than the paper strip, then the bat is longer than the bucket!

4. Order these objects from shortest to longest: bucket, tube, and paper strip

bucket *paper strip* *tube*

The bucket is shorter than the paper strip, and the paper strip is shorter than the tube, so the bucket is the shortest, and the tube is the longest.

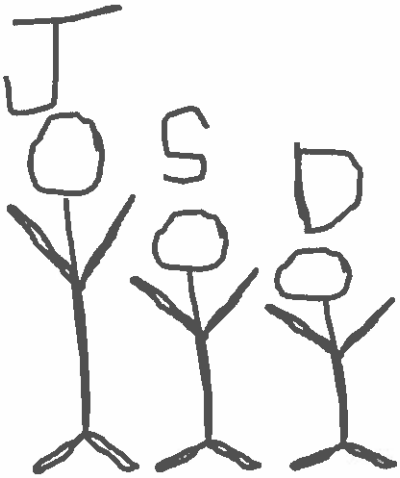
5. Draw a picture to help you complete the measurement statements. Circle the words that make each statement true.

Susie is taller than Donnie.

Jason is taller than Susie.

Donnie is (**taller than**/**shorter than**) Jason.

First I draw Susie and Donnie. Then I draw Jason. Since Donnie is shorter than Susie, and Susie is shorter than Jason, Donnie is also shorter than Jason!

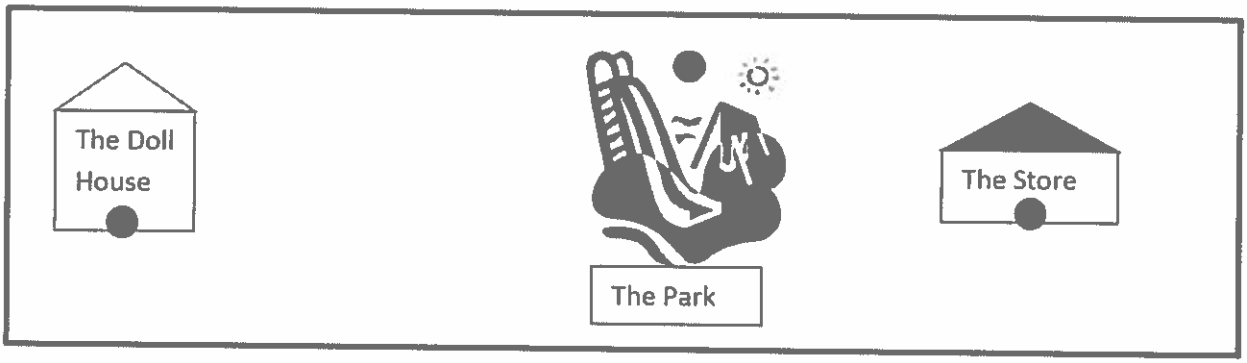


G1-M3-Lesson 3

1. The string that measures the path from the doll house to the park is longer than the path between the park and the store. Circle the shorter path.

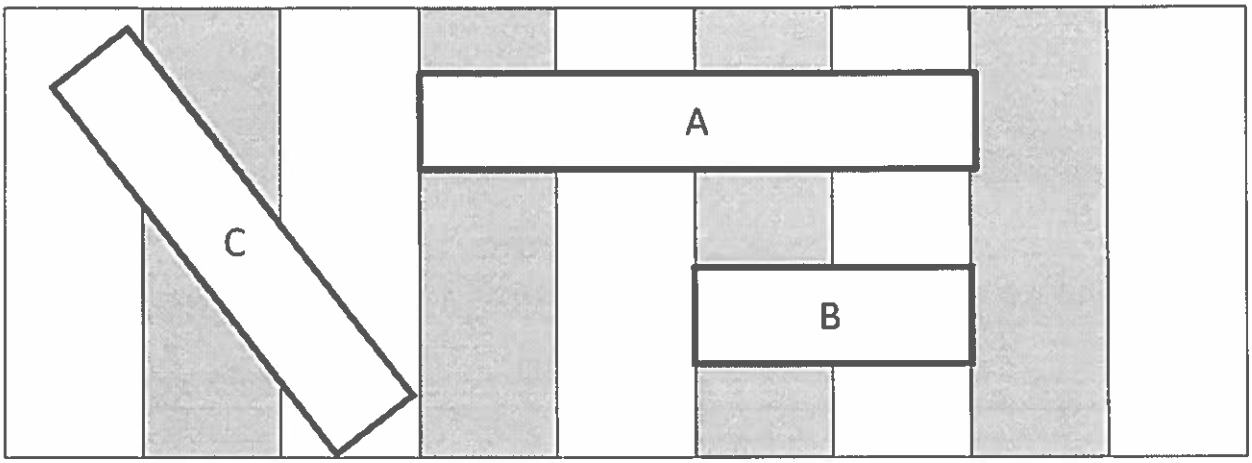
the doll house to the park

the park to the store



If the string is longer, then the path is also longer!

Use the picture to answer the questions about the rectangles.



2. Which is the shortest rectangle? *Rectangle B*

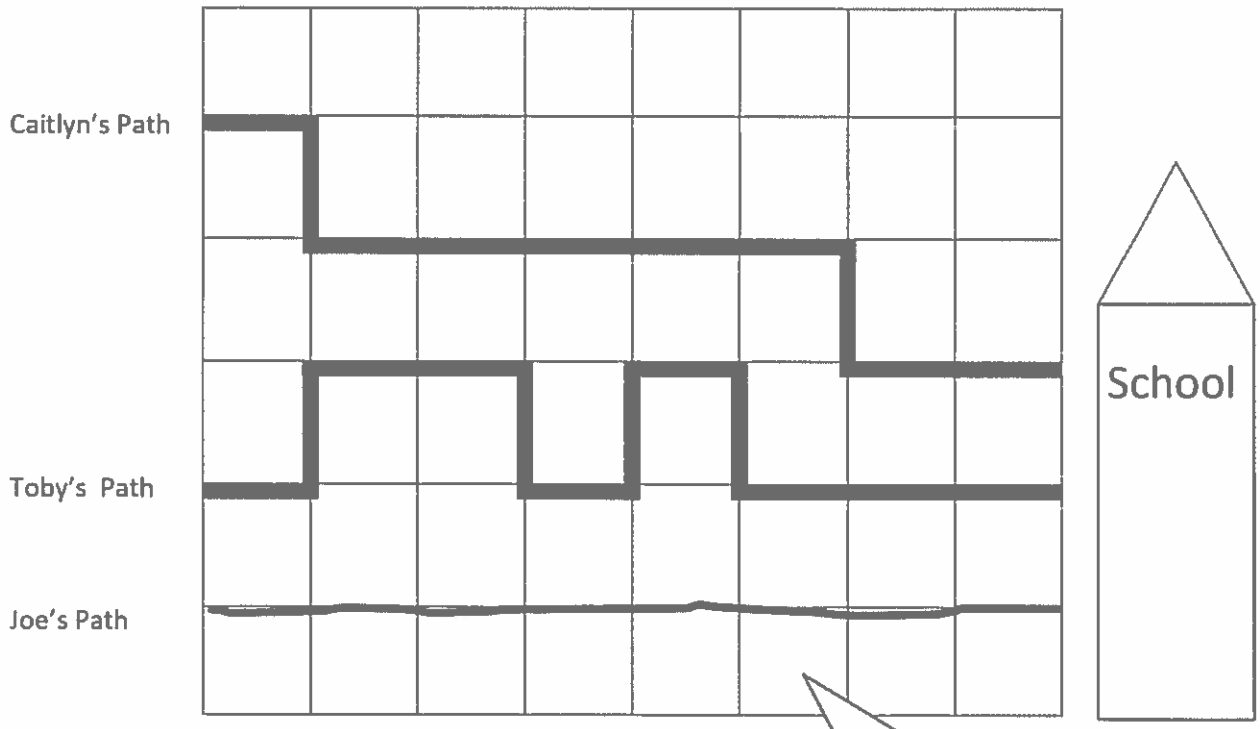
3. If Rectangle A is longer than Rectangle C, the longest rectangle is *Rectangle A*

4. Order the rectangles from shortest to longest:

B *C* *A*

I can see that Rectangle B is the shortest, and it says that Rectangle A is longer than Rectangle C, so the order must be B, C, A!

Use the picture to answer the questions about the students' paths to school.



5. How long is Caitlyn's path to school? 10 blocks

6. How long is Toby's path to school? 12 blocks

7. Joe's path is shorter than Caitlyn's. Draw Joe's path.

Caitlyn's path is 10 blocks, so Joe's path has to be 9 blocks or less. I just made a straight line for Joe's path, and that makes it 8 blocks!

Circle the correct word to make the statement true.

8. Toby's path is **longer**/**shorter** than Joe's path.

9. Who took the shortest path to school? *Joe*

Joe's path is the shortest. It is just 8 blocks straight to school with no turns. Toby's path is 12 blocks. 12 blocks is a longer walk than 8 blocks.

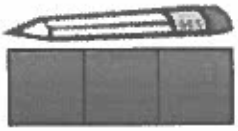
10. Order the paths from shortest to longest.

Joe *Caitlyn* *Toby*

G1-M3-Lesson 4

Measure the length of the picture with your cubes. Complete the statement below.

1. The pencil is __3__ centimeter cubes long.

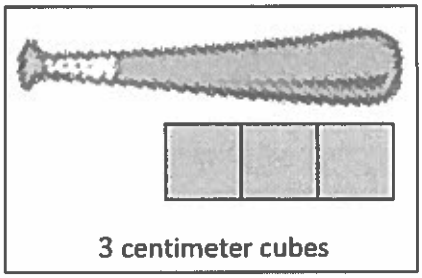


I can measure the pencil with my centimeter cubes. I have to line up the end points and make sure there is no space between each cube.

I start at the tip of the pencil and use enough cubes to go all the way to the eraser.

2. Circle the picture that shows the correct way to measure.

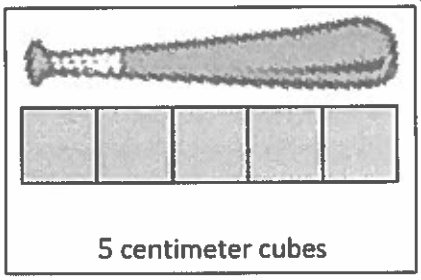
A



3 centimeter cubes

This isn't right! There are no cubes near the handle of the bat!

B



5 centimeter cubes

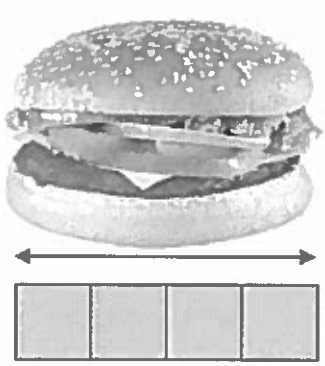
This looks much better. The cubes start at the endpoint and go all the way across with no spaces in between.

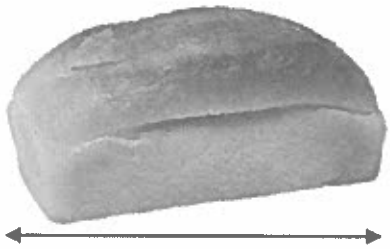
3. Explain what is wrong with the measurements for the picture you did NOT circle.

The picture that shows a measurement of 3 cubes is wrong because the cubes don't go all the way across the bat. The cubes don't start at the endpoint or end at the endpoint. There are not enough cubes!

G1-M3-Lesson 5

1. Use centimeter cubes to measure the pictures below. Complete the sentences.





I can measure these pictures accurately as long as I line up the endpoints and don't leave any gaps or overlaps with my centimeter cubes.

Each of my cubes is one centimeter long.

a. The hamburger picture is __4__ centimeters long.

b. The hot dog picture is __6__ centimeters long.

c. The bread picture is __5__ centimeters long.

The bread picture measured 5 centimeter cubes long. That makes it 5 centimeters long.

2. Use the picture measurements to order the hamburger picture, hot dog picture, and bread picture from longest to shortest. You can use drawings or names to order the pictures.

Longest → Shortest

hot dog picture *bread picture* *hamburger picture*

The hot dog picture is the longest; it's 6 centimeters long. The hamburger picture is the shortest since it's only 4 centimeters long. That means the bread picture goes in the middle.

3. Fill in the blanks to make the statements true. (There may be more than one correct answer.)

   a. The hot dog picture is longer than the ___*bread*___ picture.

   b. The bread picture is longer than the _*hamburger*_ picture and shorter than the __*hot dog*__ picture.

   c. If a banana picture is added that is longer than the bread picture, it will also be longer than which of the other pictures? _*hamburger*_

G1-M3-Lesson 6

1. Order the bugs from longest to shortest by writing the bug names on the lines. Use centimeter cubes to check your answer. Write the length of each bug in the space to the right of the pictures.

   The bugs from longest to shortest are

   ___*Caterpillar*___ ___*Dragonfly*___ ___*Bee*___

Dragonfly

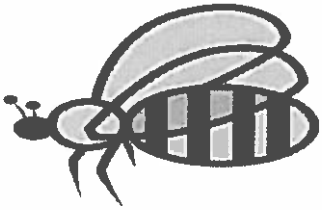
5 centimeters

The caterpillar is the longest bug. The caterpillar is 7 centimeters long!

Caterpillar

7 centimeters

Bee



The bee is the shortest bug. The bee is only 4 centimeters long!

4 centimeters

EUREKA MATH

2. Use all of the bug measurements to complete the sentences.

   a. The fly is longer than the ___bee___ and shorter than the ___caterpillar___.

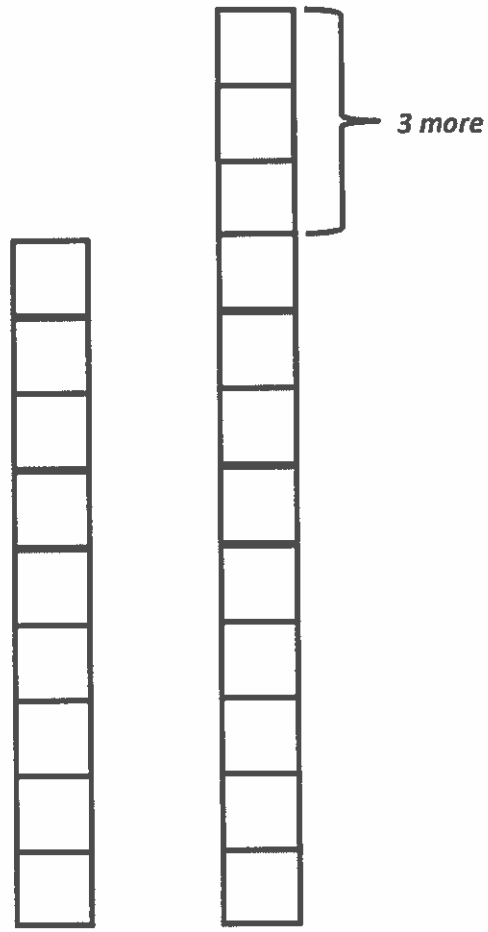
   b. The ___bee___ is the shortest bug.

   c. If another bug is added that is shorter than the bee, list the bugs that the new bug is also shorter than.

   The new bug will be shorter than the fly and the caterpillar.

   The bee is the shortest bug, so if a bug is shorter than the bee, it is also shorter than all the other bugs.

3. Tania makes a cube tower that is 3 centimeters taller than Vince's tower. If Vince's tower is 9 centimeters tall, how tall is Tania's tower?



To solve, I can use Read, Draw, Write! Now that I have read the problem, what can I draw? I think I can draw the towers! I can start with Vince's tower since I know his is 9 cubes tall.

I can write a number sentence to solve. 9 cubes + 3 cubes equals 12 cubes.

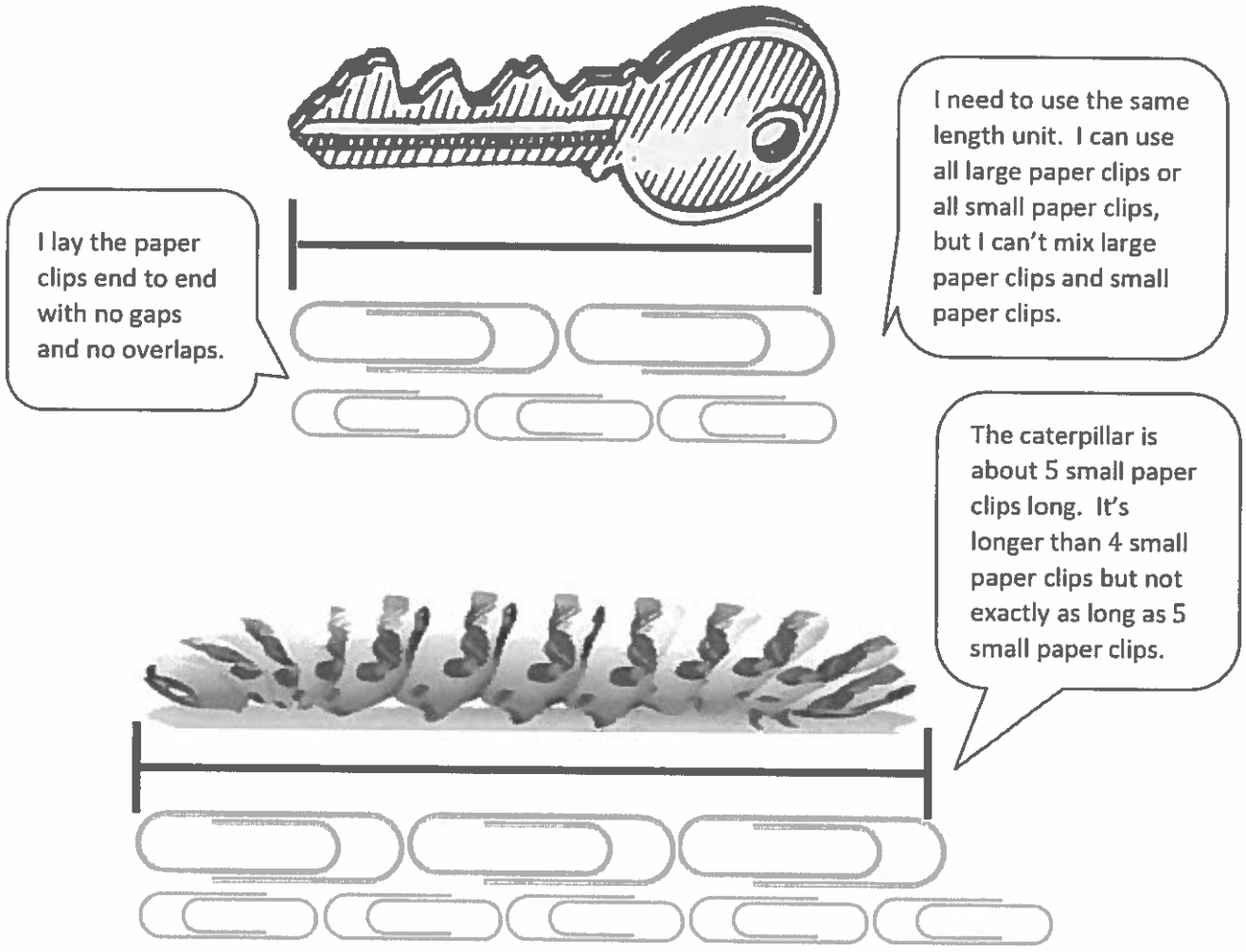
$$9 + 3 = 12$$

Tania's tower is 12 cubes tall.

G1-M3-Lesson 7

Measure the objects with the large paper clip strip (included with homework paper) and then again with the small paper clip strip (included with homework).

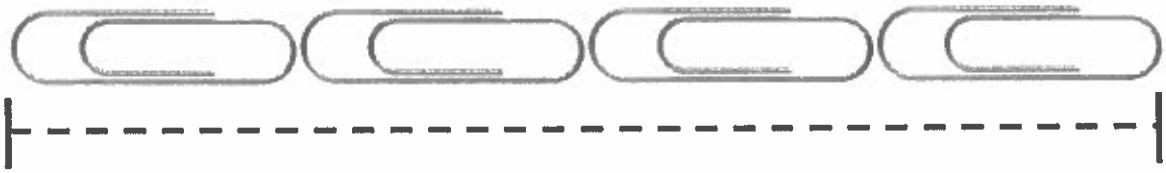
Fill in the chart on the back of the page with your measurements.



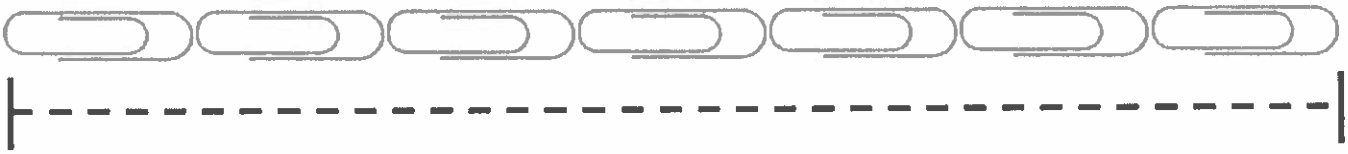
Name of Object	Length in Large Paper Clips	Length in Small Paper Clips
a. key	2	3
b. caterpillar	3	5

I knew that the length in small paper clips would be a bigger number. The smaller the length unit, the larger the measurement!

Large paper clip strip



Small paper clip strip



G1-M3-Lesson 8

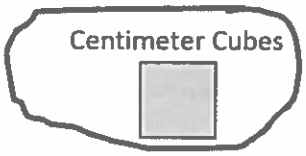
1. Circle the length unit you will use to measure. Use the same length unit for all objects.

Small Paper Clips

Toothpicks

Large Paper Clips

Centimeter Cubes



Measure each object listed on the chart, and record the measurement. Add the names of other objects in the classroom, and record their measurements.

Classroom Object	Measurement
a. glue stick	8 *centimeter cubes*
b. dry erase marker	12 *centimeter cubes*
c. unsharpened pencil	19 *centimeter cubes*
d. new crayon	9 *centimeter cubes*

2. Did you remember to add the name of the length unit after the number? (Yes) No

I have to say centimeter cubes. If not, someone might think I am measuring with some other kind of cube!

3. Pick 3 items from the chart. List your items from longest to shortest:

a. *unsharpened pencil*

b. *dry erase marker*

c. *glue stick*

I started with the longest thing I measured, the unsharpened pencil. Then I wrote the shortest one, the glue stick. Then I put the dry erase marker in the middle because it is shorter than the unsharpened pencil but longer than the glue stick.

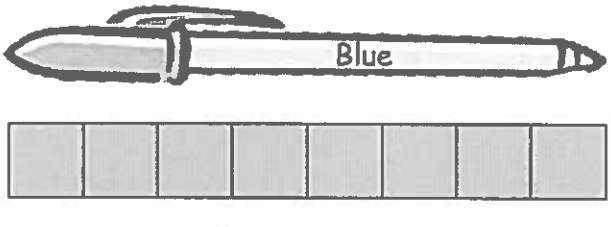
G1-M3-Lesson 9

1. Look at the picture below. How much longer is Guitar A than Guitar B?

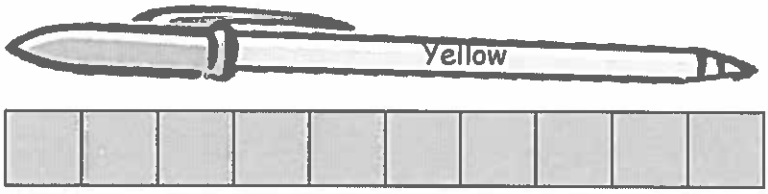
Guitar A is __1__ unit(s) **longer** than Guitar B.

Guitar A is 4 units long. Guitar B is 3 units long. $4 - 3 = 1$, so Guitar A is 1 unit longer.

2. Measure each object with centimeter cubes.



The blue pen is __*8 centimeter cubes*__.



