

ENGLISH

Grade 1 Module 1

SUCCEED

SUMS AND DIFFERENCES TO 10 | STUDENT EDITION

Succeed

K-5 Math Grade 1 Module 1

SUMS AND DIFFERENCES TO 10

Acknowledgment

Thank you to all the Texas educators and stakeholders who supported the review process and provided feedback. These materials are the result of the work of numerous individuals, and we are deeply grateful for their contributions.

Notice

These learning resources have been built for Texas students, aligned to the Texas Essential Knowledge and Skills, and are made available pursuant to Chapter 31, Subchapter B-1 of the Texas Education Code.

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Read–Draw–Write (RDW) Process

The K–5 Math materials support students as they problem solve by using a simple, repeatable process introduced by the teacher. The Read–Draw–Write (RDW) process calls for students to

1. Read the problem.
2. Draw and label.
3. Write a number sentence (equation).
4. Write a word sentence (statement).

Families may support the process by encouraging their student to ask themselves questions such as

- What do I see?
- Can I draw something?
- What conclusions can I make from my drawing?

The more students participate in reasoning through problems with this systematic approach, the more they internalize these practices and thought processes.

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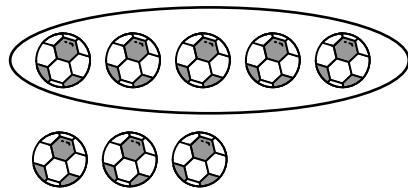
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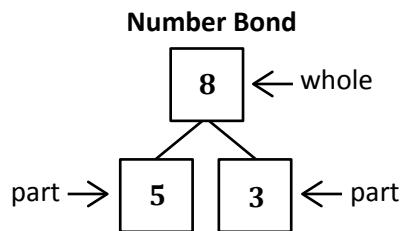
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1. Circle 5. Then, make a number bond.

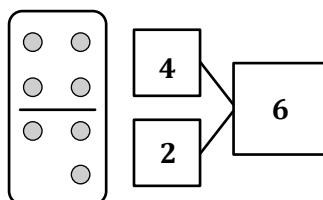


I circled 5 balls, and there are 3 more.
I can count on from 5 to find the total.
Five, 6, 7, 8.



I can make a number bond for the soccer balls.
5 and 3 are parts.
The whole, or total, is 8.

2. Make a number bond for the domino.



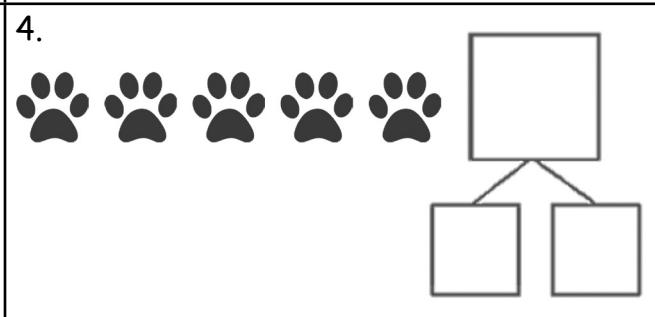
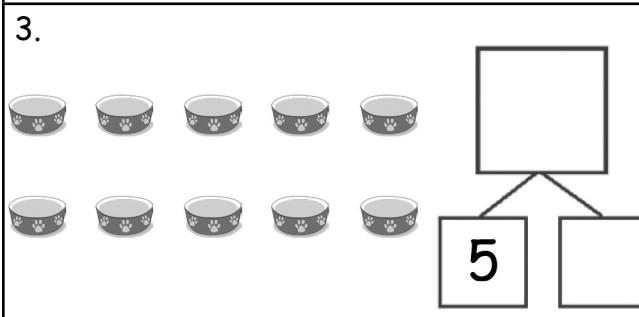
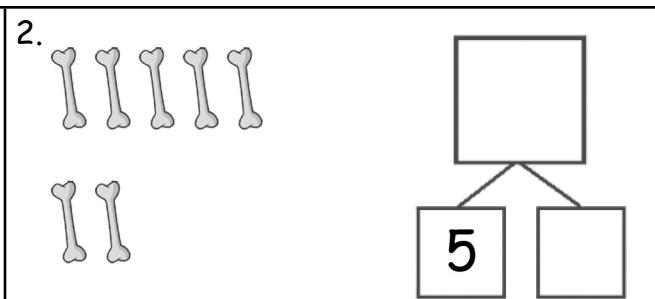
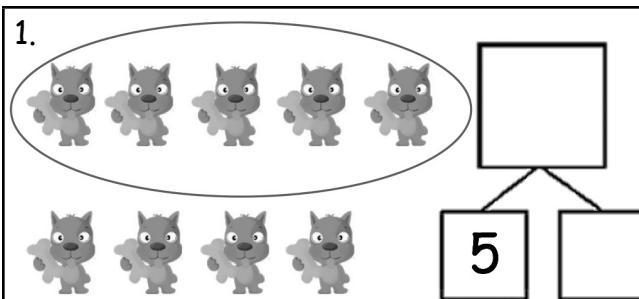
I see 4 dots and 2 dots, so 4 and 2 are the parts.
There are a total of 6 dots.