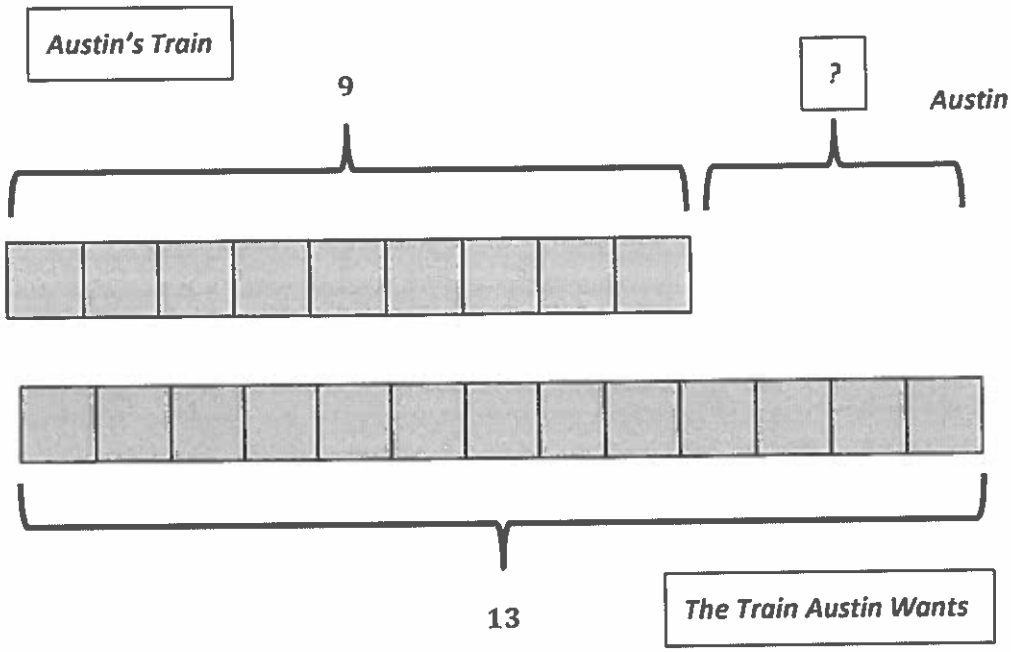
The yellow pen is __*10 centimeter cubes*__.

3. How much **longer** is the yellow pen than the blue pen?

   The yellow pen is _2_ centimeters longer than the blue pen.

Use your centimeter cubes to model the problem. Then, solve by drawing a picture of your model and writing a number sentence and a statement.

4. Austin wants to make a train that is 13 centimeter cubes long. If his train is already 9 centimeter cubes long, how many more cubes does he need?



$9 + \boxed{4} = 13$

Austin needs 4 more cubes.

I can use an addition sentence or a subtraction sentence to solve. I can say $13 - 9 = 4$, or I can say $9 + 4 = 13$.

G1-M3-Lesson 10

Students were asked about their favorite kind of fruit. Use the data below to answer the questions.

Ice Cream Flavor	Tally Marks	Votes
Apple		2
Strawberry		4
Banana		8

1. Fill in the blanks in the table by writing the number of students who voted for fruit.

2. How many students chose apple as the fruit they like best?
   2 students

I can solve by adding 2 + 4 since there are 2 students who like apple and 4 students who like strawberry.

3. What is the total number of students who like apple or strawberry the best?
   6 students

4. Which fruit received the least amount of votes? *apple*

By looking at the tally marks, it's easy to see that the least number of people voted for apple.

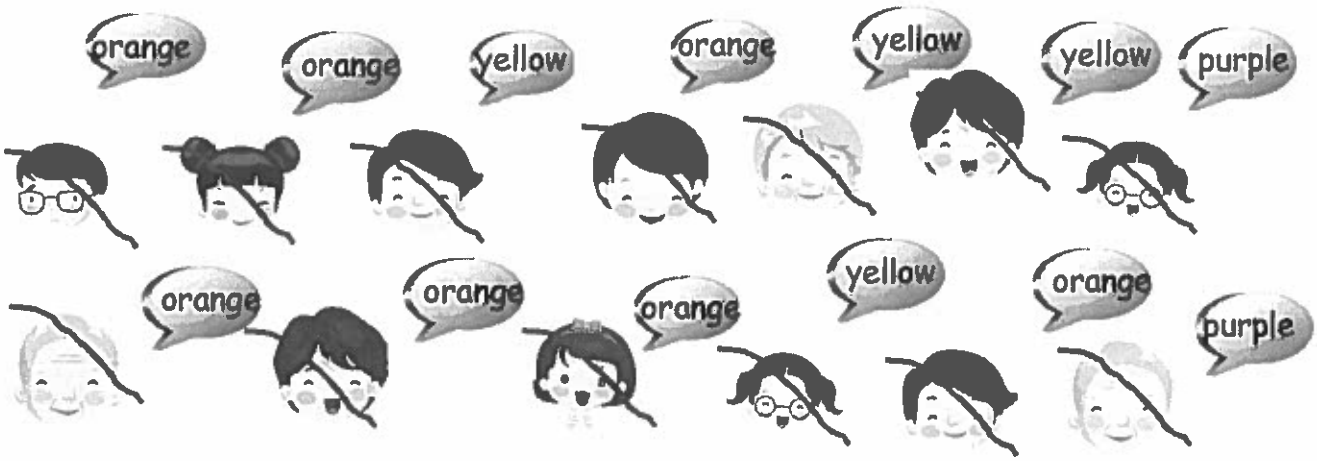
5. What is the total number of students who like banana or apple the best?
   10 students

6. Which two flavors are liked by a total of 12 students?
   strawberry and *banana*

I have to think about which two numbers can make 12. There is a 2, 4, and 8. 4 + 8 = 12 so that means strawberry and banana were liked by 12 students.

7. Write an addition sentence that shows how many students voted for their favorite fruit.
   2 + 4 + 8 = 14

8. A group of people were asked to say their favorite color. Organize the data using tally marks, and answer the questions.



Orange	𝍸 ||
Yellow	𝍸 |
Purple	||

I can count each vote and make a tally. It's a little harder than it was in class because I can't see which ones I have counted, so I just cross them off as I count.

9. Which color received the least amount of votes? *purple*

10. How many more people like yellow than purple?

I can see that yellow has two more tallies than purple.

2 students

11. What is the total number of people who like orange and purple the most?

9 students

7 students like orange, and 4 students like yellow. $7 + 4 = 11$.

12. Which two colors did a total of 11 people vote for?

orange and *yellow*

13. Write an addition sentence that shows how many people voted for their favorite color.

$7 + 4 + 2 = 13$

G1-M3-Lesson 11

Collect information about the block you live on. Use tally marks or numbers to organize the data in the chart below.

How many **brick buildings/houses** are on your street?	How many **two story buildings/houses** are on your street?	How many **one story buildings/houses** are on your street?	How many **grassy lawns** are on your street?	How many **buildings/houses with a garage** are on your street?
				

- Complete the question sentence frames to ask questions about your data.
- Answer your own questions.

It's easy to see that the most houses have grassy lawns because there are so many tallies!

1. How many *grassy lawns* are there? (Pick the the category that has the **most.**) 9

2. How many *brick buildings* are there? (Pick the item you have the **least** of.) 2

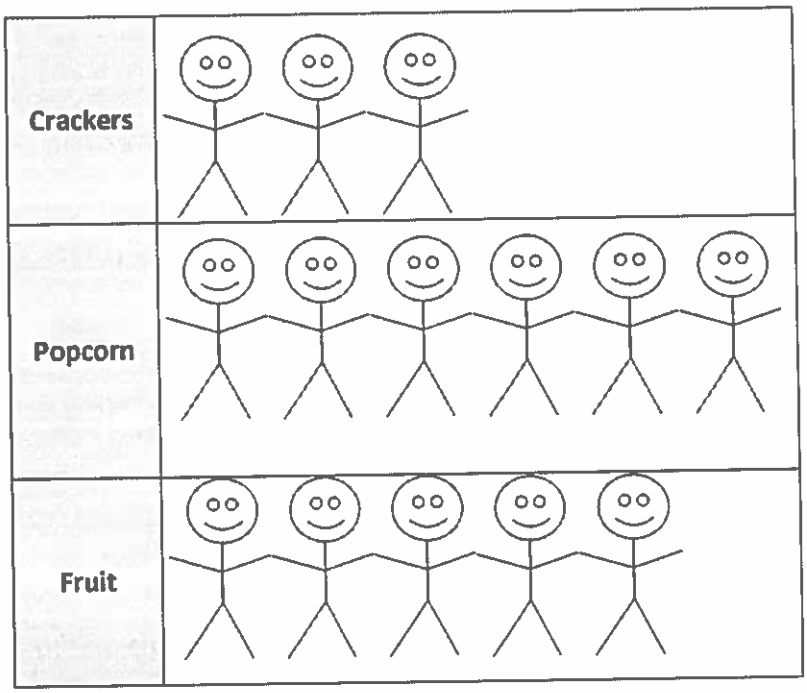
3. **Together**, how many brick houses and houses with garages are there? 8

4. Write and answer two more questions using the data you collected.

   a. *Are there more one story or two story houses* ? *There are more one story houses.*

   b. *Together, how many one story and two story houses are there* ? 9

Workers voted on their favorite snack food for the office kitchen. Each worker could only vote once. Answer the questions based on the data in the table.



3 workers chose crackers, and 5 chose fruit. $3 + 5 = 8$, so 8 workers chose fruit or crackers.

5. How many workers chose popcorn? 6 workers

6. How many workers chose fruit or crackers?
   8 workers

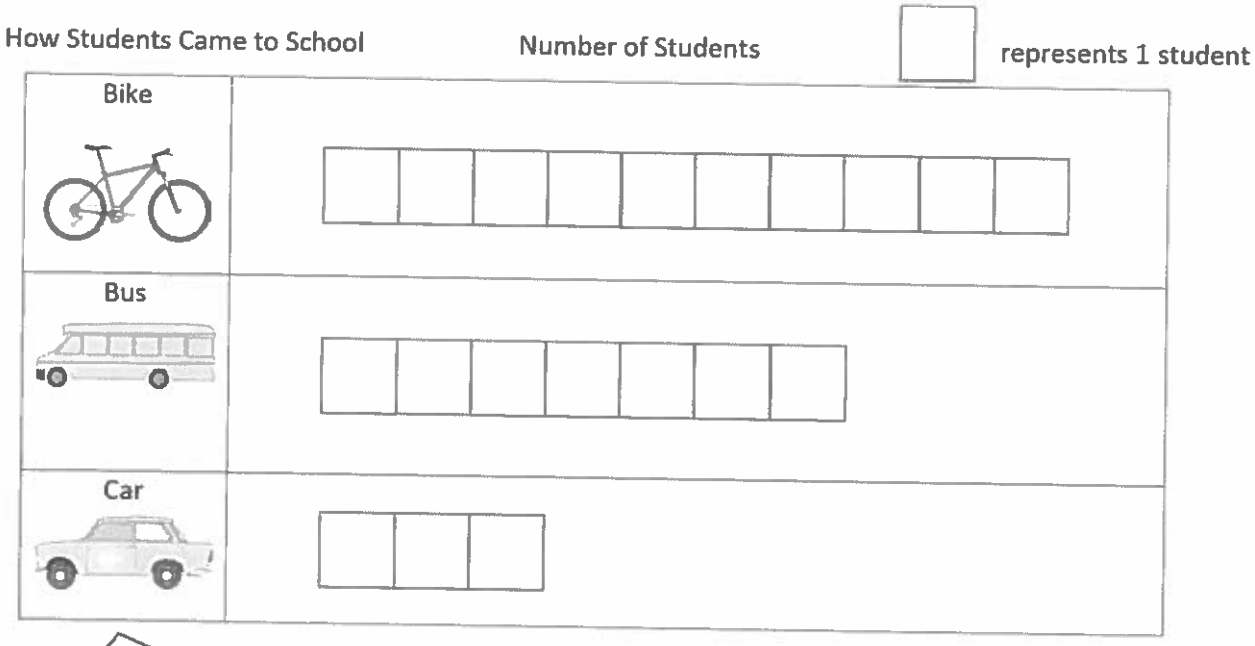
7. From this data, can you tell how many workers are in this office? Explain your thinking.

   I think there must be 14 workers in the office because I counted each person who voted. There could be more though because what if someone was absent that day or just did not vote?

I know that $3 + 6 = 9$, and then there are 5 more. $9 + 1 = 10$, and then I add on 4 more, and I get 14.

G1-M3-Lesson 12

The class has 20 students. 10 students ride their bikes to school, 7 ride the bus, and 3 come in a car. Use squares with no gaps or overlaps to organize the data. Line up your squares carefully.



I line my squares up carefully with no gaps in between and no overlaps. I started from the same endpoint.

I can look at the number of students that rode a bike and the number of students that rode the bus. I can count how many more students rode a bike. 1, 2, 3 students!

1. How many more students rode a bike than rode the bus? 3 students

2. Write a number sentence to tell how many students were asked about how they come to school.

   $10 + 7 + 3 = 20$

I add the number of bike riders, bus riders, and car riders!

3. Write a number sentence to show how many fewer students rode in a car than the bus.

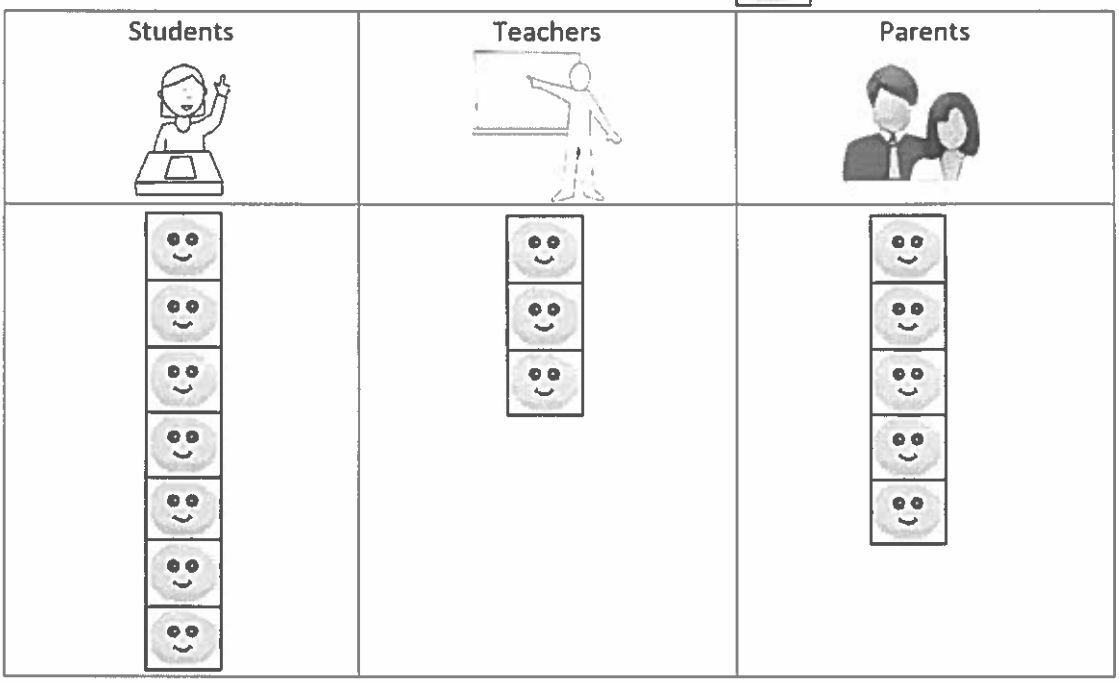
   $7 - 3 = 4$

EUREKA MATH

G1-M3-Lesson 13

Use the graph to answer the questions. Fill in the blank, and write a number sentence.

Class Play Audience  represents 1 person



1. How many more students are at the play than teachers? $7 - 3 = 4$

   There are 4 more students than teachers.

2. How many fewer parents are at the play than students? $7 - 5 = 2$

   There are 2 fewer parents.

I can see which has more and which has less by looking at the squares. I can subtract to find how many more or less.

3. If 2 more teachers attend the play, how many people will be there? $5 + 5 + 7 = 17$

   There will be 17 people.

I can add 2 more teachers to the 3 teachers. This equals 5 teachers. I know 5 teachers and 5 parents equals 10 people. Then I can add the 7 students. $10 + 7 = 17$

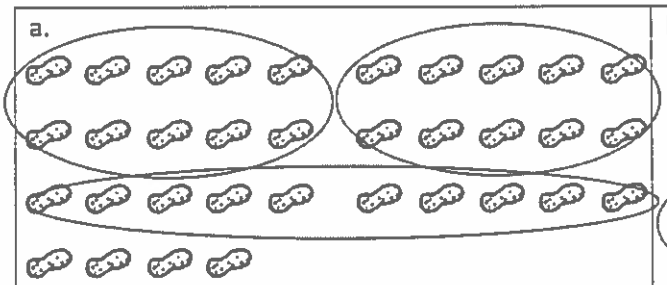
Homework Helpers

Grade 1 Module 4

G1-M4-Lesson 1

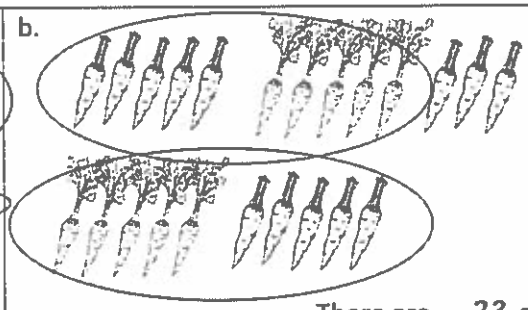
1. Circle groups of 10. Write the number to show the total amount of objects.

a.



There are 34 peanuts.

b.

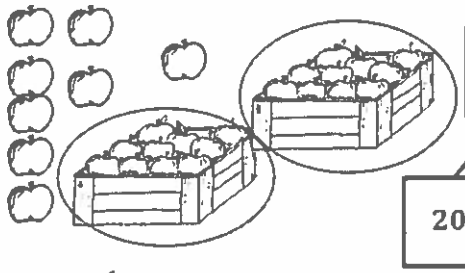


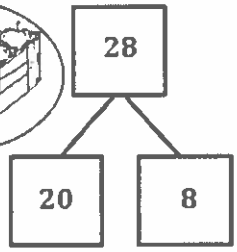
There are 23 carrots.

I circle groups of ten. I count the tens first and then the ones. 2 tens 3 ones is 23.

2. Make a number bond to show tens and ones. Circle tens to help. Write the number to show the total amount of objects.

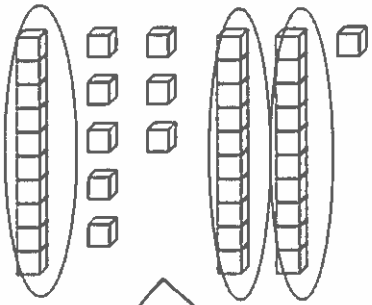
a.

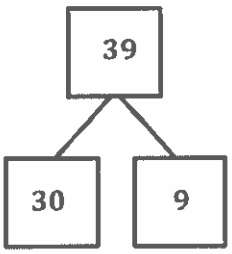




I think 10, 20, and 8 is 28.

b.

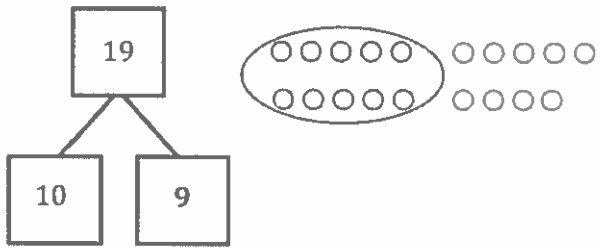




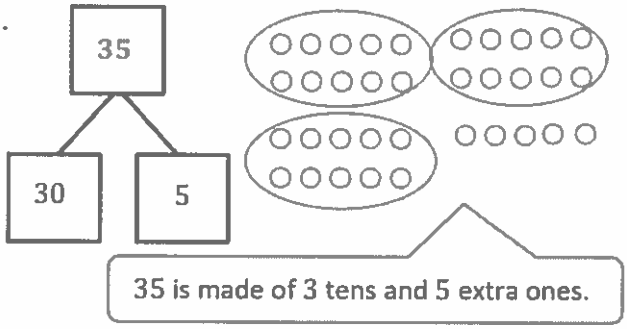
When I count with ten-sticks, it's much quicker to count. 10, 20, 30, 31, 32, 33, …, 39.

Make or complete a math drawing to show tens and ones. Complete the number bonds.

3.



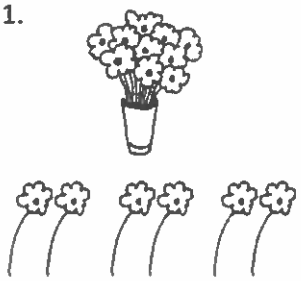
4.



G1-M4-Lesson 2

Write the tens and ones. Complete the statement.

1.



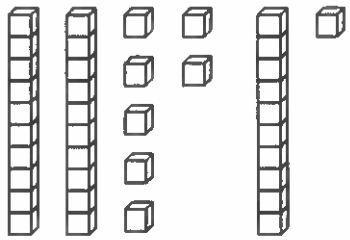
tens	ones
1	6

There are 16 flowers.

In the number 16, the 1 stands for 1 ten. The 6 stands for 6 ones.

Write the tens and ones. Complete the statement.

2.



tens	ones
3	8

There are 38 cubes.

38 can be separated into 2 parts: 30 and 8. I have 3 ten-sticks and 8 extra ones.

Write the missing numbers. Say them the regular way and the Say Ten way.

3.

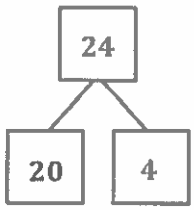
tens	ones
2	7

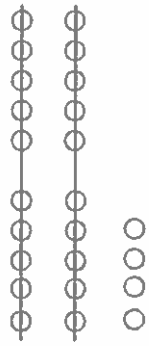
→ 27

I look at the place value chart. 2 tens and 7 ones is 27. I can say it the Say Ten way: 2 tens 7.

4. Choose a number less than 40. Make a math drawing to represent it. Fill in the number bond and place value chart.

tens	ones
2	4

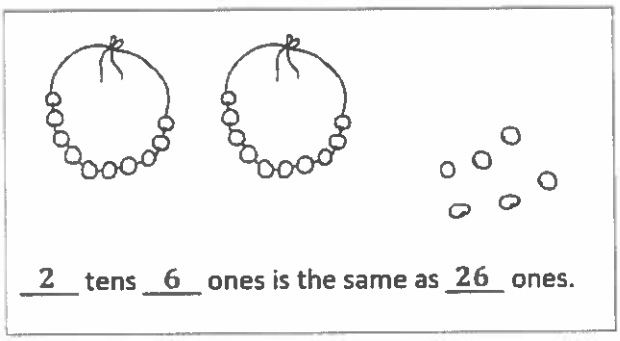




I can make a 5-group column drawing. I draw 2 tens and 4 ones. 24 is 20 and 4.

G1-M4-Lesson 3

1. Count as many tens as you can. Complete the statement. Say the numbers and the sentences.



2 tens 6 ones is the same as 26 ones.

I see 26 as 2 tens and 6 extra ones. I count by tens first. 10, 20, and 6 ones is 26.

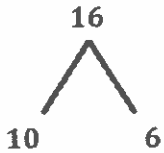
Fill in the missing numbers.

The number 27 doesn't have 7 ones. It has 27 ones!

2.	27	tens: 2, ones: 7		27 ones
3.	38	8 ones 3 tens		38 ones
4.	30	0 ones 3 tens		30 ones

There are 38 ones. Or I can say 38 has 3 tens 8 ones. Each ten is made of 10 ones. So, I can count on by tens to get to 30and then by ones to get to 38.

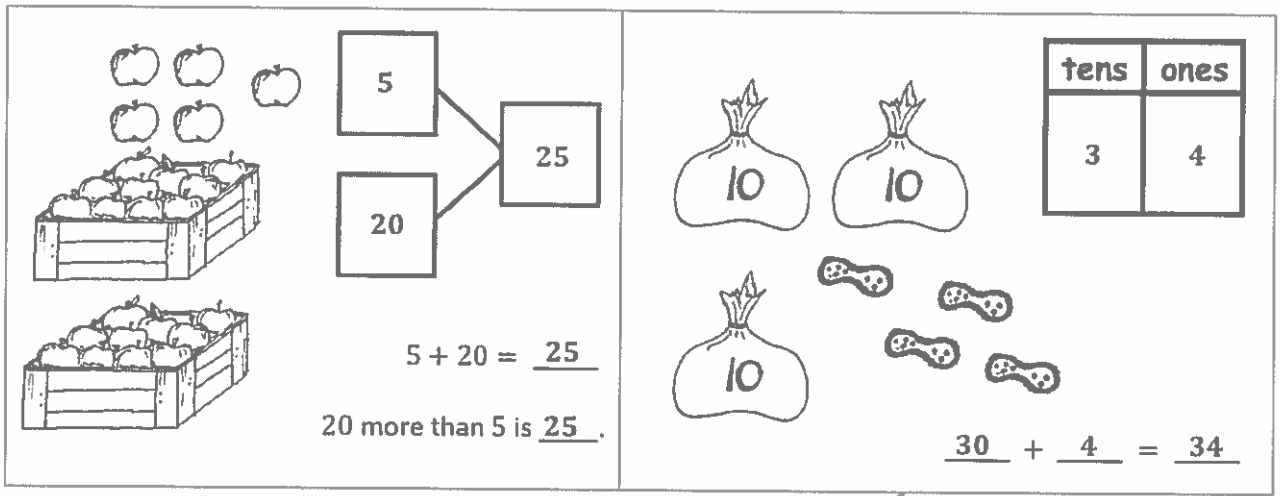
5. Choose at least one number less than 40. Draw the number in 3 ways:

As grapes:	In a number bond:	In the place value chart:
		tens: 1, ones: 6

I draw 1 group of 10 grapes since 16 has 1 ten. Then, I draw 6 extra grapes to show 6 ones. I can think of 16 as 1 ten 6 ones or 16 ones.

G1-M4-Lesson 4

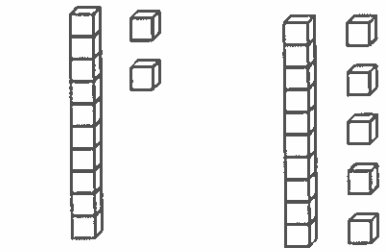
1. Fill in the number bond, or write the tens and ones. Complete the addition sentences.

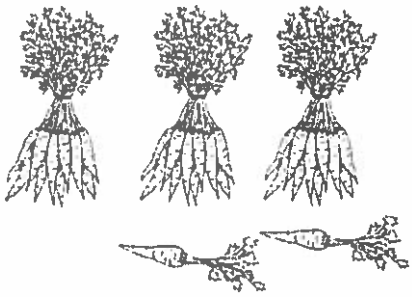


I can make a number bond that shows the tens and ones. I can break apart 25 into 20 and 5.

3 tens 4 ones is the same as the number 34. 3 is the digit in the tens place, and 4 is the digit in the ones place.

2. Match the pictures with the words.





This statement combines tens and ones!

2 more than 30 is 32 .

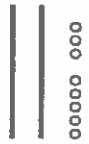
$20 + 7 = 27$

I can write a number sentence with the tens first, or I can write it with the ones first, like $7 + 20 = 27$. One number tells how many tens there are, and the other tells how many ones there are.

G1-M4-Lesson 5

Draw quick tens and ones to show the number. Then draw 1 more or 10 more.

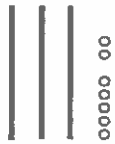
1.



1 more than 27 is 28.

I can show 27 with 2 quick tens and 7 ones in a 5-group column. To figure out 1 more, I add 1 circle to the ones, so 7 ones becomes 8 ones.

2.



10 more than 27 is 37.

Look at how quickly I can draw 37. A quick ten is a line that holds 10 beads! It represents a ten. I can draw one more quick ten to show 10 more than 27.

Draw quick tens and ones to show the number. Cross off (x) to show 1 less or 10 less.

3.

10 less than 17 is 7.

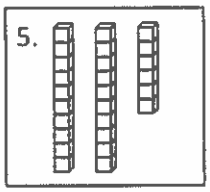
I can cross out a quick ten when I want to show 10 less than 17. Now, there are no tens and 7 ones.

4.

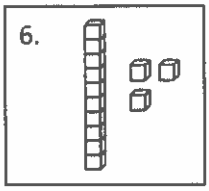
1 less than 25 is 24.

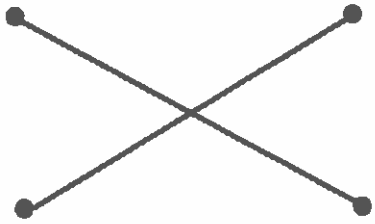
Match the words to the picture that shows the right amount.

5.



6.





10 less than 23

10 more than 16

The digit in the tens place changes when I think of 10 more than 16. The new number is 26. That's 2 tens 6 ones.

G1-M4-Lesson 6

Fill in the place value chart and the blanks.

1.

dimes	pennies
3	5

35 = 3 tens 5 ones

1 dime has the same value as 10 pennies, but it's just 1 coin. 3 dimes and 5 pennies equal 3 tens 5 ones. That's 35 cents!

2.

dimes	pennies
0	6

6 = 0 tens 6 ones

I don't see any tens because there are no dimes. The value of 6 pennies is 6 cents.

Fill in the blank. Draw or cross off tens or ones as needed.

3.

10 more than 30 is 40.

I can draw 1 more dime since I want to show 10 more. So, 3 tens changes to 4 tens. 30 cents + 10 cents = 40 cents.

4.

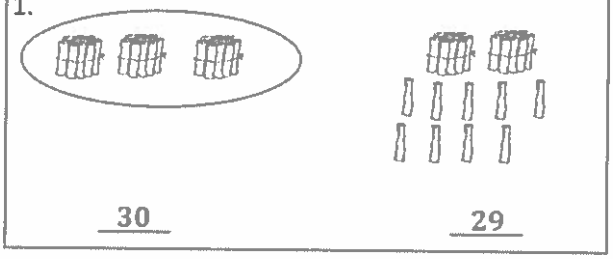
1 less than 24 is 23.

When I cross off 1 penny, I have 1 less, or 23 cents. I could write this in my place value chart as 2 tens 3 ones.

G1-M4-Lesson 7

Write the number, and circle the set that is *greater* in each pair. Say a statement to compare the two sets.

1.



I look at the tens place first to find the number that is greater. 3 tens is more than 2 tens. So, 30 is greater than 29.

Circle the number that is *greater* for each pair.

2.

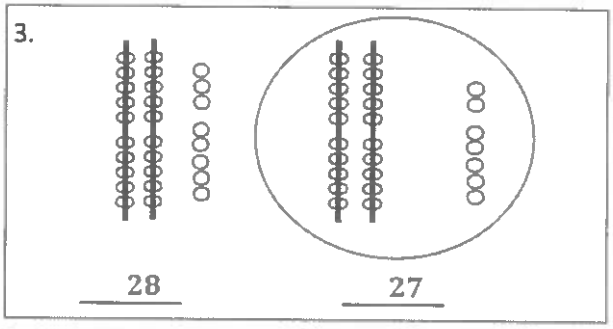
3 tens 9 ones

4 tens 8 ones

4 tens is greater than 3 tens, so 48 is greater than 39.

Write the number, and circle the set that is *less* in each pair. Say a statement to compare the two sets.

3.



First, I look at the tens place and both numbers have 2 tens. Next, I look at the ones place, and 7 ones is less than 8 ones. So, 27 is less than 28.

4. Write the value, and circle the set of coins that has *less* value.

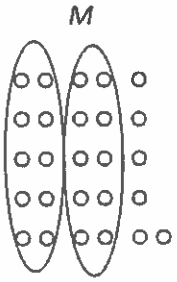
14 cents

22 cents

The first set has 5 coins, and the second set has 4 coins, but you have to look at the values! Dimes and pennies are like tens and ones. So, 1 ten 4 ones is less than 2 tens 2 ones.

5. Maddox and Caroline are playing cards. If Caroline's total has 29 ones and Maddox's total is 26, whose total is less? Draw a math drawing to explain how you know.

Hey, 29 ones is also 2 tens 9 ones! I can draw a picture and just compare ones!



Maddox's total is less. I know because they both have 2 tens, so I looked at the ones. Maddox only has 6 ones, and Caroline has 9 ones. So, Maddox has less.

G1-M4-Lesson 8

Word Bank

is greater than

is less than

is equal to

1. Draw the numbers using quick tens and circles. Use the phrases from the word bank to complete the sentence frames to compare the numbers.

a.

28 *is less than* 30.

b.

1 ten 7 ones *is equal to* 17.

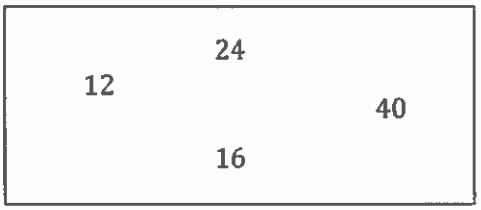
I look at the digit in the tens place first to compare the numbers! Even though there are 8 ones in 28, that's still less than a ten. I read from left to right: 28 is less than 30.

3 tens 3 ones is 33. Both numbers have 3 tens, but 3 ones is less than 4 ones. So, 3 tens 3 ones is less than 34.

2. Circle the numbers that are *less* than 34.

29 3 tens 5 ones 4 tens 31 3 tens 3 ones

3. Write the numbers in order from *greatest* to *least*.



I read the numbers from left to right. 40 is greater than 24. 24 is greater than 16....

40 24 16 12

Where would the number 38 go in this order? Use words or rewrite the numbers to explain.

40 38 24 16 12

I put 38 between 40 and 24. 38 is less than 40, and 38 is greater than 24. Look at the tens: 4 tens, 3 tens, 2 tens!

G1-M4-Lesson 9

1. Write the numbers in the blanks so that the alligator is eating the greater number. Read the number sentence, using *is greater than, is less than,* or *is equal to.* Remember to start with the number on the left.

a.

23 28

28 23

I remember to read starting with the number on the left. So, 28 is greater than 23. I know because 2 tens 8 ones is greater than 2 tens 3 ones.

b.

29 30

29 30

29 is less than 30. 30 is 3 tens! The alligator wants to eat the bigger number!

2. Complete the charts so that the alligator is eating a *greater* number.

a.

tens	ones
1	5

tens	ones
1	3

I read the number sentence as 15 is greater than 13. Both numbers have 1 ten, but 5 ones is bigger than 3 ones, so the alligator eats the number

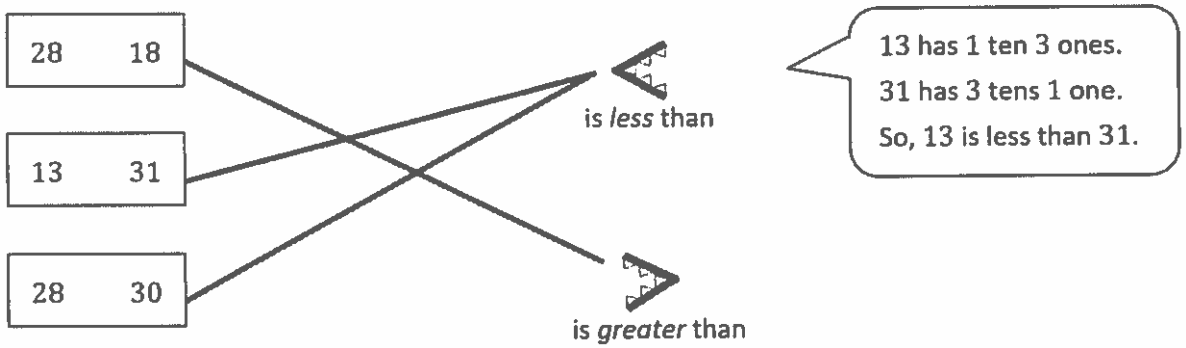
b.

tens	ones
2	3

tens	ones
2	8

I write 8 in the ones place, so the alligator eats the number 28. I can read the number sentence as 23 is less than 28. I could also write 4, 5, 6, 7, 8, or 9 ones,

3. Compare each set of numbers by matching to the correct alligator or phrase to make a true number sentence. Check your work by reading the sentence from left to right.



G1-M4-Lesson 10

Use the symbols to compare the numbers. Fill in the blank with <, >, or = to make a true number sentence. Complete the number sentence with a phrase from the word bank.

Word Bank

is greater than
is less than
is equal to

a. 21 (>) 12

21 *is greater than* 12.

Both of these numbers have the same digits, but they are in different positions. That means they have a different value. 2 tens 1 one is greater than 1 ten 2 ones!

b. 3 tens (<) 32

3 tens *is less than* 32.

I put the less than sign between 3 tens and 32. 3 tens is 30. The smaller end points to the smaller number!

c. 2 tens 8 ones (<) 29

2 tens 8 ones *is less than* 29.

There are more ones in 29 than in 2 tens 8 ones, or 28. The symbol is open on the side that the alligator likes to eat! But I still read it from left to right!

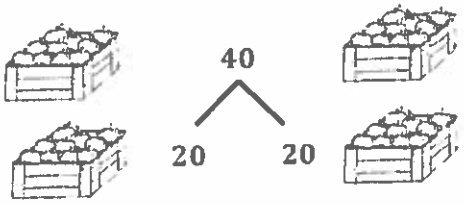
d. 19 (=) 1 ten 9 ones

19 *is equal to* 1 ten 9 ones.

G1-M4-Lesson 11

Draw a number bond, and complete the number sentences to match the pictures.

1.

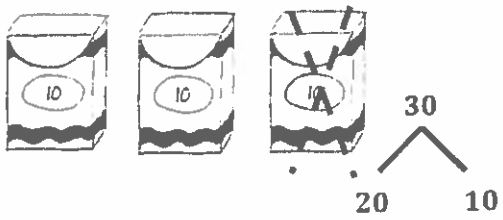


4 tens = 2 tens + 2 tens

40 = 20 + 20

I can say the number sentence with place value units, so 4 tens = 2 tens + 2 tens. That's the unit way. Or I can just write the numbers the regular way, so 40 = 20 + 20.

2.



3 tens − 1 ten = 2 tens

30 − 10 = 20

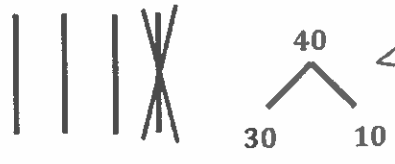
The number bond shows 3 tens on top with 2 tens and 1 ten as the parts. The X shows that I take away 1 ten. The subtraction sentences match.

Draw quick tens and a number bond to help you solve the number sentences.

3.

20 + 10 = 30

4.



40 − 10 = 30

I can draw 4 quick tens to show 40. I cross off 1 ten. There are 3 tens left, or 30.

2 tens +1 ten = 3 tens. It's just like 2 + 1 = 3, except now it's tens. The units change!

Add or subtract.

5. 4 tens − 3 tens = *1 ten*

6. 40 = 10 + 30

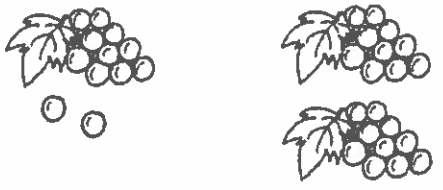
I can think of the simpler problem, 4 = 1 + 3, to help me solve.

7. 20 − 20 = 0

G1-M4-Lesson 12

1. Fill in the missing numbers to match the picture. Write the matching number bond.

a.



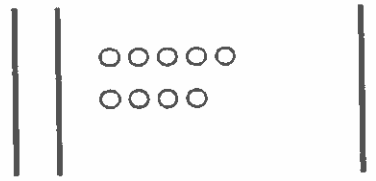
32

12 20

12 + 20 = 32

1 ten 2 ones + 2 tens = 3 tens 2 ones. The digit in the tens place changes because I add 2 tens. The ones stay the same.

b.



39

29 10

29 + 10 = 39

1 ten more than 2 tens is 3 tens. That's why there is a 3 in the tens place. There are still 9 ones.

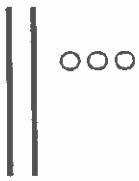
2. Draw using quick tens and ones. Complete the number bond and the number sentence.

a.

tens	ones
2	3

+

tens	ones
1	0



33

23 10

23 + 10 = 33

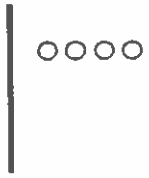
The number bond shows how I change 23 to make 33. I add 1 ten.

b.

tens	ones
1	4

+

tens	ones
2	0



34

14 20

14 + 20 = 34

If 34 is the whole and 14 is one part, I can add 2 tens to make 34. 2 tens is the same as 20. 14 plus 20 equals 34.

3. Use arrow notation to solve.

a. +10

17 → 27

b. +20

19 → 39

I can think: What number plus 2 tens will give me 3 tens 9 ones? 1 ten 9 ones plus 2 tens equals 3 tens 9 ones! So, 19 is the number.

4. Use the dimes and pennies to complete the place value charts.

a.

tens	ones
2	6

+

tens	ones
1	0

=

tens	ones
3	6

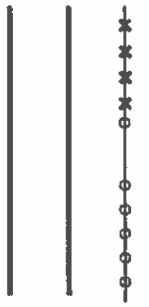
2 dimes and 6 pennies make 2 tens 6 ones. When I add 1 dime, I add 1 ten. Now, there are 3 tens all together. The number sentence is $26 + 10 = 36$.

G1-M4-Lesson 13

1. Use quick tens and ones to complete the place value chart and number sentence.

I can show 26 with 2 quick tens and 6 dots, or circles. I can show adding 4 using x's. 6 and 4 make a new ten!

Let me put a line through these to show it's a ten. Now I have 3 tens!



tens	ones
3	0

$26 + 4 =$ 30

2. Draw quick tens, ones, and number bonds to solve. Complete the place value chart.

$25 + 5 =$ 30

20 5

tens	ones
3	0

25 is made of 20 and 5. I can add 5 and 5 to make 10. Then I know that $20 + 10 = 30$. That's 3 tens.

3. Solve. You may draw quick tens and ones or number bonds to help.

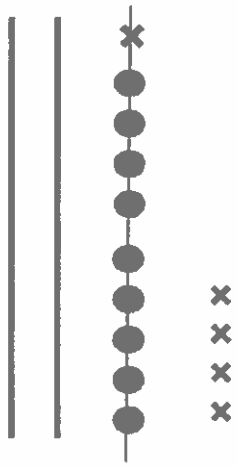
$37 + 3 =$ 40

I know this one in my head. 3 more than 37 is 40. I am making the next ten when I add 3 to 37.

G1-M4-Lesson 14

1. Use the pictures, or draw quick tens and ones. Complete the number sentence and place value chart.

I can use 2 quick tens and 9 dots, or circles, to show 29. I only need one more to make a new ten. As I add 5, the first x makes a new ten. I start a new column as I draw 4 more x's. I can draw a line through the new ten I made. Now I can see easily that I have 3 tens and 4 ones.



tens	ones
3	4

$29 + 5 = \underline{34}$

2. Make a number bond to solve. Show your thinking with number sentences or the arrow way. Complete the place value chart.

I need 2 more to get to 20 from 18. I can break apart 5 into 2 and 3. $18 + 2 = 20$. Then $20 + 3 = 23$.

$18 + 5 = \underline{23}$

2 3

tens	ones
2	3

Here are my number sentences to show my thinking.

$18 + 2 = 20$
$20 + 3 = 23$

$18 \overset{+2}{\rightarrow} 20 \overset{+3}{\rightarrow} 23$

I can use the arrow way to show my thinking too! I start at 18. I add 2 to get to 20. Then, I add 3 more to get to 23.

G1-M4-Lesson 15

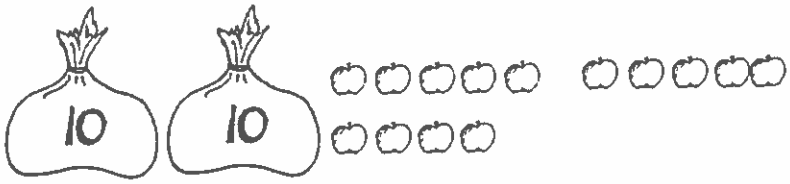
1. Solve the problems.

$9 + 5 = \underline{14}$

9 plus 5 is 14. That one's easy.

$19 + 5 = \underline{24}$

19 plus 5 is just 10 more. That's 24.



$29 + 5 = \underline{34}$

29 plus 5 is 10 more again. That's 34.

2. Use the first number sentence in each set to help you solve the other problems.

a. $3 + 8 = \underline{11}$

b. $13 + 8 = \underline{21}$

c. $23 + 8 = \underline{31}$

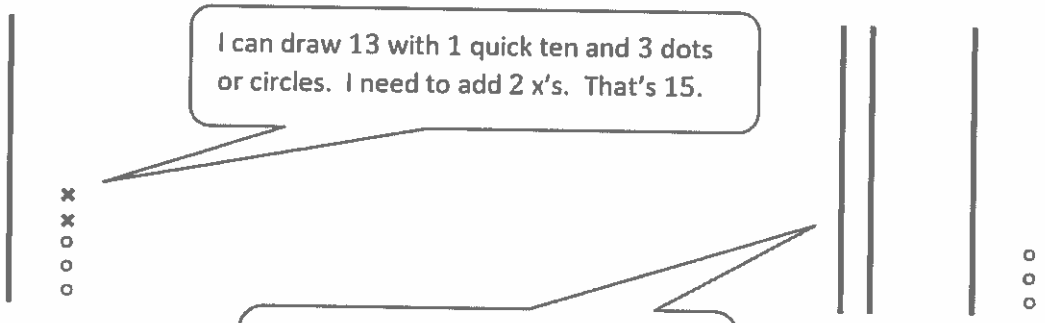
3. Solve the problems. Show the 1-digit addition sentence that helped you solve.

$18 + 4 = \underline{22}$ $\quad\underline{8 + 4 = 12}$

I can use $8 + 4$ to help me solve $18 + 4$. I know that $8 + 4 = 12$. $18 + 4$ has 1 more ten. That's 22.

G1-M4-Lesson 16

1. Draw quick tens and ones to help you solve the addition problems.



$13 + 2 = \underline{15}$

$13 + 20 = \underline{33}$

2. Make a number bond, or use the arrow way to solve the addition problems.

$11 + 20 = \underline{31}$

I can solve this in different ways!

I can break apart 11 into 10 and 1. Then, I can add my tens. That's 3 tens, or 30, and 1 one to make 31.

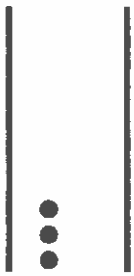
$11 \xrightarrow{+10} 21 \xrightarrow{+10} 31$

I can also start with 11 and add my tens one at a time. $11 + 10 = 21$. Then, when I add another 10, I get to 31.

G1-M4-Lesson 17

1. Use quick ten drawings or number bonds to make true number sentences.

a. $13 + 10 = \underline{23}$



I can draw 13 and then just add another quick ten. Let me count what I have now: 10, 20, …, 23.

b. $25 + 5 = \underline{30}$

$5 + 5 = 10$

$10 + 20 = 30$

I can break apart 25 into 20 and 5. I add 5 and 5 to make the next ten. The next ten is 30.

2. How did you solve Problem 1(a)? Why did you choose to solve it that way?

I chose to use a quick ten drawing because I only had to draw 1 more ten. That was a fast way to show $13 + 10 = 23$.

3. How did you solve Problem 1(b)? Why did you choose to solve it that way?

I used a number bond because I wanted to see the parts I had. When I broke apart 25 into 20 and 5, I saw that I could add 5 and 5 to make a new ten.

G1-M4-Lesson 18

1. Two students both solved the addition problem below using different methods. Are they both correct? Why or why not?

$28 + 5 = \underline{33}$

$28 \overset{+2}{\rightarrow} 30 \overset{+3}{\rightarrow} 33$

This student used the arrow way to get the answer. He used 2 to get to 30 and then added 3 more to get to 33. That means he added 5 altogether to get to 33. That's correct.

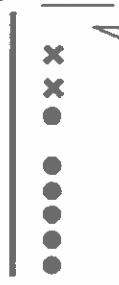
$28 + 5 = \underline{33}$

This student broke apart 5 so she could get to the next 10. She needed 2 to get to 30. Then she added the rest and got to 33. That's correct.

They are both correct. 28 plus 5 is 33. The first student used the arrow way to show his thinking. That student added 2 to get to 30 and then added 3 more since he had to add 5 altogether. The second student used a number bond to show how she got to 33.

2. Another two students solved the same problem shown below, using quick tens. Are they both correct? Why or why not?

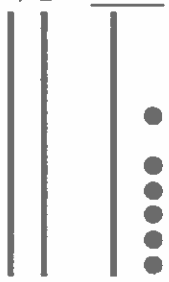
$16 + 2 = \underline{18}$



I already know $16 + 2 = 18$. When I look at the drawing, it matches the number sentence.

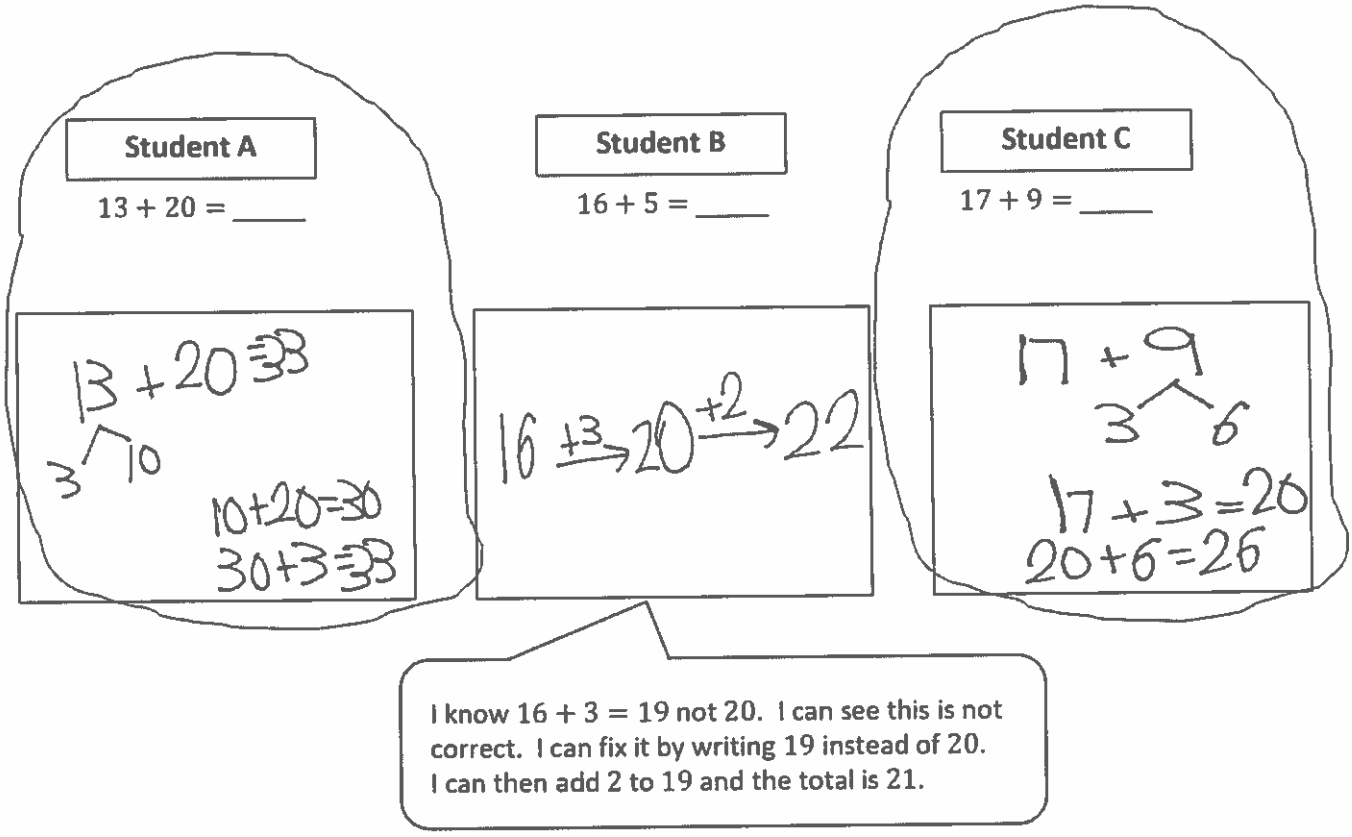
This does not look right. Let me see. I see too many quick tens. I know! This student added 2 tens instead of 2 ones!

$16 + 2 = \underline{36}$



The first student is correct. The second student is not correct. The second student added quick tens instead of ones. He has too much.

3. Circle any student work that is correct.



Fix the student work that was incorrect by making a new drawing or drawings in the space below.

Choose a correct student work, and give a suggestion for improvement.

***Student A's work can be solved without breaking apart** 13. **I can just add** 2 **tens to** 13. **I can do this in my head and get the answer** 33.*

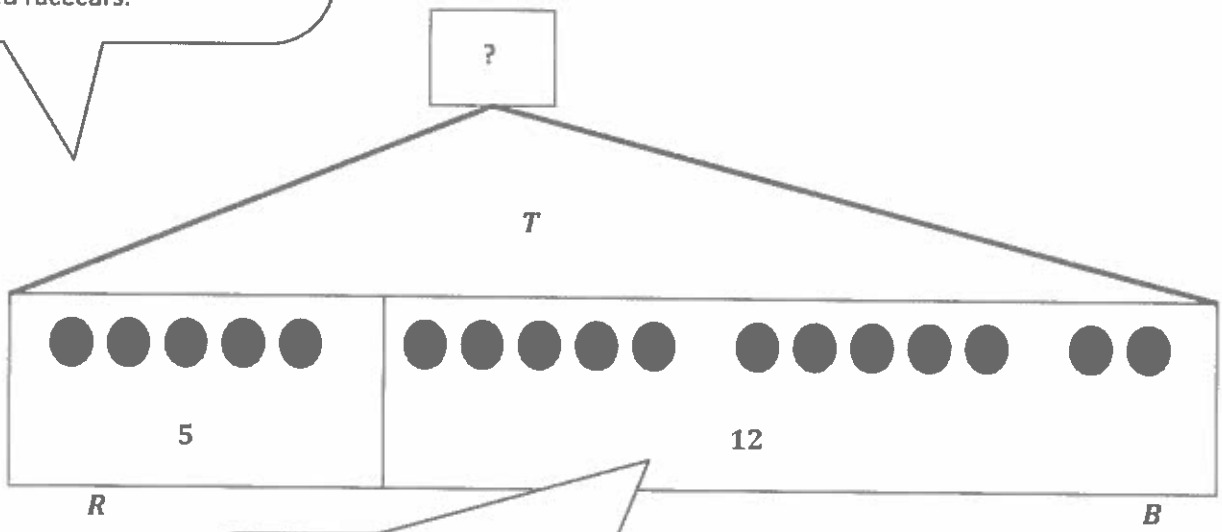
G1-M4-Lesson 19

Solve using the RDW process.

John has 5 red racecars and 12 blue racecars. How many racecars does John have in all?

I can draw 5 circles for the red racecars. I put my circles in a rectangle to keep them organized. I label my drawing with the number 5 and the letter R, so I know that this rectangle represents the 5 red racecars.

I connect the two rectangles and draw a box with a question mark labeled with the letter T because it is the total. When I find the total, I will know the answer to the question.



I can draw 12 circles for the blue racecars. I organize my circles and put them in a rectangle labeled with the number 12 and the letter B, so I know that this rectangle represents the 12 blue racecars.

$5 + 12 =$ 17

I draw a box around 17 because it is the total and answers the question. The last part of RDW is write. I can write a statement to answer the question.

John has 17 racecars.

G1-M4-Lesson 20

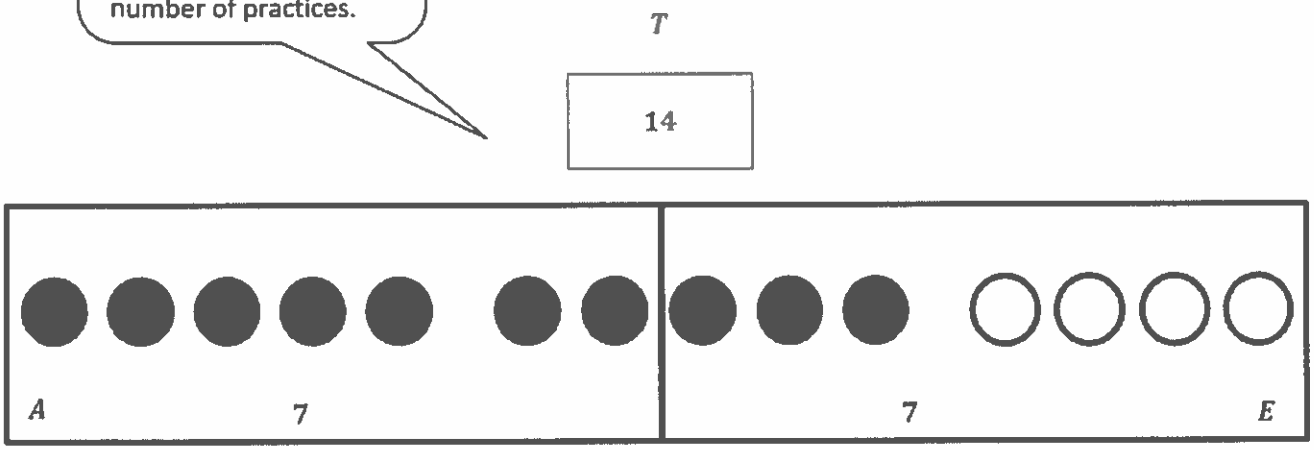
What can I draw?

Solve using the RDW process.

1. Mary has 14 play practices this month. 7 practices are after school, and the rest are in the evening. How many practices are in the evening?

What do I know after reading the problem?

I know the total, or the whole. I can draw 14 circles in 5-group rows to represent the total number of practices.



I know there are 7 practices after school. I can draw a rectangle around 7 of the circles to represent the 7 practices that are after school. I label the rectangle with the letter A for after school.

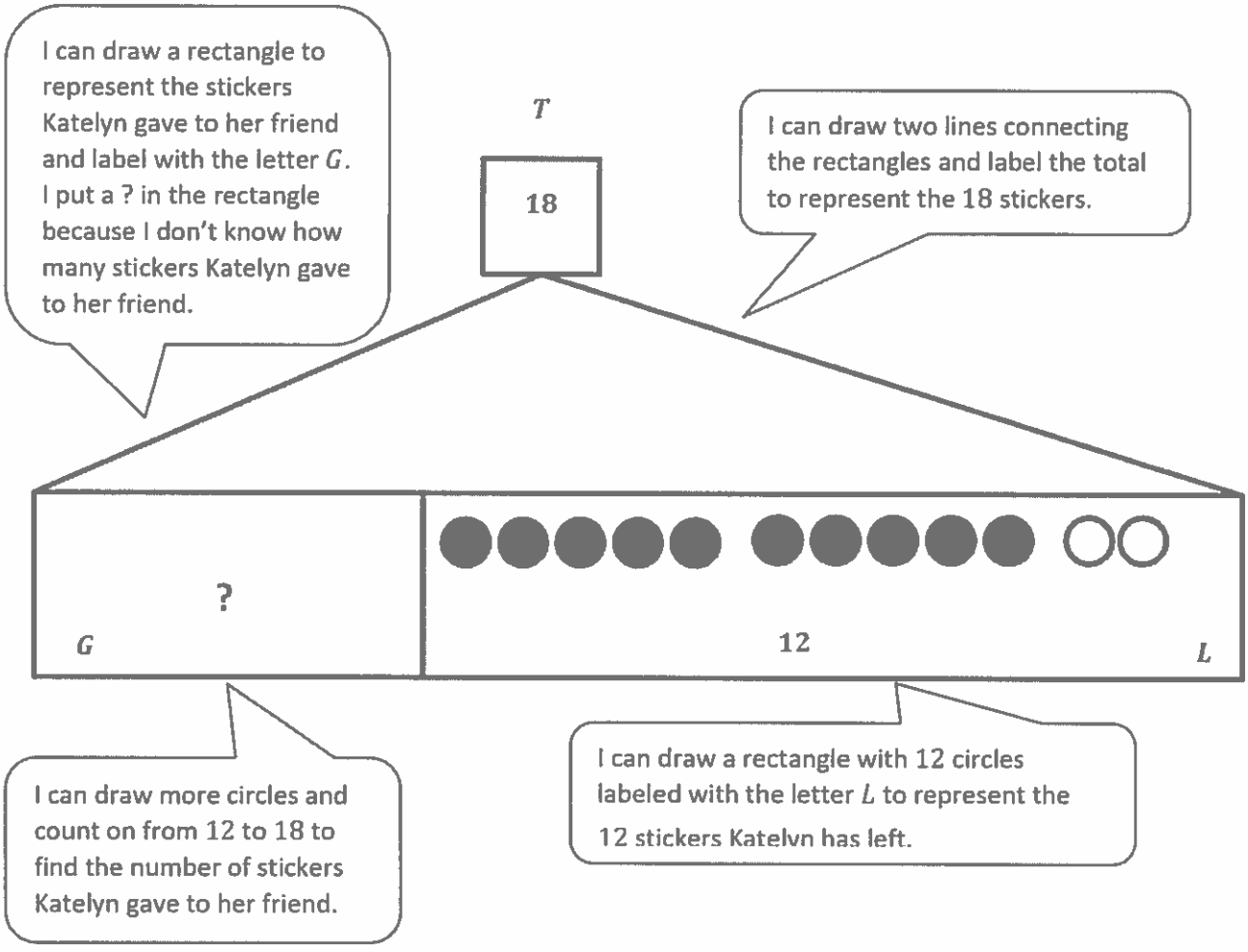
I draw a rectangle around the rest of the circles. This represents the practices that are in the evening. I count the circles and see there are 7 practices in the evening. I label the rectangle with the letter E for evening.

$14 - 7 = \boxed{7}$

I draw a rectangle around the 7 because 7 is the answer to the question.

Mary has 7 practices in the evening.

2. Katelyn gave some of her stickers to her friend. She had 18 stickers at first, and she still has 12 stickers left. How many stickers did Katelyn give to her friend?



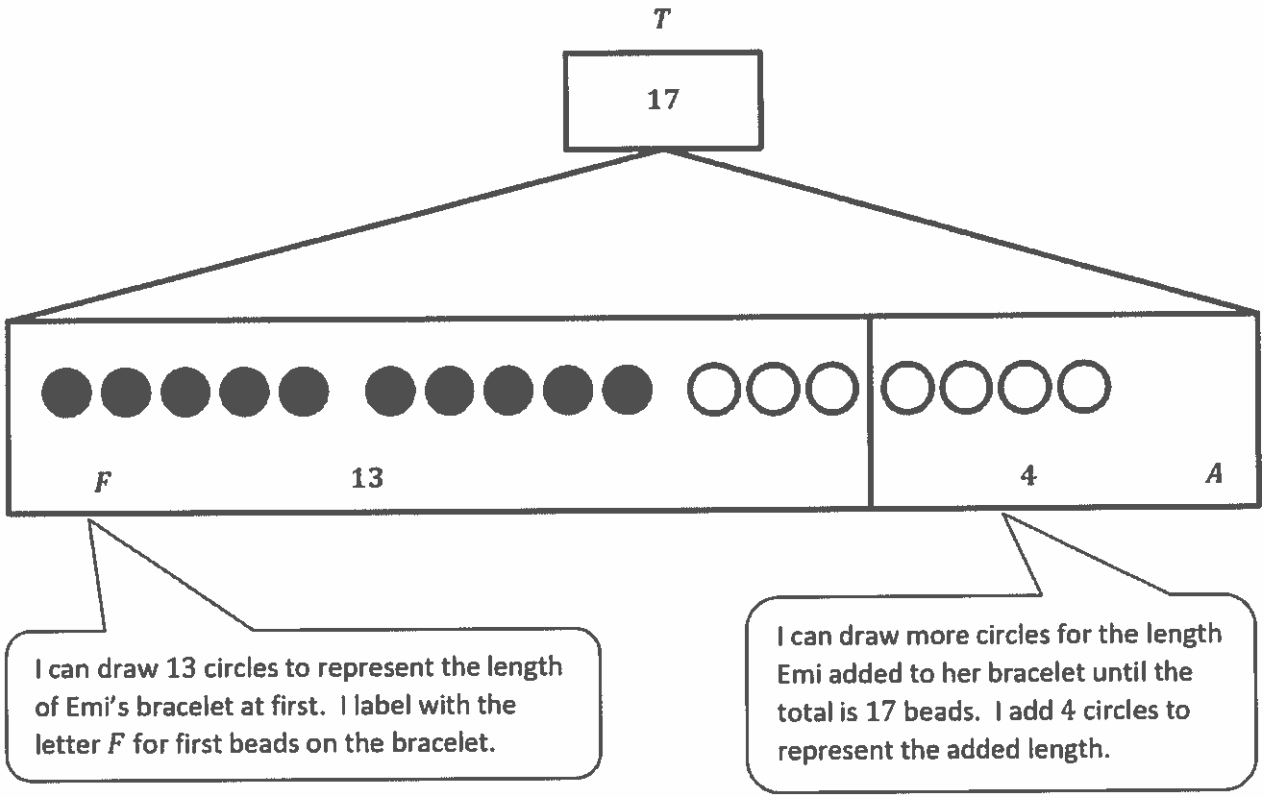
$$\boxed{6} + 12 = 18$$

Katelyn gave 6 stickers to her friend.

G1-M4-Lesson 21

Solve using the RDW process.

Emi made a bracelet that was 13 centimeters long. The bracelet didn't fit so she made the bracelet longer. Now the bracelet is 17 centimeters long. How many centimeters did Emi add to the bracelet?

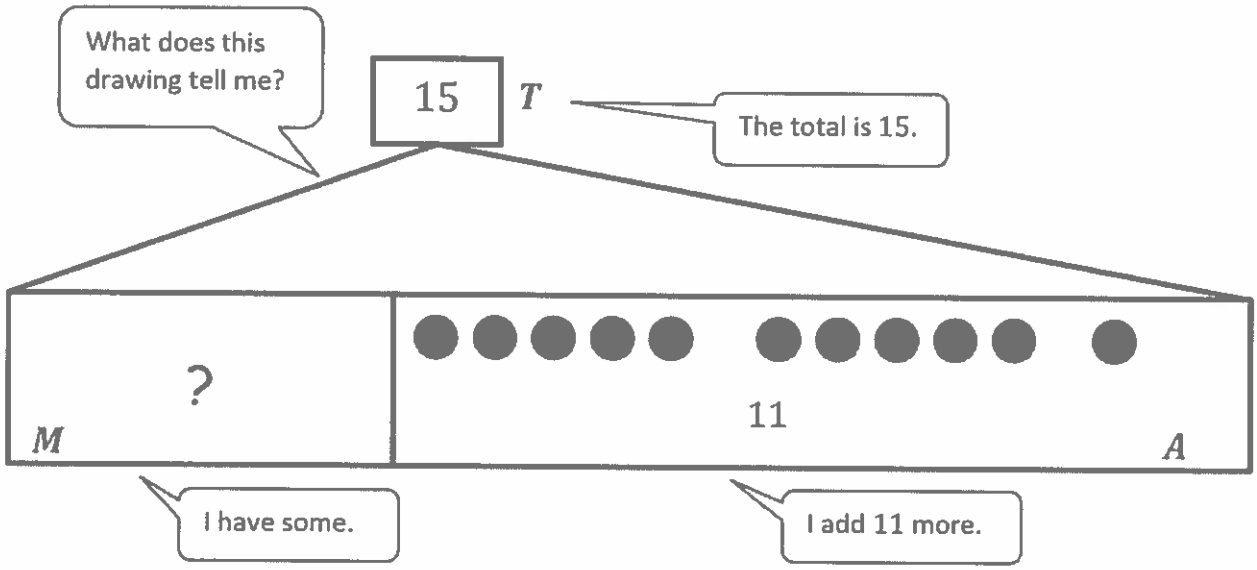


$$13 + \boxed{4} = 17$$

Emi added 4 centimeters to the bracelet.

G1-M4-Lesson 22

Use the tape diagrams to write a variety of word problems. Use the word bank, if needed. Remember to label your model after you write the story.



Topics (Nouns)		
flowers	goldfish	lizards
stickers	rockets	cars
frogs	crackers	marbles

Actions (Verbs)		
hide	eat	go away
give	draw	get
collect	build	play

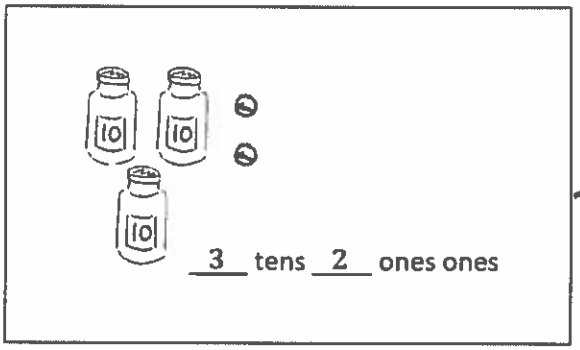
I can use the words in the box to help me think of what to write, or I can think of my own idea.

Beth picks some flowers for her mom in the morning. She picks 11 more flowers in the afternoon. Now she has 15 flowers for her mom. How many flowers did Beth pick in the morning?

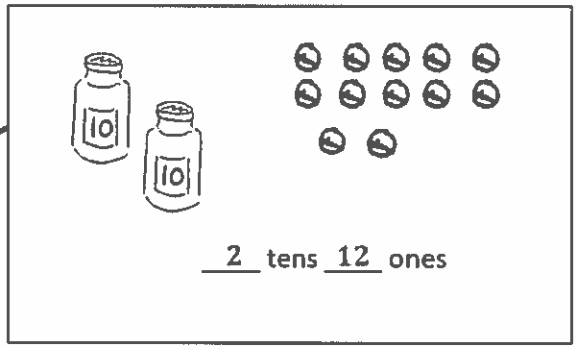
G1-M4-Lesson 23

1. Fill in the blanks, and match the pairs that show the same amount.

I can match these pictures because they both show 32. 3 tens 2 ones is equal to 2 tens 12 ones. If I bundle 10 ones in the picture on the right, it would have 3 tens 2 ones.



3 tens 2 ones ones



2 tens 12 ones

2. Match the place value charts that show the same amount.

The place value chart shows how many tens and ones. It's okay to have more than 9 in the ones. 2 tens 15 ones is 35.

tens	ones
3	5

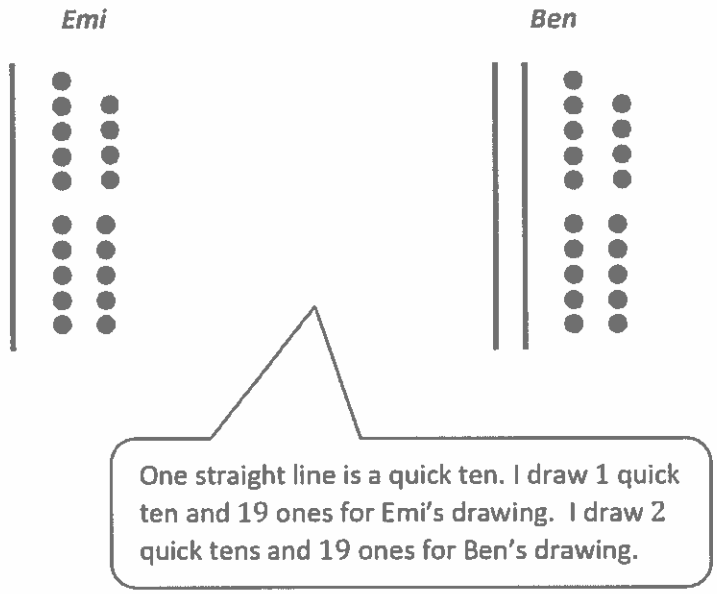
tens	ones
3	7

tens	ones
0	37

tens	ones
2	15

3 tens 7 ones is the same as 37 ones. I can unbundle the 3 tens, which makes 30 ones. I add the 7 ones, and now I have 37 ones.

3. Emi says 29 is the same as 1 ten 19 ones, and Ben says 29 is the same as 2 tens 19 ones. Draw quick tens to show if Emi or Ben is correct.



Emi is correct because 1 ten 19 ones is the same as 29. Ben is not correct because 2 tens 19 ones is the same as 39, which is not 29.

G1-M4-Lesson 24

1. Solve using number bonds. Write the two number sentences that show that you added 10 first. Draw quick tens and ones if that helps you.

a.

15 + 13 = 28

10 3

15 + 10 = 25

25 + 3 = 28

I draw 15 using quick tens and ones. I can break apart 13 into 10 and 3. I add 15 and 10, which equals 25. I add the 3 ones to 25. I use x's to show I am adding the 3 ones.

b.

16 + 23 = 39

10 6

23 + 10 = 33

33 + 6 = 39

I want to add 10 first, so I break apart 16 into 10 and 6 using a number bond. I add 10 to 23 and get 33. Then, I add 33 and 6, which is my answer of 39.

2. Solve using number bonds.

a.

$17 + 23 = \underline{40}$

10 7

$23 + 10 = 33$

$33 + 7 = 40$

I can break apart 17 into 10 and 7 using a number bond. I add 10 and 23, which equals 33. Then, I add 33 and 7 to get my answer of 40.

b.

$22 + 18 = \underline{40}$

10 8

I didn't write the two number sentences because I was able to add in my head.

G1-M4-Lesson 25

1. Solve using number bonds. This time, add the tens first. Write the two number sentences to show what you did.

a.

$12 + 16 = \underline{28}$

10 2

$16 + 10 = 26$
$26 + 2 = 28$

b.

$23 + 17 = \underline{40}$

10 7

$23 + 10 = 33$
$33 + 7 = 40$

I need to add the tens first. I can break apart 12 into 10 and 2 and add 10 to 16 first. 10 + 16 = 26. I still have 2 more to add: 26 + 2 = 28.

2. Solve using number bonds. This time, add the ones first. Write the two number sentences to show what you did.

a.

$23 + 16 = \underline{39}$

6 10

$23 + 6 = 29$
$29 + 10 = 39$

b.

$11 + 29 = \underline{40}$

10 1

$29 + 1 = 30$
$30 + 10 = 40$

I can still break apart 16 into 6 and 10, but this time I add the 6 ones to 23 first.

I notice that when I add my ones, the result is the next 10.

G1-M4-Lesson 26

1. Solve using a number bond to add ten first. Write the two addition sentences that help you.

I need to use the add ten first strategy. I break apart one of the numbers into 10 and some ones.

a. $25 + 14 = \underline{39}$

10 4

$25 + 10 = \underline{35}$

$\underline{35} + \underline{4} = \underline{39}$

b. $19 + 15 = \underline{34}$

10 5

$19 + 10 = \underline{29}$

$\underline{29} + \underline{5} = \underline{34}$

Adding 10 to a number is easy. I know $25 + 10 = 35$. Now I just have to add the ones; that's easy too.

2. Solve using a number bond to make a ten first. Write the two number sentences that help you.

a.

$16 + 19 = 35$

15 1

$19 + 1 = 20$

$20 + 15 = 35$

16 is broken apart into 15 and 1 because 19 needs 1 more to make the next ten.

b.

$18 + 14 = 32$

2 12

$18 + 2 = 20$

$20 + 12 = 32$

I could have also chosen to break apart 18 into 6 and 12 because I can make the next ten with 6 and 14.

G1-M4-Lesson 27

For the following problems, solve using the strategy that makes you feel most comfortable.

1. $15 + 17 =$ 32

10 5

$17 + 10 = 27$

$27 + 5 = 32$

I feel more comfortable using quick tens and ones. I can draw 17 with one quick ten and 7 ones. I draw the ones with 5 closed circles and 2 open circles, to help me see how many more 7 needs to make a new ten.

I can break apart 15 into 10 and 5, and add a quick ten next to the quick ten in 17. Now I only have 5 more to add. I use x's to draw this part to help keep track of how many I need to draw. I add 3 x's to the 7 ones in 17 . I draw a line through the circles and x's because 7 and 3 makes a ten, I have 2 more to draw, I can draw 2 more x's. My drawing shows 32.

2. $18 + 14 =$ 32

$18 + 10 = 28$

$28 + 4 = 32$

For this problem, I feel most comfortable using the add ten first strategy, which means I break apart 14 into 10 and 4, and then I add 10 and 18 which makes 28. I have 4 more to add. 28 and 4 is 32.

3. $19 + 12 =$ 31

$19 + 2 = 21$

$21 + 10 = 31$

For this problem, I feel most comfortable adding the ones first. 12 is ten and 2. I can add the 2 to 19, which makes 21. Then, I can quickly add the 10 to get the answer.

4. $19 + 18 =$ 37

$19 + 1 = 20$

$20 + 17 = 37$

For this problem, I feel most comfortable making a 10. I know that 19 needs one more to make 20. I can easily break apart 18 into 1 and 17.

G1-M4-Lesson 28

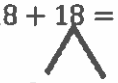
Solve using quick tens and ones, number bonds, or the arrow way.

1. $26 + 13 = \underline{39}$

$26 \xrightarrow{+10} 36 \xrightarrow{+3} 39$

I solved using the arrow way because I know 13 is 10 and 3. I can add the 10 first to get 36 and then add 3. My answer is 39.

2. $18 + 18 = \underline{36}$

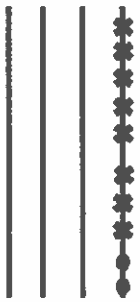


$18 + 2 = 20$

$20 + 16 = 36$

I solved using a number bond. I made a ten. I know 18 needs 2 more to make 20, so I broke apart the other 18 into 2 and 16. I added 20 and 16 to get my answer of 36.

3. $22 + 18 = \underline{40}$



I solved using quick tens and ones. I can draw 2 quick tens and 2 ones. I can draw 18 more. 18 is 1 ten and 8 ones.

I can draw the 2 ones in 22 with circles and the 8 ones in 18 with x's. When I do this I make a new ten and draw a line through it.

G1-M4-Lesson 29

Solve using quick tens and ones, number bonds, or the arrow way.

1. $24 + 16 = \underline{40}$

$24 \xrightarrow{+10} 34 \xrightarrow{+6} 40$

I solved using the arrow way because I know 16 is 10 and 6. I can add the 10 to 24 first to get 34. I know that 34 and 6 is 40.

2. $17 + 12 = \underline{29}$

I solved using a number bond. I added 17 and 10 and got 27. Then I added 27 and 2 to get my answer of 29. I didn't need to write the number sentences because I can do the math in my head.

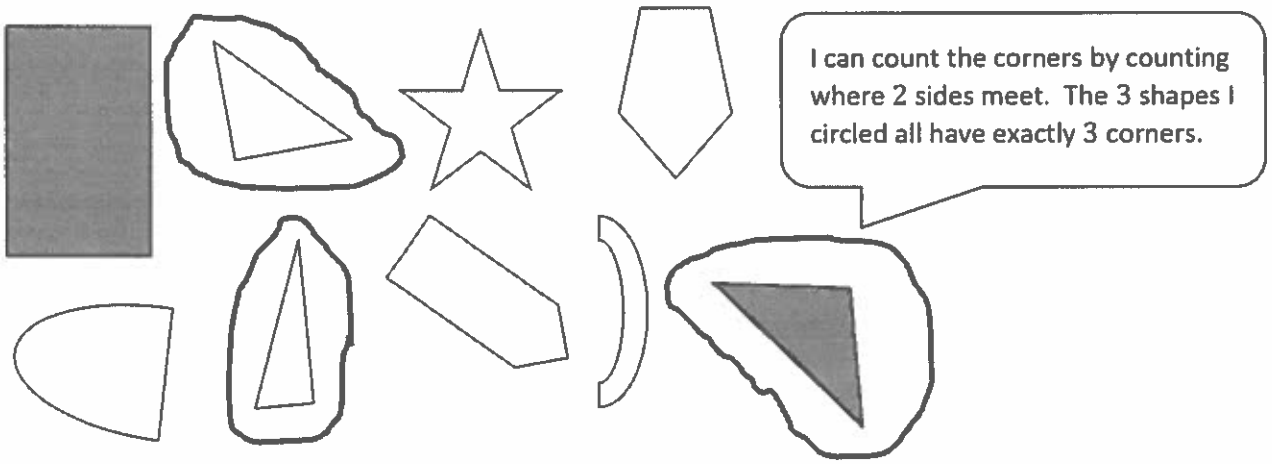
I didn't solve any using drawings this time. Using the arrow way and number bonds is more efficient for me now. If I get stuck I can always use a quick ten drawing.

Homework Helpers

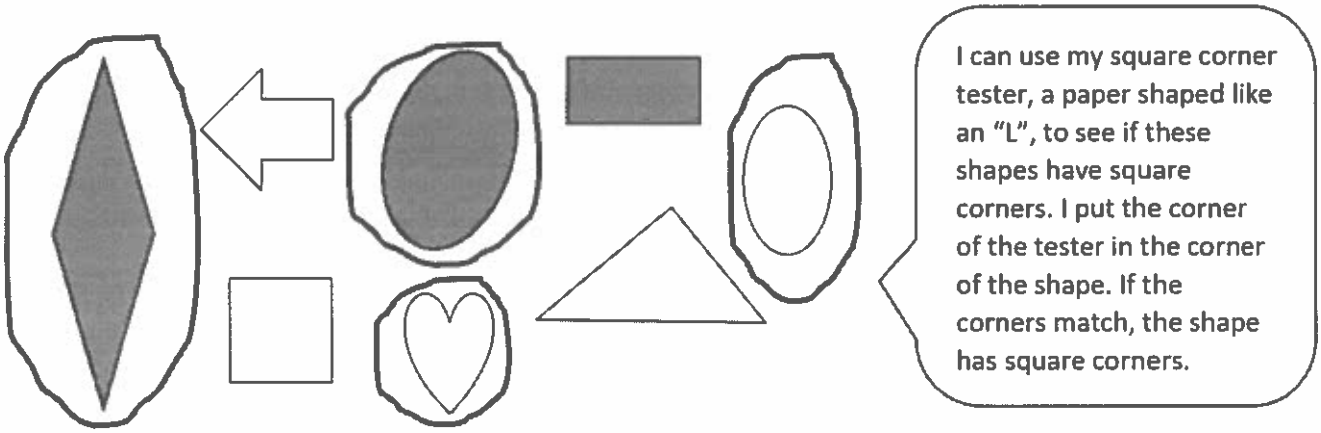
Grade 1 Module 5

G1-M5-Lesson 1

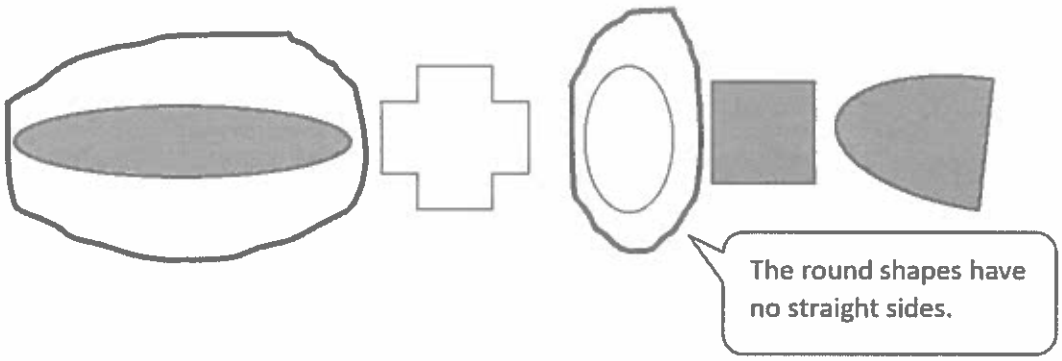
1. Circle the shapes that have exactly 3 corners.



2. Circle the shapes that have no square corners.

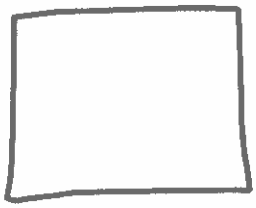


3. Circle the shapes that have no straight sides.



4.

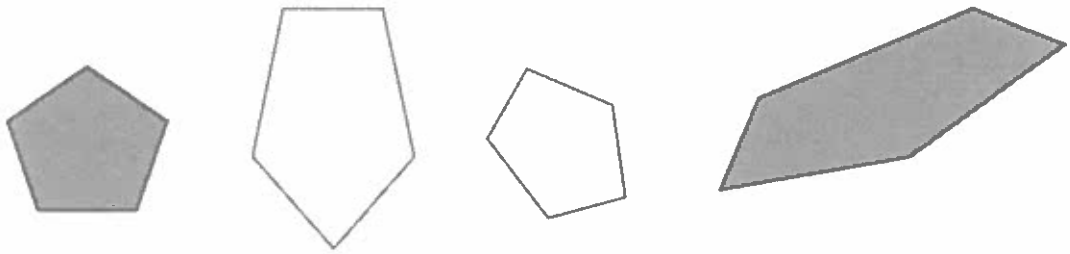
a. Draw a shape that has only square corners.



b. Draw another shape with only square corners that is different from the shape you drew in part (a) and from the ones above.

5. Which attributes, or characteristics, are the same for all of the shapes in Group A?

GROUP A

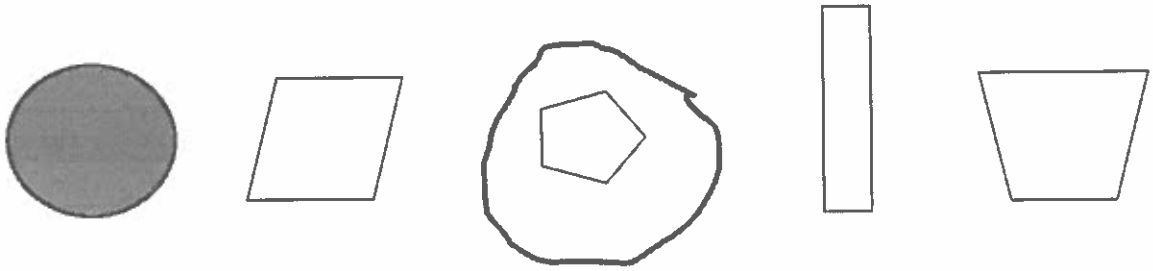


They all *have 5 straight sides*.

They all *have 5 corners*.

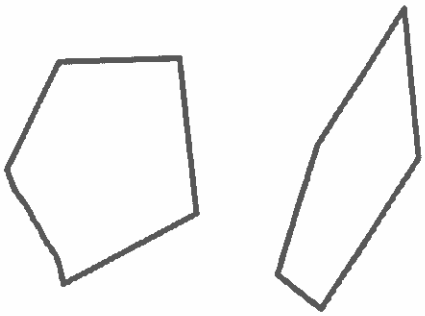
6.

a. Circle the shape that best fits with Group A in Problem 5.

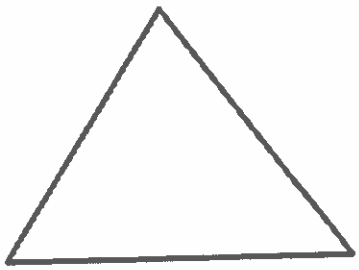


This shape has 5 straight sides and 5 corners just like the shapes from Group A!

b. Draw 2 more shapes that would fit with Group A.



c. Draw 1 shape that would **not** fit with Group A.



I can draw any shape I want, as long as it doesn't have 5 straight sides and 5 corners!

G1-M5-Lesson 2

1. Color the shapes using the key. Write the number of shapes you colored on each line.

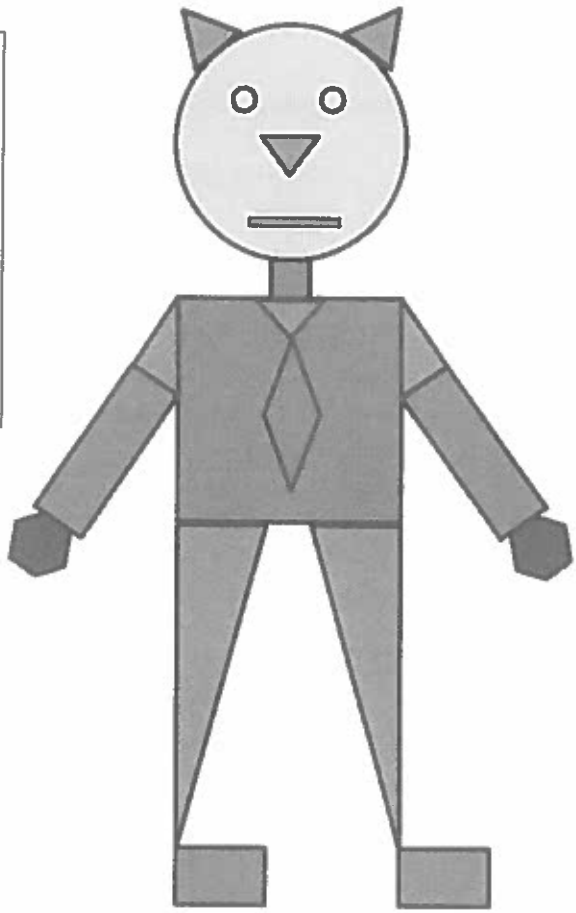
Key

RED—4 straight sides: 8

GREEN—3 straight sides: 8

BLUE—6 straight sides: 2

YELLOW—0 straight sides: 3



I count each side to know which color to make it. I know that yellow will be a circle because round shapes have no straight sides!

A triangle has 3 straight sides and 3 corners.

I colored 8 triangles.

A hexagon has 6 straight sides and 6 corners.

I colored 2 hexagons.

A circle has 0 straight sides and 0 corners.

I colored 3 circles.

The cat's neck and body look like squares. Squares are rhombuses, too! The cat's tie also is a rhombus. That makes 3 rhombuses.

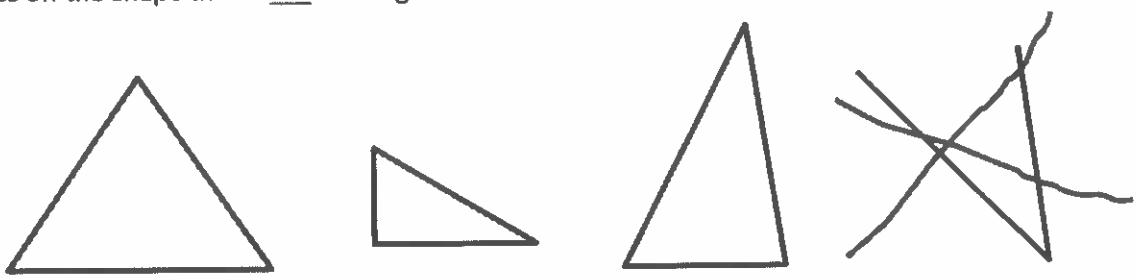
A rhombus has 4 straight sides that are equal in length and 4 corners.

I colored 3 rhombuses.

EUREKA MATH

2. A triangle is a closed shape with 3 straight sides and 3 corners.

a. Cross off the shape that is **not** a triangle.



b. Explain your thinking: *The shape that I crossed off is not a triangle because it is missing an open shape and doesn't have 3 sides.*

G1-M5-Lesson 3

1. Go on a scavenger hunt for 3-dimensional shapes. Look for objects that would fit in the chart below.

Cube	Rectangular Prism	Cylinder	Sphere	Cone
				

I know that this gift is a cube because it has 6 faces and all the faces are square!

My fish tank is like a cube. It has 6 faces, but not all of them are square. That is how I know it is a rectangular prism!

I have a lot of cylinders in my kitchen! There are a lot of cans in there!

The orange I ate for a snack is a sphere. It is round! It has no flat sides!

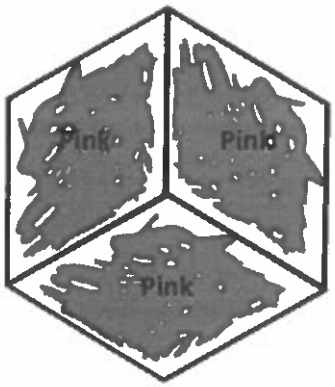
The cone I use at soccer practice is pointy on one end and opens with a circle on the

G1-M5-Lesson 4

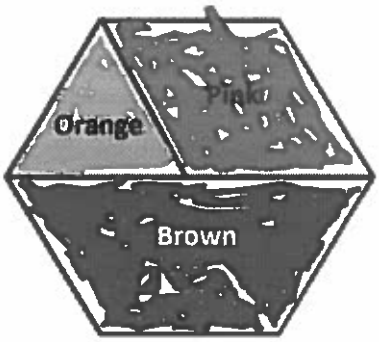
1. Cut out the pattern block shapes from the bottom of the page. Color them to match the key, which is different from the pattern block colors in class. Trace or draw to show what you did.

Hexagon—purple	Triangle—orange	Rhombus—pink	Trapezoid—brown

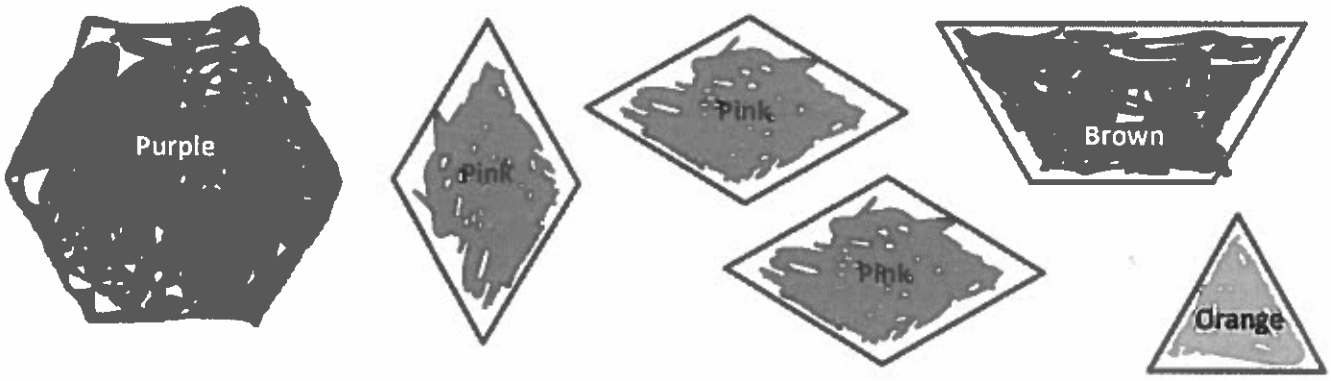
Use 3 rhombuses to make a hexagon.



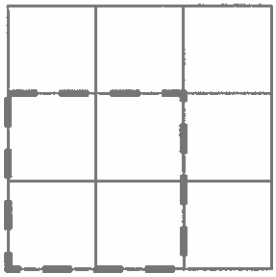
Use 1 trapezoid, 1 rhombus, and 1 triangle to make 1 hexagon.



I can make a bigger shape, or a composite shape, by putting smaller shapes together!



2. How many smaller squares do you see in this square?



I can find 13 squares in this large square.

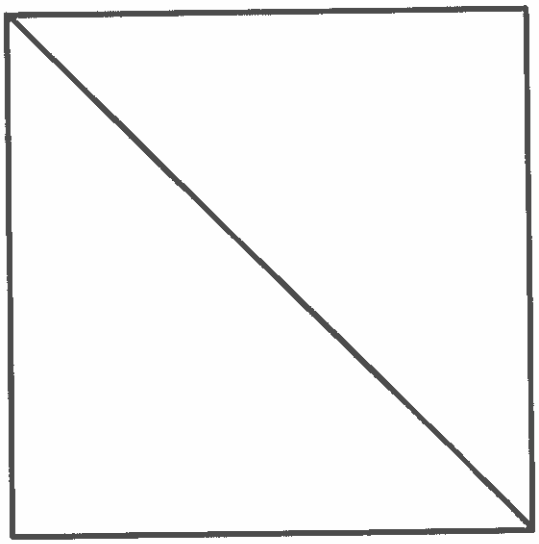
I know each little individual square counts as 1, so that makes 9. There are also 4 medium squares that are made of 4 little squares, so altogether that makes 13.

G1-M5-Lesson 5

Use your tangram pieces to complete the problems below.

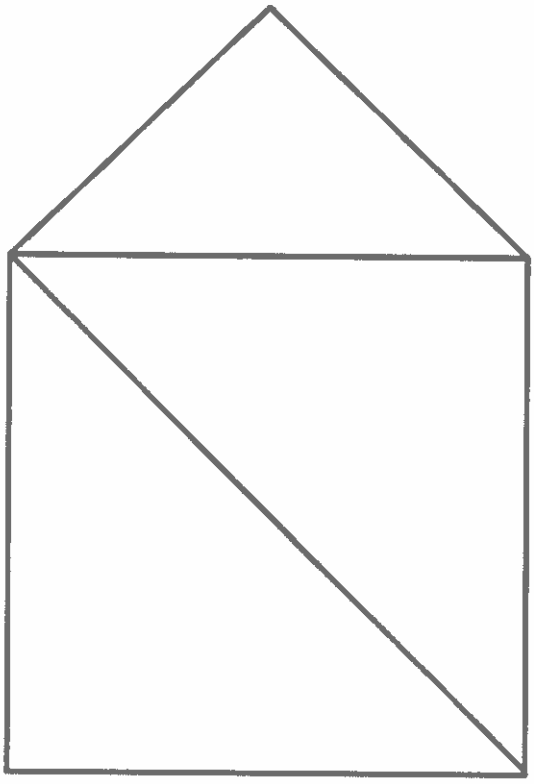
Draw or trace to show the parts you used to make the shape.

1. Use 2 triangles to make a square.



I can make a square with two triangles just like I did in class! I know that if I fold a square in half diagonally, it will make two triangles, so I just put my triangles together with the long sides touching, and it makes a square!

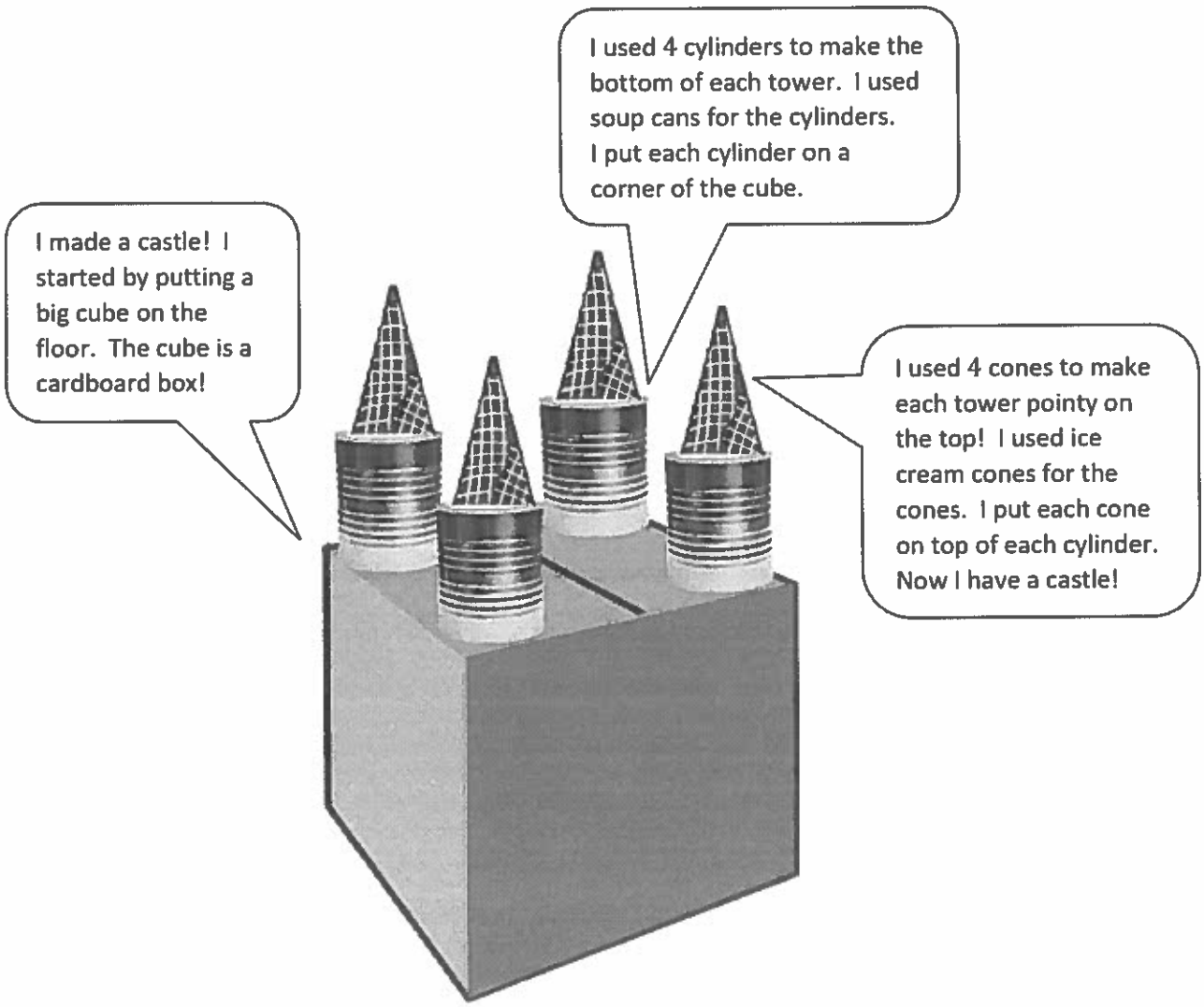
2. Use the square you made and a triangle to make a house.



I can add to my square to make a house. I just take the small triangle from my tangram pieces and put it on top to make a roof!

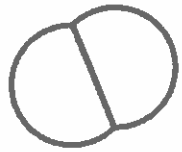
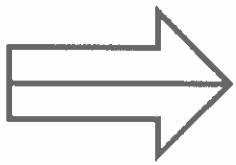
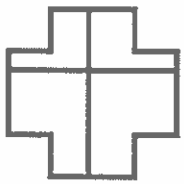
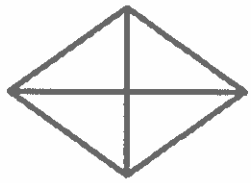
G1-M5-Lesson 6

Use some 3-dimensional shapes to make a structure. Ask someone at home to take a picture of your structure.



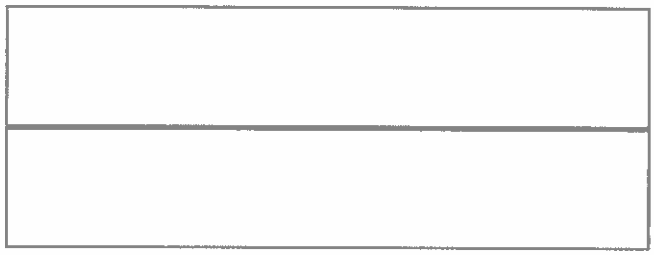
G1-M5-Lesson 7

1. Are the shapes divided into equal parts? Write **Y** for yes or **N** for no. If the shape has equal parts, write how many equal parts there are on the line.

a.  Y 2	b.  N	c.  Y 4
d.  Y 2	e.  N	f.  Y 4

I know there are equal parts when every part is exactly the same. If every part is exactly the same, I just count how many!

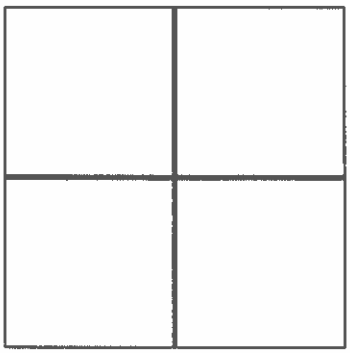
2. Draw 1 line to make 2 equal parts. What smaller shapes did you make?



I can make 2 equal parts in different ways. I can make 2 rectangles or 2 triangles.

I made 2 *rectangles*.

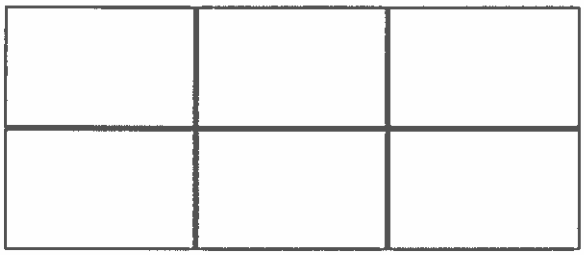
3. Draw 2 lines to make 4 equal parts. What smaller shapes did you make?



I made 4 *squares*.

I can make 4 equal parts by drawing 2 lines. Then I have 4 smaller squares that are all equal!

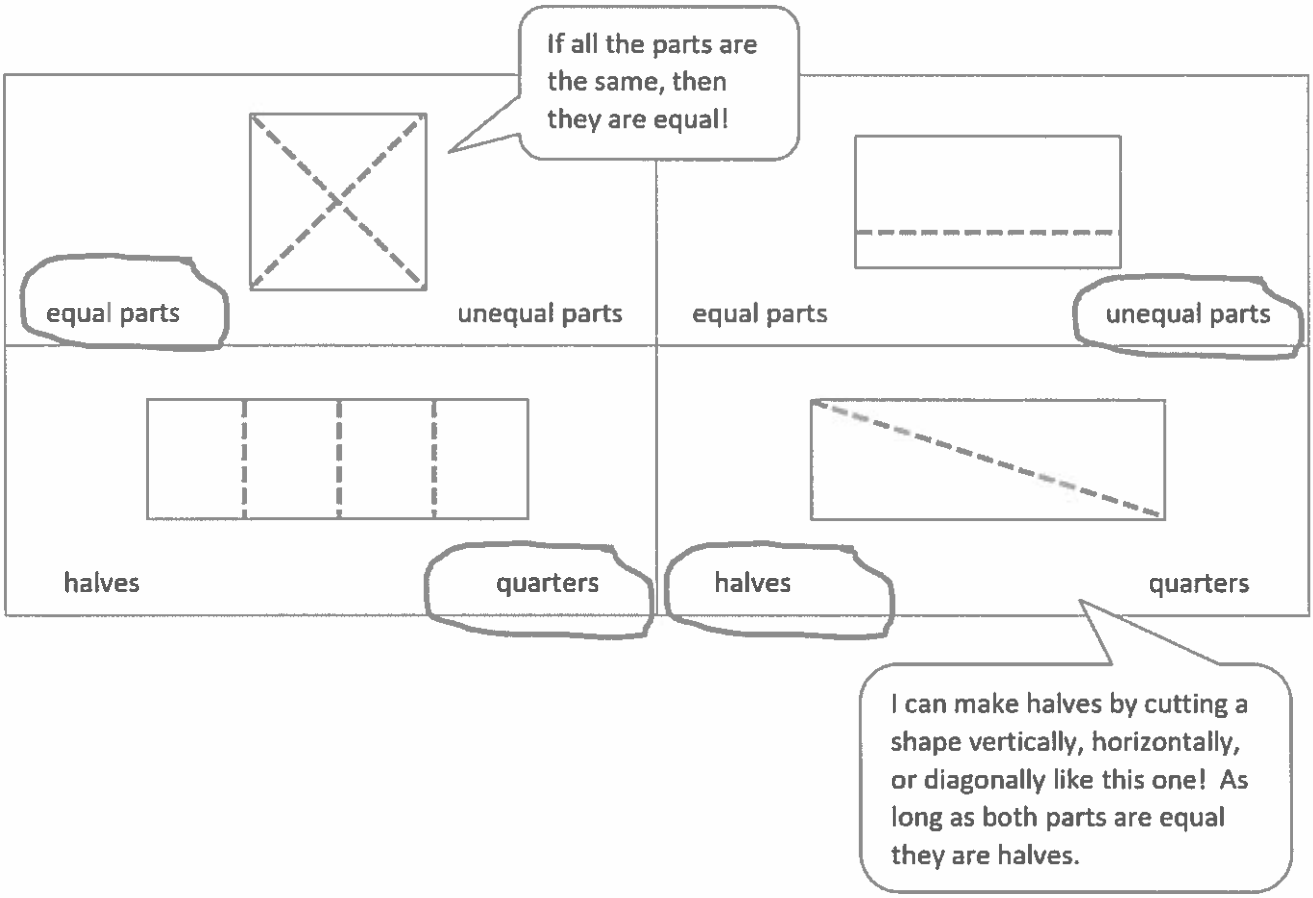
4. Draw lines to make 6 equal parts. What smaller shapes did you make?



I made 6 *rectangles*.

G1-M5-Lesson 8

1. Circle the correct word(s) to tell how each shape is divided.



2. What part of the shape is shaded? Circle the correct answer.

a.

1 half

1 quarter

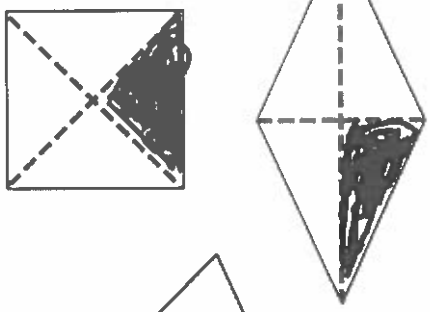
Even though this shape has 4 equal parts, 2 of them are shaded. I can see that half the shape is shaded.

b.

1 half

1 quarter

3. Color 1 quarter of each shape.



To color a quarter, I just color 1 of the 4 equal parts!

4. Color 1 half of each shape.

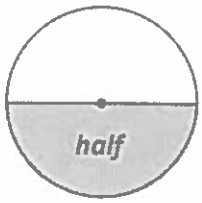
To color a half, I just color 1 of the 2 equal parts!

To color a half of this shape I need to color 2 of the 4 equal parts.

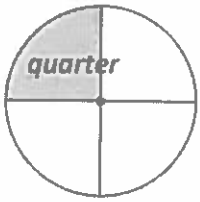
G1-M5-Lesson 9

1. Label the shaded part of each picture as one half of the shape or one quarter of the shape.

A



B



Which picture has been cut into more equal parts? *B*

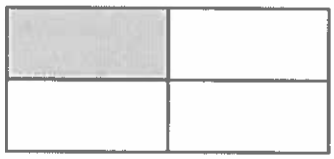
Which picture has larger equal parts? *A*

Which picture has smaller equal parts? *B*

Picture B has been cut into 4 equal parts, and Picture A has been cut into 2 equal parts.

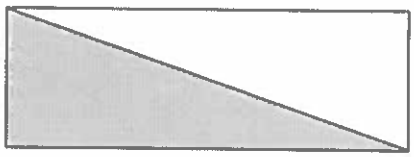
If these were pieces of pizza, I would want the piece from Picture A so that I could have the bigger piece! One half is bigger than one quarter.

2. Write whether the shaded part of each shape is a half or a quarter.



quarter

I know this is a quarter because there are 4 equal parts.

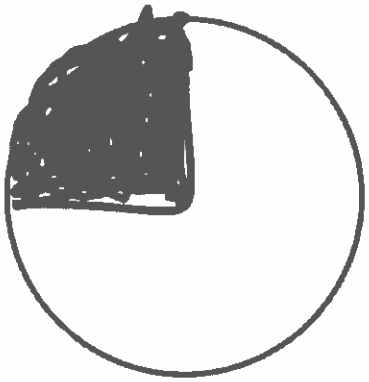


half

I know this is a half because there are 2 equal parts.

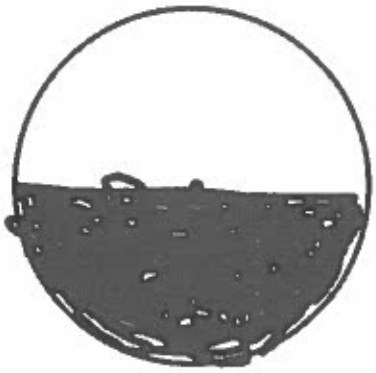
3. Color part of the shape to match its label. Circle the phrase that would make the statement true.

One quarter of the circle



is larger than
is smaller than
is the same size as

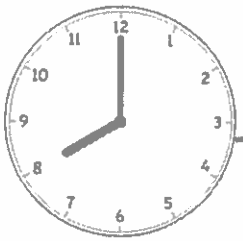
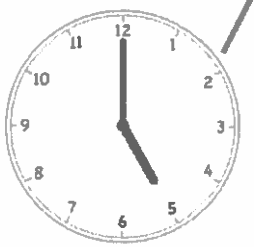
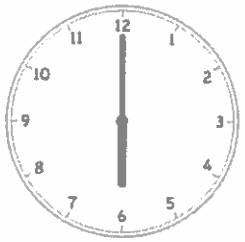
one half of the circle.



A quarter is smaller than a half. If you cut a shape into quarters, you cut it into 4 equal parts. If you cut a shape into halves, you make only 2 equal parts. The more equal parts there are, the smaller the size of the parts.

G1-M5-Lesson 10

1. Match each clock to the time it shows.

5 o'clock

8 o'clock

6 o'clock

12 o'clock

The minute hand is pointing at the 12 on every clock. That means each time is "something o'clock"! To find the answer, I just look at the hour hand, which tells me what the hour is!

2. Put the hour hand on the clock so that the clock matches the time. Then, write the time on the line.

2 o'clock

2:00

I have to make the hour hand point right at the 2. When the time is 2:00, the minute hand is pointing at the 12, and the hour hand is pointing right at the 2.

G1-M5-Lesson 11

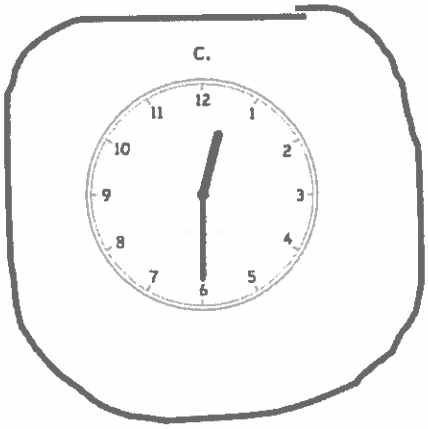
1. Circle the correct clock.

   Half past 12 o'clock

a.

b.

c.



When the time is "half past", the minute hand will always be pointing down, halfway around the clock, at the 6. All these clocks have the minute hand pointing at the 6, so now I just find the clock with the hour hand pointing just past the 12.

The hour hand is not yet at the 1, so I know the hour is still 12.

2. Write the time shown on each clock to tell about Henry's Saturday.

Henry wakes up at 8:30.

He goes to the park at 11:30.

He goes home for lunch at 1:30.

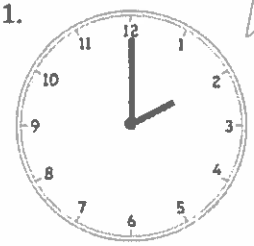
He takes a nap at 2:30.

I can check my work by asking myself if my answer makes sense. It wouldn't make sense for Henry to eat lunch at 8:30, for example.

G1-M5-Lesson 12

Write the time shown on the clock, or draw the missing hand(s) on the clock.

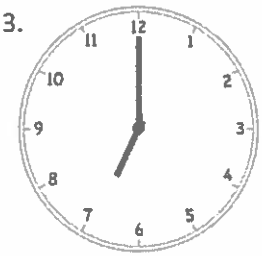
When the time is "o'clock", I draw the minute hand pointing to the 12.

1. 

2 o'clock

2. 

half past 2 o'clock

3. 

7 o'clock

4. 

7:30

When the time is "half past" or 30 minutes, I know the minute hand should be pointing halfway around the clock at the 6.

5. Match the pictures with the clocks.

When I am looking at the hour hand, I can tell if the time is "o'clock" or "half past"! The hour hand should point right at the number when the time is "o'clock"!

After school art class

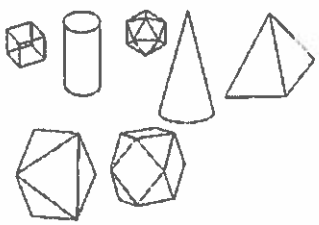
4:00

Walk to school

half past 7 o'clock

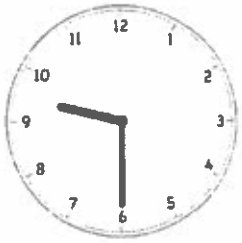
Eat dinner

6 o'clock



Math class

9:30



G1-M5-Lesson 13

1. Fill in the blanks.

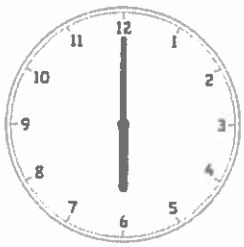
A

B

Clock ___B___ shows half past five.

Clock A shows half past 6. This one was easy because it's easy to read the digital clock. It shows "five-thirty."

A



B

Clock ___A___ shows seven o'clock.

Both clocks show a time that is "o'clock," but when I look carefully at the hour hands, I see that clock B shows 6 o'clock, and clock A shows 7 o'clock.

2. Write the time on the line under the clock.

I also know that if the hour hand is halfway between two numbers, then it will be half past the hour.

a. 

2: 00

b. 

Half past 1

c. 

12: 30

d. 

Half past 10

e. 

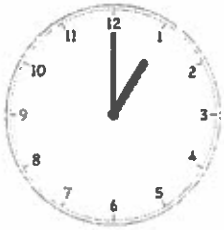
4 o'clock

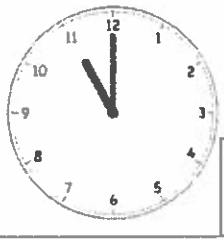
f. 

Half past 5

3. Put a check (✓) next to the clock(s) that show 11 o'clock.

a. 

b. 

c. 

d. 

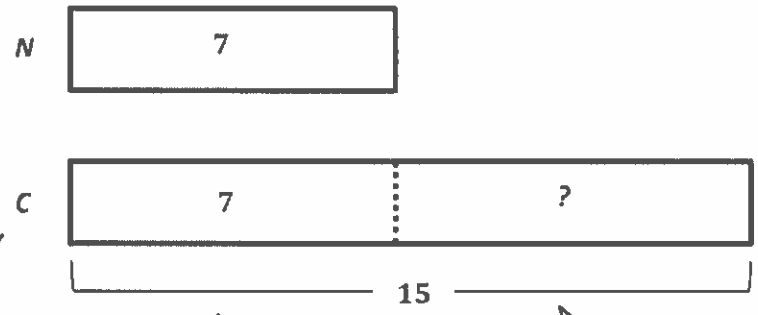
Homework Helpers

Grade 1 Module 6

G1-M6-Lesson 1

Noah ate 7 jelly beans. His older sister Charlotte ate 15 jelly beans. How many more jelly beans did Charlotte eat than Noah?

I can first draw and label a tape diagram to represent the number of jelly beans Noah ate, 7. I can label this tape diagram with the letter *N*.



Next, I can draw and label a second tape diagram right underneath to represent the number of jelly beans Charlotte ate, 15, and label it with the letter *C*. I can see that Charlotte's tape is longer than Noah's because she ate more jelly beans. Drawing and labeling a double tape diagram like this helps me easily compare numbers.

Noah's tape represents 7, so this much of Charlotte's tape is also 7.

This part of Charlotte's tape represents how many more jelly beans she ate. I can write a question mark in this part to represent the unknown.

$15 - 7 = \boxed{8}$

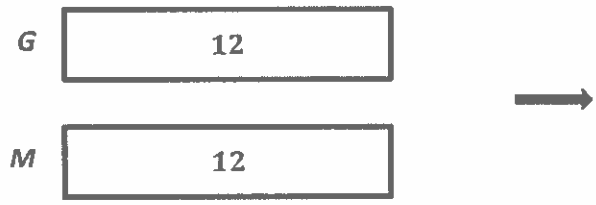
Now I can write a number sentence to find the unknown. There are many strategies to find the unknown. I can count on from 7 to get to 15. I can think of this problem as $7 + ? = 15$ to get 8. But, in this case I choose to use subtraction since it is the most efficient.

Charlotte ate 8 more jelly beans than Noah.

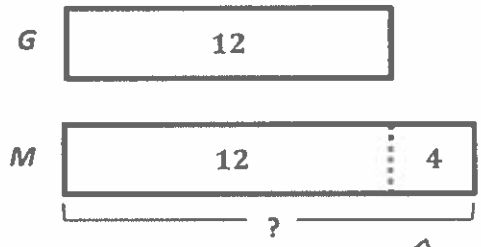
Finally, I need to write my statement that matches my story. This will help me check my answer and make sure it makes sense.

G1-M6-Lesson 2

1. Grace used 12 blocks to build a tower. Matt used 4 more blocks than Grace. How many blocks did Matt use?



I can draw a double tape diagram to represent the story. First, I can draw a tape diagram that represents the number of blocks, 12, that Grace used to build a tower and label her tape with the letter *G*. Then I can draw a second tape diagram to represent the number of blocks Matt used to build his tower and label it with the letter *M*. Since I don't yet know how many blocks Matt used for his tower, I can begin by drawing and labeling his tape the same size as Grace's.



The story says, "Matt used 4 more blocks than Grace." So, I need to draw an extra part of tape next to Matt's to show that he used 4 more blocks than Grace. The unknown is the total number of blocks Matt used. I can label this with a question mark.

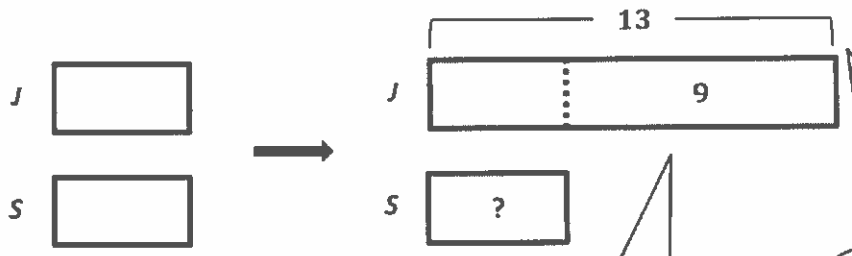
To check that I've drawn and labeled all of the known and unknown information, I can read each part of the story again. As I read, I can touch the part of the double tape diagram that corresponds to what I'm saying.

$12 + 4 = \boxed{16}$

Now I can write a number sentence to help me find the total number of blocks and a statement that answers the question.

Matt used 16 blocks.

2. Susan found 9 fewer seashells than John. John found 13 seashells. How many seashells did Susan find?



I can start by drawing and labeling a double tape diagram to represent the story. I will draw my two tapes the same size.

The first sentence of the story says, "Susan found 9 fewer seashells than John." That means John found 9 more seashells than Susan. I can show this on my diagram by adding another part to John's tape and labeling it with a 9.

The second sentence of the problem says, "John found 13 seashells." That means 13 represents the total number of seashells John found, so I can put the arms around John's entire tape diagram and label it 13. The question, however, is, "How many seashells did Susan find?" I know that if I find out the unknown part for John's tape, then I also find the unknown of Susan's tape.

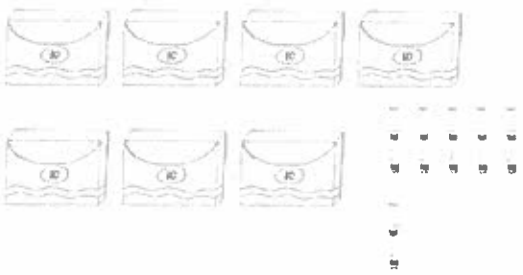
$13 - 9 = \boxed{4}$

Susan found 4 seashells.

I can use subtraction to find the missing part. Since John's missing part is 4, Susan's missing part is also 4 because they are the same size. So, Susan found 4 seashells.

G1-M6-Lesson 3

1. Write the tens and ones. Complete the statement.



I counted 7 boxes of ten markers and 6 more markers. Now I can fill in my place value chart as 7 tens and 6 ones.

tens	ones
7	6

7 tens and 6 ones, or 70 and 6, is 76.

There are 76 markers.

2. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 52

tens	ones
5	2

52 is made of two parts, 50 and 2. 52 the Say Ten way is 5 tens 2. That means there are 5 tens and 2 ones in 52.

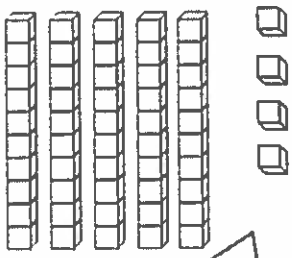
b. 98

tens	ones
9	8

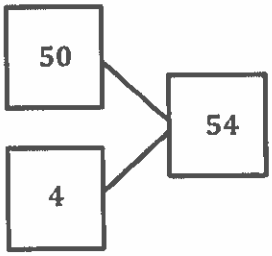
The digit 9 stands for 9 tens, which is the same as 90. The digit 8 stands for 8 ones. So, 9 tens and 8 ones, or 90 and 8, is 98.

G1-M6-Lesson 4

1. Count the objects, and fill in the number bond and place value chart. Complete the sentences to add the tens and ones.



tens	ones
5	4



I counted 5 tens and 4 ones. I can record this on my place value chart.

5 tens and 4 ones is the same as 54. I can break apart 54 as 50 and 4, as shown on my number bond.

Now I can write addition number sentences that match my number bond. I can either start with the part that represents the tens like I did here or start my number sentence with the ones: $4 + 50 = 54$. I can switch the addends around, and the total is still the same.

50 + 4 = 54

5 tens + 4 ones = 54

2. Complete the sentences to add the tens and ones.

a. $70 + 4 =$ 74

b. 6 tens + 8 ones = 68

I can say this number sentence as "70 more than 4 is 74," or "4 more than 70 is 74," or "70 plus 4 is 74," or "7 tens and 4 ones is 74." These are just some of the many different ways to say this number sentence. This helps me think about numbers flexibly.

G1-M6-Lesson 5

1. Find the mystery numbers. Use the arrow way to show how you know.

   a. 1 less than 50 is 49.

   b. 10 more than 50 is 60.

tens	ones
5	0

-1 →

tens	ones
4	9

There are 5 tens and 0 ones in 50. I can write that in the place value chart on the left. 1 less than 50 is 49. From 50 to 49, I subtracted 1. I can draw an arrow from the first place value chart to the second and write −1 above the arrow. In this case, when I found 1 less, both the tens digit and ones digit changed.

tens	ones
5	0

$+10$ →

tens	ones
6	0

10 more than 50 is 60. From 50 to 60, I added 10. I can draw an arrow from the first place value chart to the second and write +10 above the arrow. Only the tens digit changed this time from 5 tens to 6 tens because we added 10 more. The ones digit did not change.

2. Write the number that is 1 *more*.
   a. 60, 61
   b. 79, 80

When I find 1 more or 1 less, sometimes only the ones digit changes, and sometimes both the tens and ones digits change.

3. Write the number that is 10 *less*.
   a. 70, 60
   b. 82, 72

I need to read the directions carefully to know when I am adding 1 more, 1 less, 10 more, or 10 less.

G1-M6-Lesson 6

62 57

62 is greater than 57.

5 tens 6 ones 5 tens 9 ones

56 is less than 59.

I remember that this is the greater than symbol by pretending the open side is a hungry alligator's mouth that eats the bigger number. I can also remember it by seeing that the side with the two endpoints is near the greater number, and the side with one endpoint is near the smaller one.

Circle the correct words to make the sentence true. Use >, <, or = and numbers to write a true statement.

a.

24 (is greater than / is less than / is equal to) 4 tens 2 ones

24 < 42

4 tens 2 ones is the same as 42. 24 and 42 use the same two digits, but 4 tens is greater than 2 tens. That means 24 is less than 42.

b.

70 (is greater than / is less than / is equal to) 6 tens 9 ones

70 > 69

6 tens 9 ones is the same as 69. 69 is one less than 70. So, 70 is greater than 69.

G1-M6-Lesson 7

1. Complete the chart by filling in the missing numbers.

0	100
1	101
2	102
3	103
4	104
5	105
6	106
7	107
8	108
9	109
10	110

I want to be sure to read these numbers without saying *and* between one hundred and the ones place unit. I can read these numbers as, "One hundred one, one hundred two, one hundred three." When I say, "100 *and* 1," it means 100 + 1, but the name of the number is one hundred one.

2. Compare the 2 columns. What pattern do you notice?

The column on the left counts from 1 to 10. The column on the right counts from 100 to 110. The pattern is that at 100 the numbers start over again from 0, only this time you say and write 100 first. So, instead of 1, 2, 3, 4, it is 101, 102, 103, 104.

3. Fill in the missing numbers to continue the counting sequence.

a. 97, 96, 95, 94

This one is tricky because it is counting down!

b. 99, 100, 101, 102

This one is tricky because it is counting to a larger unit. It is going from a 2-digit number to a 3-digit number.

G1-M6-Lesson 8

1. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 74

tens	ones
7	4

74 can be broken apart as 70 and 4, which is the same as 7 tens and 4 ones.

b. 109

tens	ones
10	9

10 tens is the same as 100, and 9 more is 109.

2. Write the number.

a. 10 tens 5 ones is the number 105.

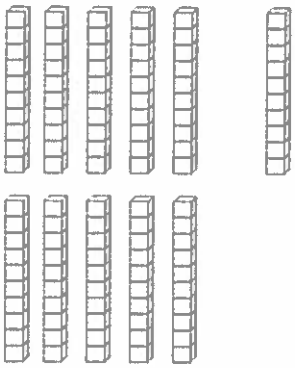
I can read this number as one hundred five, not one hundred *and* five. One hundred *and* five describes 100 + 5.

b. 11 tens 8 ones is the number 118.

11 tens is the same as 110, and 8 more is 118. I can also show 118 as 10 tens and 18 ones. It is the same number, just written differently.

G1-M6-Lesson 9

1. Count the objects. Fill in the place value chart, and write the number on the line.



tens	ones
11	0

110

It is important to count efficiently. When cubes are in sticks of ten, it is much easier and faster to count than if each cube is counted individually.

Since these ten sticks are set up in 5-groups, it is easy to count them quickly. I see 5 tens and 5 tens and 1 more ten, which is 11 tens. Since I know there are 11 tens, I know there are 110 cubes, or 110 ones.

2. Use quick tens and ones to represent the following numbers. Write the number on the line.

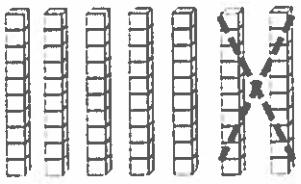
tens	ones
10	2

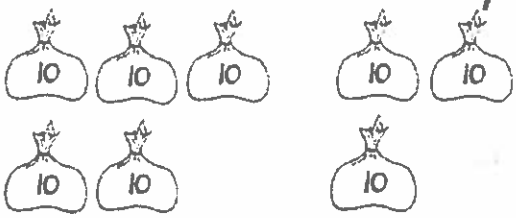
102

Quick tens represent 1 stick of 10 cubes, or 1 ten. It helps me represent large numbers easily and efficiently.

G1-M6-Lesson 10

1. Complete the number bond or number sentence, and draw a line to the matching picture.





80

30 50

The number bond shows that 80 is the total, and 30 is one part. 3 tens + 5 tens = 8 tens. It's like 3 + 5 = 8. The numbers stay the same, but the units change!

70 − 20 = 50

70 is the total, and 50 is one part. 7 tens minus the mystery number equals 5 tens. The mystery number is 2 tens!

80 − 10 = 70

2. Count the dimes to add or subtract. Write a number sentence to match the dimes.

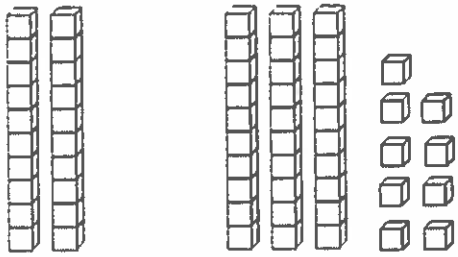
$0 - 30 = 60$

$60 + 40 = 100$

I can think of $6 + 4 = 10$, to help me. 6 dimes + 4 dimes equals 10 dimes. $60 + 40 = 100$. There is a total of 10 tens!

G1-M6-Lesson 11

1. Solve using the pictures. Complete the number sentence to match.



20 + 39 = 59

I can add 2 tens and 3 tens first. That's 5 tens. I have 9 ones; the ones don't change.

2. Use a number bond to solve.

40 + 38 = 78

30 8

40 + 30 = 70

70 + 8 = 78

I can break 38 into 30 and 8 with the number bond. I add 40 and 30 first, which is 70, and then add on 8 to make 78.

3. Solve. You may use number bonds to help you.

23 + 40 = 63

I can start at 23 and count on by tens until I get to 63. I count up four tens: 33, 43, 53, 63. 63 is my total!

34 + 50 = 84

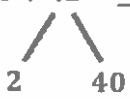
30 4

I can check my work by drawing a number bond. Since 3 + 5 = 8, I know that 30 + 50 = 80. 34 is the missing part because the total, 84, has 4 ones.

G1-M6-Lesson 12

1. Solve.

$38 + 42 =$ 80



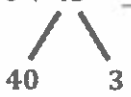
$38 + 2 = 40$

$40 + 40 = 80$

I can think about the ones first. Since 38 is close to 40, I can make the next ten! I use a number bond to break apart 42, and then I add $38 + 2$. Then, $40 + 40 = 80$.

2. Solve using number bonds. You may choose to add the ones or tens first. Write the two number sentences to show what you did.

a. $56 + 43 =$ 99

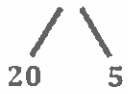


$56 + 40 = 96$

$96 + 3 = 99$

I can break apart 43 into tens and ones. I can add tens first. So, $56 + 40 = 96$. I can't forget to add the 3 ones: $96 + 3 = 99$.

b. $25 + 45 =$ 70



$45 + 5 = 50$

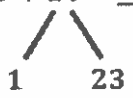
$50 + 20 = 70$

This time, I add ones first. When I break apart 25, I see that I can add 5 to 45 to make 50. That's a friendly number! Then I just add 5 tens + 2 tens = 7 tens, or 70.

G1-M6-Lesson 13

Solve and show your work.

1. $49 + 24 = \underline{73}$

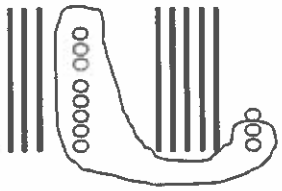


$49 + 1 = 50$

$50 + 23 = 73$

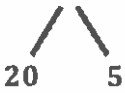
I can think about making the next ten! 49 is close to 50, so I can break apart 24 to add 1 to 49. Then, I add the rest, so $50 + 23 = 73$.

2. $38 + 53 = \underline{91}$



I can show each number with quick tens and ones. When I look at the ones, I can make another group of ten with 1 leftover. So, I have a total of 9 tens and 1 one, or 91.

3. $25 + 58 = \underline{83}$

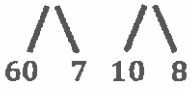


$58 + 20 = 78$

$78 + 5 = 83$

I can start with 58 and add 20. To add $78 + 5$, I can break apart 5 into 2 and 3. It's easy to solve in my head because $78 + 2 = 80$, and 3 more is 83.

4. $67 + 18 = \underline{85}$



$60 + 10 = 70$

$7 + 8 = 15$

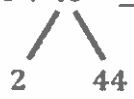
$70 + 15 = 85$

I can break apart both numbers into tens and ones. I add tens first and then ones. I can combine them, so $70 + 15 = 85$.

G1-M6-Lesson 14

Solve and show your work.

1. $38 + 46 = \underline{84}$

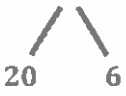


$38 + 2 = 40$

$40 + 44 = 84$

First, I think about making the next ten! I can break apart 46 and add 2 to 38, which makes 40. Then, I add the rest, so $40 + 44 = 84$.

2. $26 + 55 = \underline{81}$

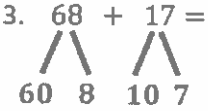


$55 + 20 = 75$

$75 + 6 = 81$

This time, I can start with 55 and add 20. Then, to add $75 + 6$, I can break apart 6 into 5 and 1 to make a ten. $75 + 5 = 80$, and 1 more is 81.

3. $68 + 17 = \underline{85}$



$60 + 10 = 70$

$8 + 7 = 15$

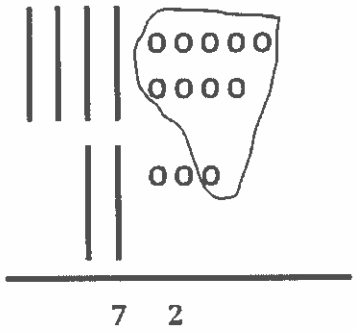
$70 + 15 = 85$

I can break both numbers apart into tens and ones. I add tens first and then ones. I can combine them, so $70 + 15 = 85$.

G1-M6-Lesson 15

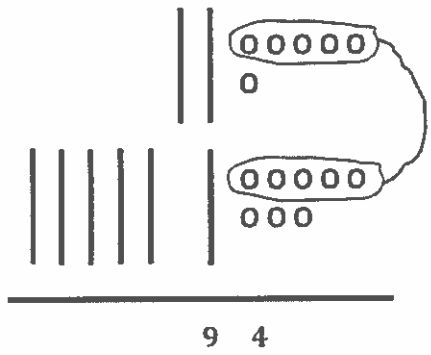
Solve using quick tens and ones drawings. Remember to line up your tens with tens and ones with ones. Write the total below your drawing.

1. $49 + 23 =$ 72



49 is 4 tens and 9 ones. 23 is 2 tens and 3 ones. I can line up the tens and the ones to add. I add the ones first. 9 ones and 3 ones is 12 ones. That's 10 and 2. I can circle a new ten and add it to 6 tens. Now I have 7 tens and 2 ones.

2. $26 + 68 =$ 94

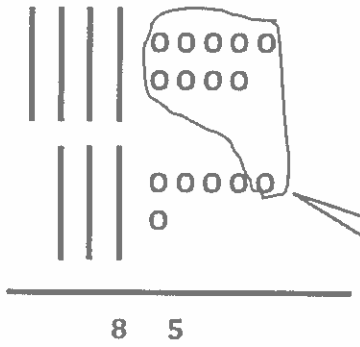


I make sure to draw each number with quick tens and ones. When I draw the number 68, I put the 6 tens under the 2 tens, and I put the 8 ones under the 6 ones from 26. Look, my 5-group drawings help me to see 10 ones right away!

G1-M6-Lesson 16

Solve using quick tens and ones drawings. Remember to line up your drawings and rewrite the number sentence vertically.

1. $49 + 36 =$ 85



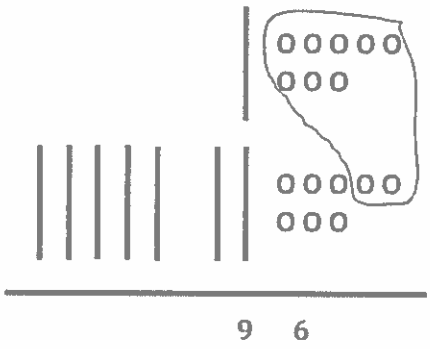
8 5

$$\begin{array}{r} 4\ 9 \\ +\ 3\ 6 \\ \hline 8\ 5 \end{array}$$

I can draw 49 as 4 quick tens and 9 ones. So, I write 4 in the tens place and 9 in the ones place. I do the same with 36. I add 4 tens to 3 tens and 9 ones to 6 ones. $9 + 6 = 15$. That's 1 ten 5 ones. Look at where I record the new ten!

9 needs 1 from 6 to get to 10. 10 and 5 is 15.

2. $18 + 78 =$ 96



9 6

$$\begin{array}{r} 1\ 8 \\ +\ 7\ 8 \\ \hline 9\ 6 \end{array}$$

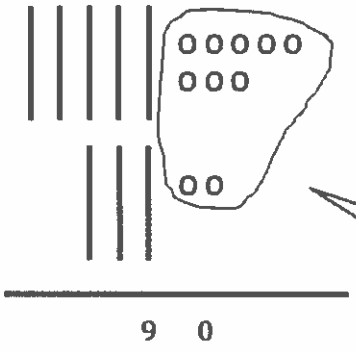
When I add 8 ones plus 8 ones, I get 16 ones, which is 1 ten and 6 ones. I record the new ten below the second number in the tens place. 1 ten + 7 tens + 1 ten = 9 tens.

8 needs 2 from 8 to get to 10. 10 and 6 is 16.

G1-M6-Lesson 17

Solve using quick tens and ones drawings. Remember to line up your drawings and rewrite the number sentence vertically.

1. $58 + 32 =$ 90

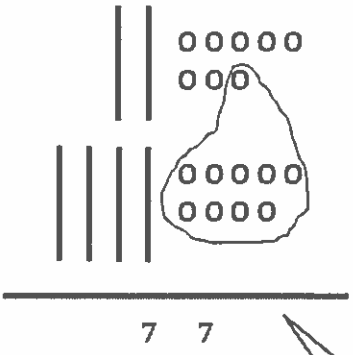


$$\begin{array}{r} 5\ 8 \\ +\ 3\ 2 \\ \hline 9\ 0 \end{array}$$

I can draw 58 as 5 quick tens and 8 ones. So, I write 5 in the tens place and 8 in the ones place. I do the same with 32. I add 5 tens to 3 tens and 8 ones to 2 ones: $8 + 2 = 10$. That's 1 ten 0 ones. Look at where I record the new ten!

8 needs 2 to make 10. Now there are 0 ones left.

2. $28 + 49 =$ 77



$$\begin{array}{r} 2\ 8 \\ +\ 4\ 9 \\ \hline 7\ 7 \end{array}$$

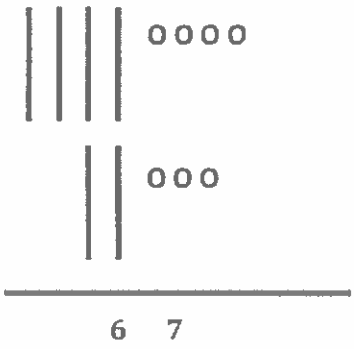
When I add 8 ones plus 9 ones, I get 17 ones, which is 1 ten and 7 ones. I record the new ten below the second number in the tens place. 2 tens + 4 tens + 1 ten = 7 tens.

9 needs 1 from 8 to get to a new 10. Now there are 7 tens and 7 ones.

G1-M6-Lesson 18

Use any method you prefer to solve the problems below.

1. $44 + 23 = \underline{67}$



$$\begin{array}{r} 4\ 4 \\ +\ 2\ 3 \\ \hline 6\ 7 \end{array}$$

I want to draw quick tens and ones to help me solve this problem. The lines represent my tens. The circles represent my ones. I know it is important to carefully line up the tens to tens and the ones to ones.

2. $57 + 23 = \underline{80}$

$$20 \quad 3$$

$$57 \xrightarrow{+20} 77 \xrightarrow{+3} 80$$

I want to use the arrow way as my strategy. I can break apart 23 into 20 and 3. I can add 20 first and then 3.

3. $48 + 15 = \underline{63}$

$$2 \quad 13$$

$$48 + 2 = 50$$

$$50 + 13 = 63$$

48 is so close to 50. I can use the make ten strategy! 48 needs 2 more to make the next ten, 50. I can break apart 15 into 2 and 13. First I can add $48 + 2 = 50$. Then I can add the rest, $50 + 13 = 63$.

G1-M6-Lesson 19

Use any strategy you prefer to solve the problems below.

1. $64 + 33 = 97$

$60 \quad 4 \quad 30 \quad 3$

$60 + 30 = 90$

$4 + 3 = 7$

$90 + 7 = 97$

I can use double number bonds and break apart BOTH numbers. I can add the tens to the tens,
6 tens + 3 tens = 9 tens, and the ones to the ones,
4 ones + 3 ones = 7 ones. Then, I add all my tens and ones together, 9 tens + 7 ones = 97 ones.

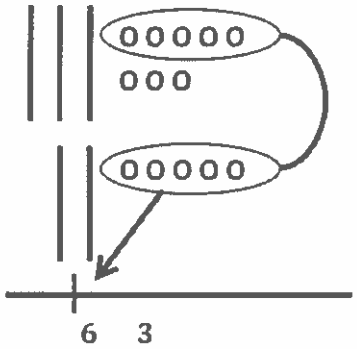
2. $37 + 35 = 72$

$30 \quad 5$

$37 \xrightarrow{+30} 67 \xrightarrow{+5} 72$

I might want to break apart just one of the numbers. If I break 35 into 30 and 5, I can add 30 first and then add 5. The arrow way is one way I can show my thinking.

3. $38 + 25 = 63$

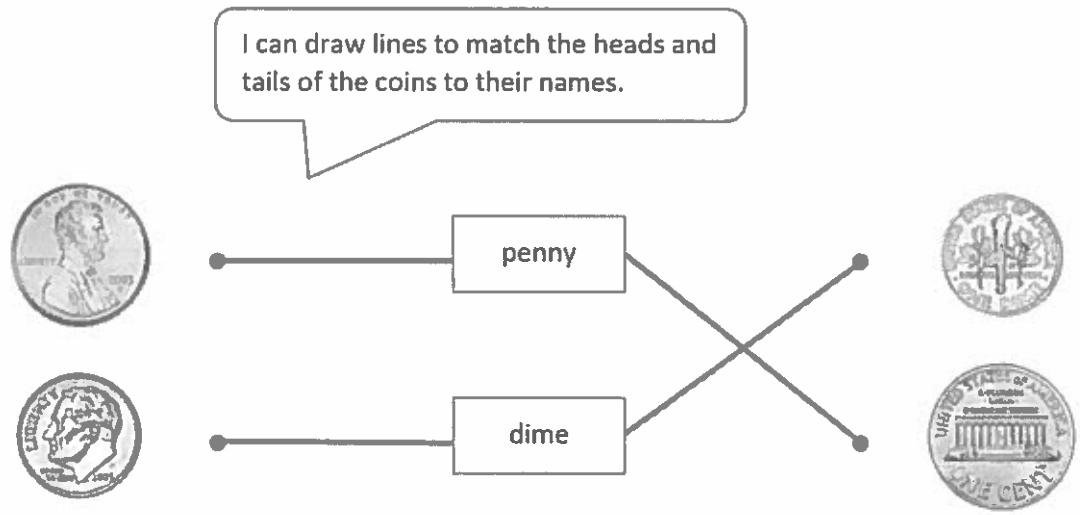


$$\begin{array}{r} 3\ 8 \\ +\ 2\ 5 \\ \hline 6\ 3 \end{array}$$

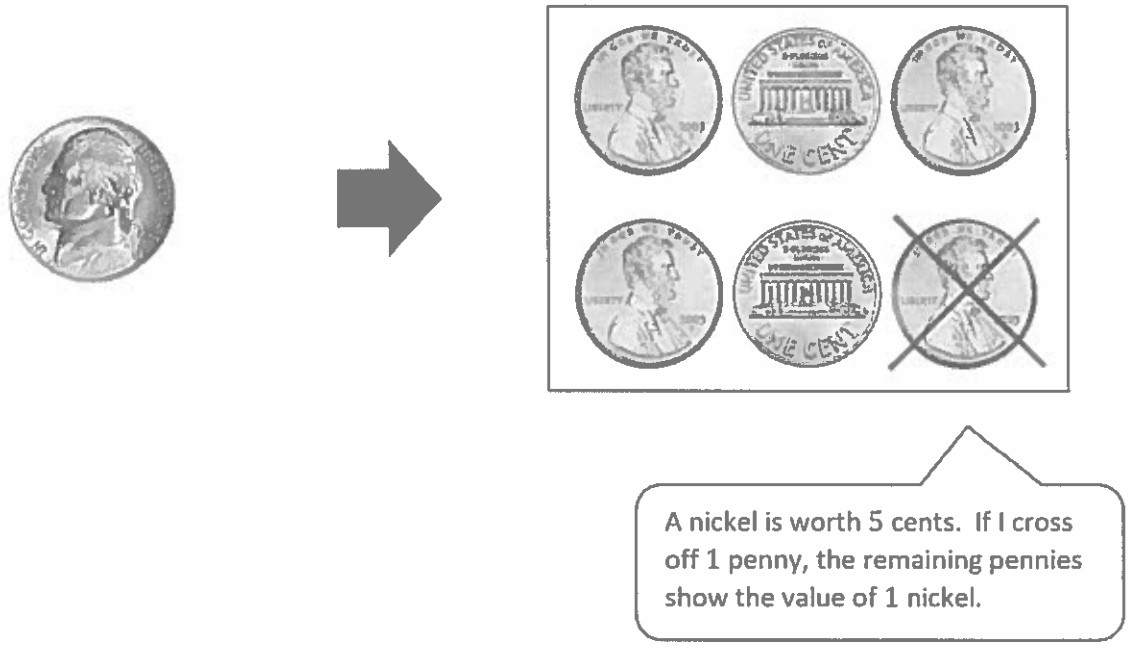
Another strategy I can use is drawing quick tens and ones.
8 ones + 5 ones = 13 ones. I can bundle 10 of the ones to make 1 ten. I still have 3 ones.
3 tens + 2 tens + 1 ten = 6 tens.
There are 6 tens and 3 ones!

G1-M6-Lesson 20

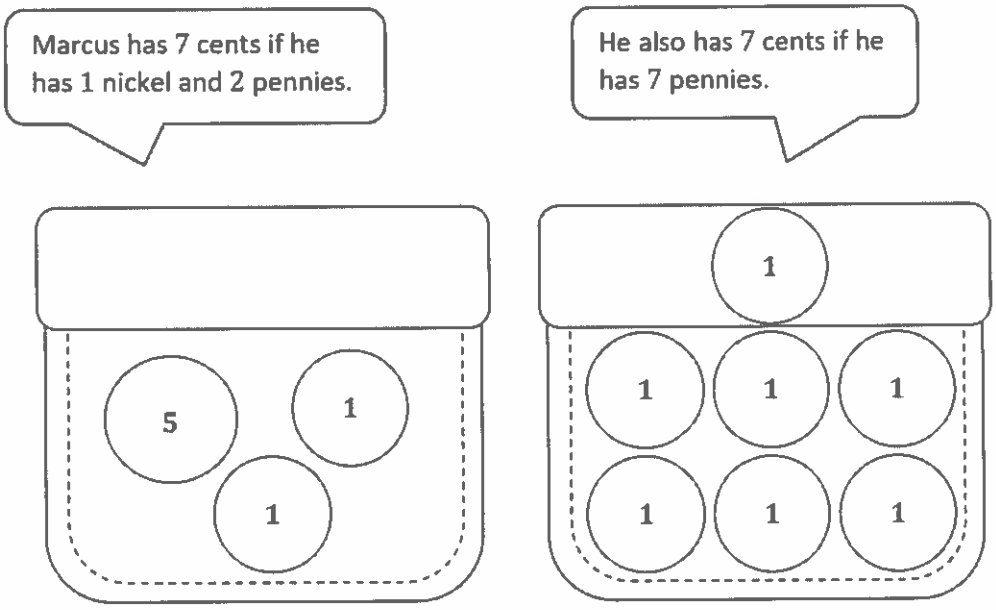
1. Match



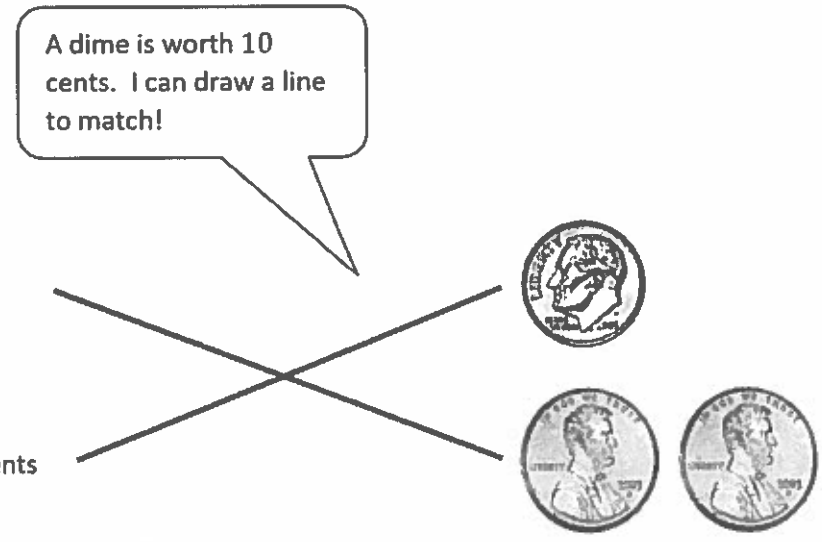
2. Cross off some pennies so the remaining pennies show the value of the coin to their left.



3. Marcus has 7 cents in his pocket. Draw coins to show two different ways he could have 7 cents.



4. Solve. Draw a line to match the number sentence with the coin or coins that give the answer.



G1-M6-Lesson 21

1. Use the word bank to label the coins.

pennies	dimes

pennies

I am learning the names and values of coins!

2. Write the value of each coin.

The value of 1 penny is 1 cent.

3. Your papa said he will give you 1 dime or 1 penny. Which would you take, and why?

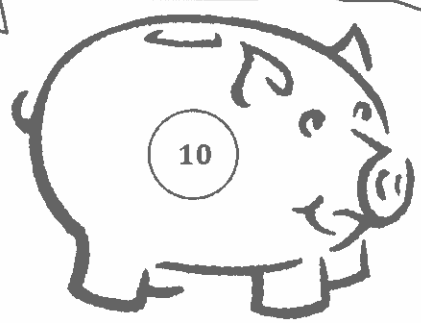
I would take 1 dime because it is worth 10 cents. A penny is only worth 1 cent.

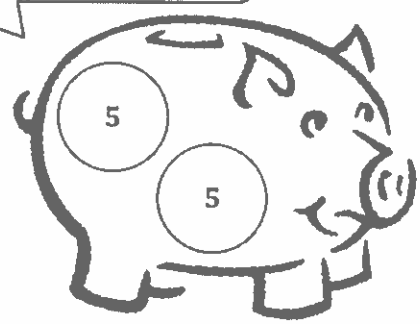
I would take the dime because it is more money!

4. Kira has 10 cents in her piggy bank. Which coin or coins could be in her bank? Draw to show two different sets of coins that could be in Kira's piggy bank.

A dime is worth 10 cents. Maybe she has 1 dime.

A nickel is worth 5 cents. She might have 2 nickels.





G1-M6-Lesson 22

1. Match the label to the correct coins, and write the value. There may be more than one match for each coin name.

a. quarter ___25___ cents

b. nickel ___5___ cents

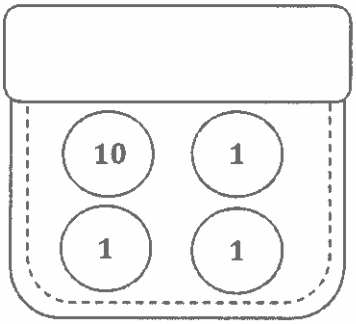
This is the heads side of a nickel.

The quarter is a little bigger than the nickel.

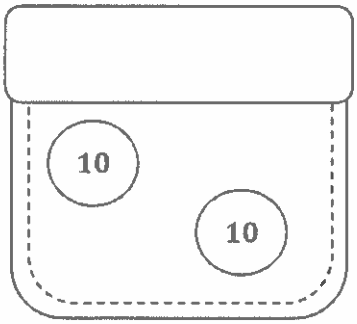
2. Brian has 4 coins in his pocket, and Larry has 2 coins. Larry has more money than Brian. Draw a picture to show the coins each boy might have.

Hmmm ..., Brian has more coins, but Larry has more money. How is this possible?

Brian's Pocket



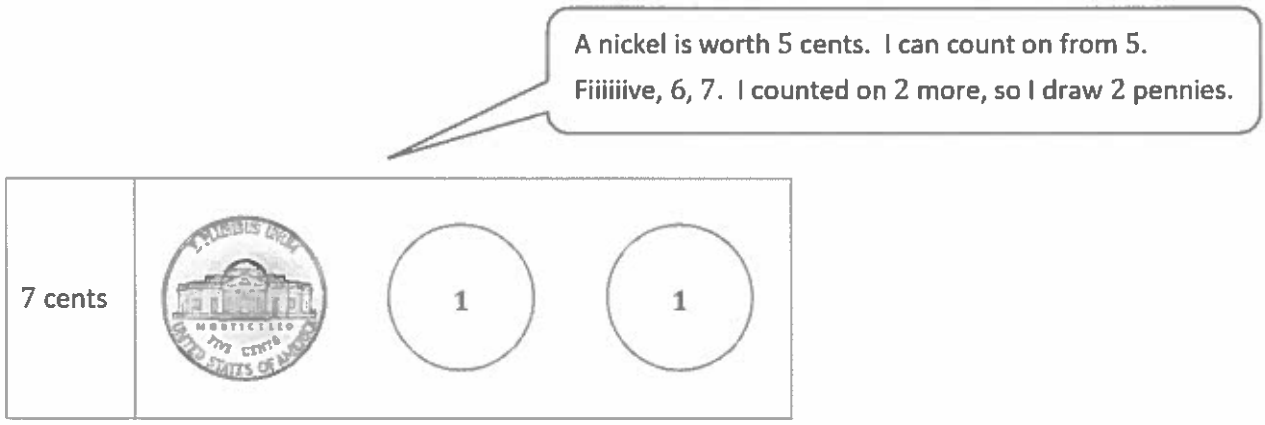
Larry's Pocket



I have an idea! Maybe Brian has 1 dime and 3 pennies. That's 13 cents. Larry might have 2 dimes, which is 20 cents. 20 is greater than 13, so Larry has more money!

G1-M6-Lesson 23

1. Add pennies to show the written amount.



2. Write the value of the group of coins.

33 cents

G1-M6-Lesson 24

1. Find the value of each set of coins. Complete the place value chart.
   Write an addition sentence to add the value of the dimes and the value of the pennies.

1 dime = 1 ten.
There are 10 dimes, so there are 10 tens.

1 penny = 1 one.

tens	ones
10	1

$100 + 1 = 101$

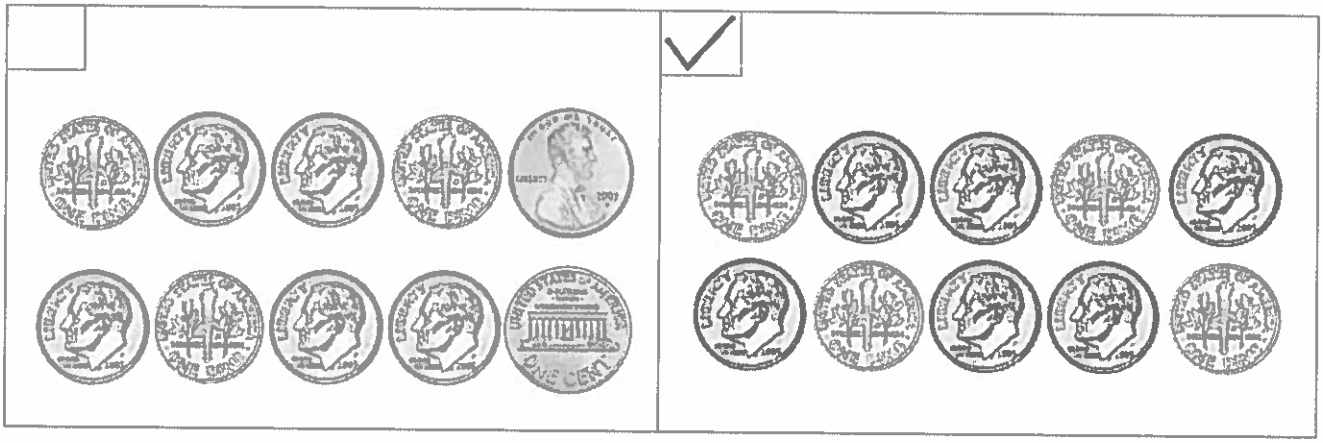
10 tens + 1 one is the same as $100 + 1$.
$100 + 1 = 101$

2. Check the set that shows the same amount. Fill in the place value chart to match 100 cents.

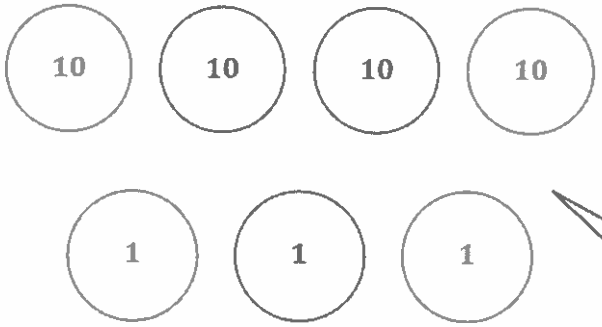
There are 8 dimes and 2 pennies, so there are 8 tens and 2 ones: $80 + 2 = 82$. This set shows 82 cents.

tens	ones
10	0

There are 10 dimes and 0 pennies, so there are 10 tens and 0 ones: $100 + 0 = 100$. This set shows 100 cents.



3. Draw 43 cents using dimes and pennies. Fill in the place value chart to match.



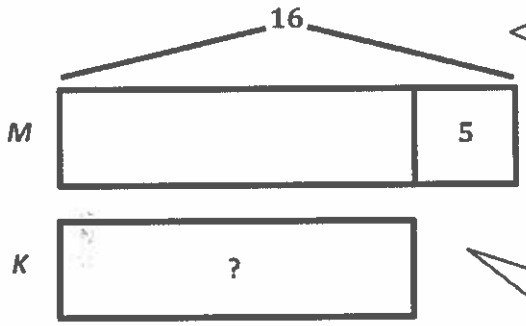
tens	ones
4	3

I can make 43 cents with 4 dimes and 3 pennies. That's 4 tens and 3 ones!

G1-M6-Lesson 25

Read the word problem.
Draw a tape diagram or double tape diagram and label.
Write a number sentence and a statement that matches the story.

1. Maria used 16 beads to make a bracelet. Maria used 5 more beads than Kim. How many beads did Kim use to make her bracelet?



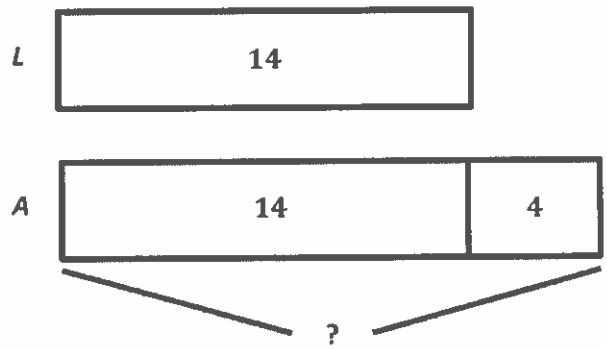
I can draw a double tape diagram to compare Maria's and Kim's beads. I can draw Maria's and Kim's tapes the same length. Since I know they don't have the same amount of beads, I ask myself, Who has more? Maria! She has 5 more beads than Kim. I'll add more to Maria's tape and label it with 5 because she has 5 more beads than Kim.

$16 - 5 = \boxed{11}$

Kim used **11** *beads.*

I can draw arms to include both parts of Maria's tape because the whole is 16. The first part of Maria's tape is equal to Kim's, so if I figure out Maria's first part, I'll know Kim's tape, too!

2. Leo picked 14 strawberries. Leo picked 4 fewer strawberries than Agnes. How many strawberries did Agnes pick?



$14 + 4 = \boxed{18}$

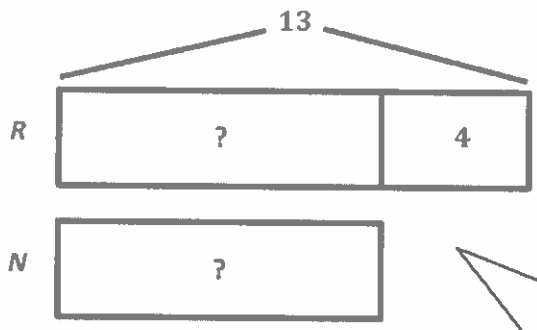
Agnes picked **18** *strawberries.*

I slow down and read every part of the problem carefully. If Leo picked 4 fewer strawberries than Agnes, then Agnes has 4 more than Leo! This is an addition problem, not subtraction!

G1-M6-Lesson 26

Read the word problem.
Draw a tape diagram or double tape diagram and label.
Write a number sentence and a statement that matches the story.

1. Ruben has 13 markers. Nashrah has 4 fewer markers than Ruben. How many markers does Nashrah have?



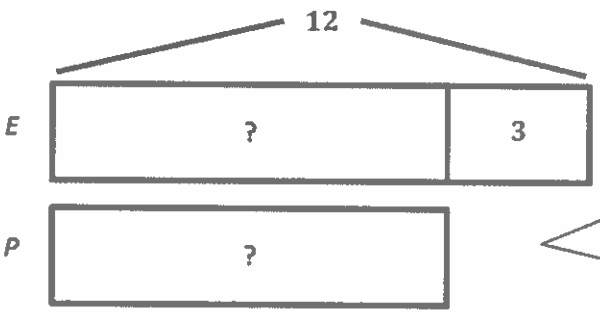
I can draw a double tape diagram with equal tapes for both Ruben and Nashrah. Since I know they don't have an equal amount of markers, I ask myself, who has more? Since Nashrah has fewer markers, and I know that Ruben has 4 more markers, I'll add more to Ruben's tape and label it with 4 since he has 4 more markers.

I can draw arms to show Ruben's total, which is 13 markers. The first part of Nashrah's tape is equal to Ruben's, so if I figure out Ruben's first part, I'll know how many markers Nashrah has. I can use subtraction to solve.

$13 - 4 = \boxed{9}$

Nasrah has 9 markers.

2. Emil found 12 leaves on the playground. He found 3 more leaves than Payton. How many leaves did Payton find?



$12 - 3 = \boxed{9}$

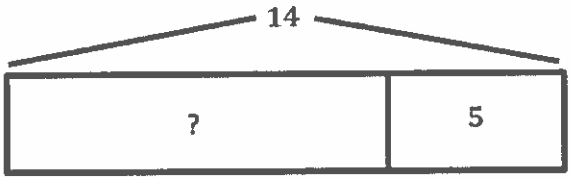
Payton found 9 leaves.

I must read every part of the problem carefully. Sometimes *more* doesn't mean to add! Since Emil found 3 more leaves than Payton, I have to subtract to find out how many leaves Payton found.

G1-M6-Lesson 27

Read the word problem.
Draw a tape diagram or double tape diagram and label.
Write a number sentence and a statement that matches the story.

1. Some children were playing in the gym. 5 children came to join, and now there are 14 children. How many children were in the gym in the beginning?



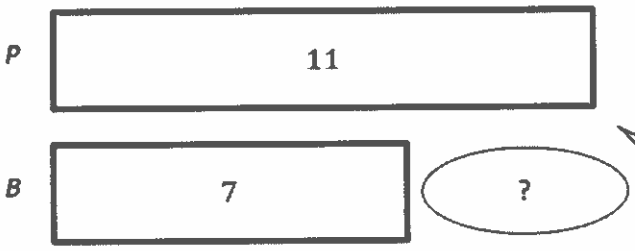
This problem feels tricky because I don't know how many children were playing at first. That's my unknown! It helps when I read one sentence at a time and draw.

$14 - 5 = \boxed{9}$

9 children were in the gym in the beginning.

My drawing shows that I know the whole and one part. I can use subtraction to find out how many children were playing in the beginning. Or, I could have used addition to solve: $\_\_ + 5 = 14$.

2. Peter biked for 11 minutes. Belle biked for 7 minutes. How much shorter in time was Belle's bike ride?



$7 + \boxed{4} = 11$

Belle's bike ride was 4 minutes shorter.

Since I am comparing this time, I draw a double tape diagram. Since Peter biked for more minutes, his tape is longer than Belle's. I can use addition to solve for the missing part, which is 4 minutes.

G1-M6-Lesson 28

1. Teach a family member some of our counting activities. Check all the activities you do together.

   - [ ] Happy Count by ones.
   - [x] Happy Count by tens.
   - [x] Count by ones the Say Ten way.
   - [ ] Count by tens the Say Ten way. First, start at 0, and then start at 7.
   - [x] Movement counting—count while doing squats, arm rolls, jumping jacks, etc.

I can practice these fun math games with a family member or friend to keep my math skills sharp over the summer.

2. Write the numbers from 96 to 115.

96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115

3. Count backward by tens from 82 to 2.

   82, 72, 62, 52, 42, 32, 22, 12, 2

Practicing a math game like Happy Counting throughout the year has helped me count forward and backward. Look, I can count past 100 by ones and backward by tens! I couldn't do these two things when I started first grade. Now I can do them easily.

G1-M6-Lesson 29

Teach a family member your favorite math game during our fluency celebration. Describe what it was like to teach the game. Was it easy? Hard? Why?

I taught my mom how to play the math game Missing Part: Make Ten. I am used to learning how to play the math games from my teacher and then playing with my friends. Teaching my mom was fun, but it was a little bit hard. Even though I know how to play the game, I sometimes forgot to explain some of the important parts to her.

I can pick a math game from one of our math centers and teach it to one of my family members. I know how to play the game by myself, but sometimes you learn something by teaching it to someone else. It helped me think about making ten when I had to show my mom what we needed to do.

G1-M6-Lesson 30

What did you do in math class today?

Today I decorated a math folder for my math summer packet. I decorated my folder with drawings of all the things I learned in math this year. I drew addition and subtraction number sentences, 5-group drawings, and number bonds. I also drew quick tens, a place value chart, and different two- and three-dimensional shapes. These are just some of the many things I learned in math this year. I will try to practice my summer packet everyday with one of my family members so that I can be ready for math in second grade!

My summer packet includes

- A Lesson 30 Summer Packet.
- Single-sided numeral or 5-group cards.
- 5 Core Fluency Sprints and some other Grade 1 Sprints.
- Core Fluency Differentiated Practice Sets.

Homework Helpers: Grade 1

To truly understand math, students need to know more than the process for solving a problem; they need to know why that process works. Students who understand "why" can connect math to the real world and solve problems they haven't encountered before. That's why a team of teachers and mathematicians created *Eureka Math*.

The teacher-writers also crafted Homework Helpers, a companion guide to *Eureka Math* designed to help parents at homework time. The Homework Helpers explain, step by step, how to work problems *similar* to those found in *Eureka Math* assignments. In fact, there is a Homework Helper to go with every homework assignment in the curriculum.

Discover additional resources, including free parent tip sheets, videos, full grade-level modules, and more, at eureka-math.org.

ON THE COVER:
Vincent van Gogh (1853—1890), *The Bedroom of van Gogh at Arles*, 1889. Oil on canvas. Musée d'Orsay, Paris, France.
Photo: Erich Lessing/Art Resource, NY

WHAT DOES THIS PAINTING HAVE TO DO WITH MATH?
In an effort to take advantage of every opportunity to build students' cultural literacy, Great Minds features an important work of art or architecture on the cover of each book we publish. We select images that we know students and teachers will love to look at again and again. These works also relate, in visual terms, to ideas taken up in the book. In his painting *The Bedroom of van Gogh at Arles*, Vincent van Gogh evidenced thoughtful care in his arrangement of objects, not unlike the sort of intentionality we hope *A Story of Units* will cultivate in students' manipulation of units.

EUREKA MATH™

From the non-profit Great Minds®

ISBN 978-1-63255-824-4