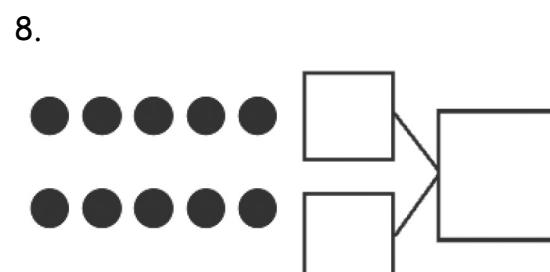
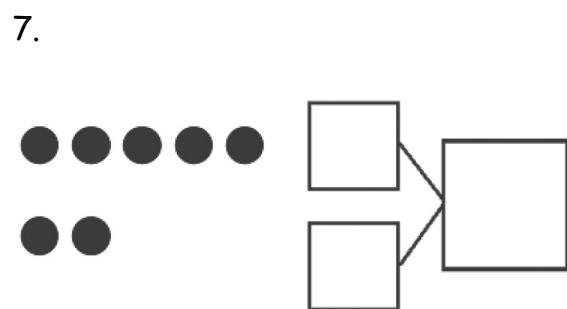
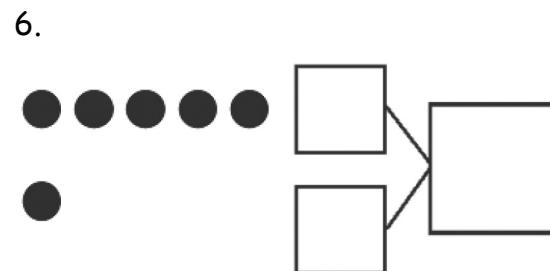
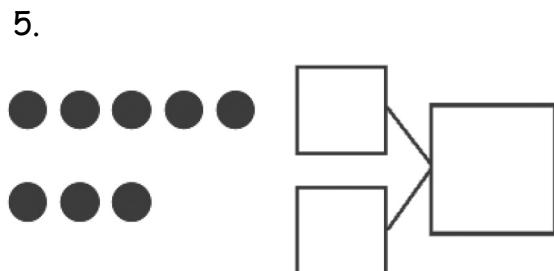
Name _____

Date _____

Circle 5, and then make a number bond.

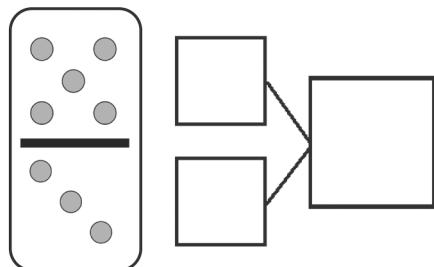


Make a number bond that shows 5 as one part.

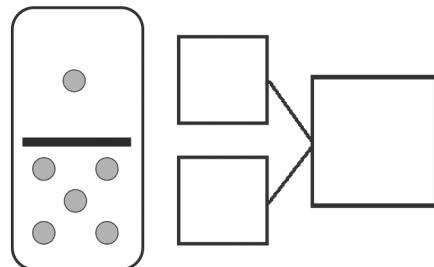


Make a number bond for the dominoes.

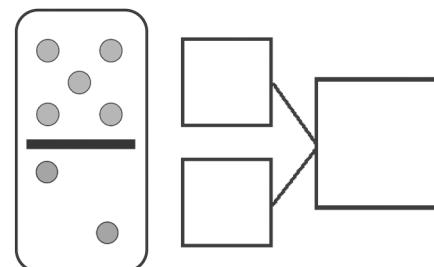
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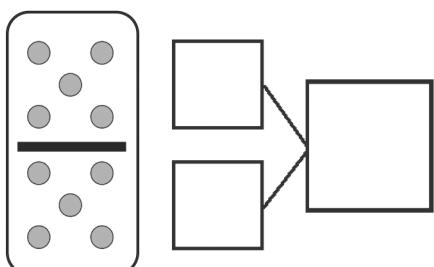
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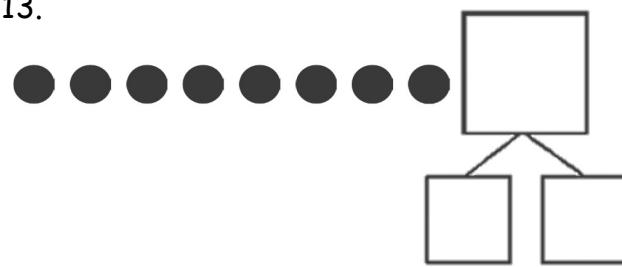


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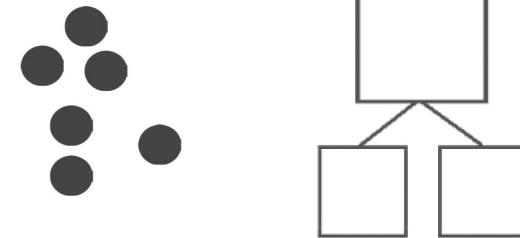


Circle 5 and count. Then, make a number bond.

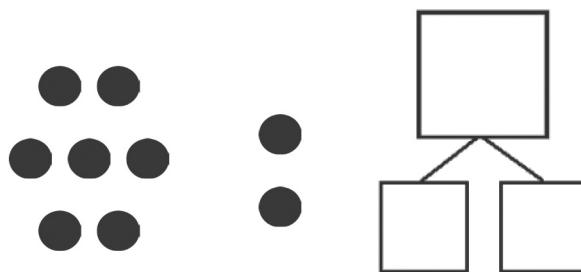
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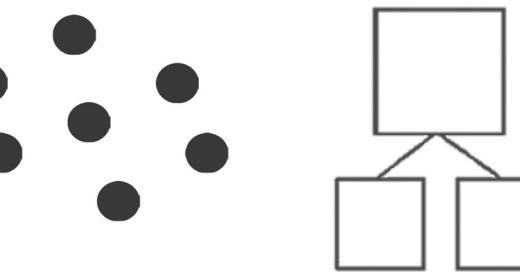
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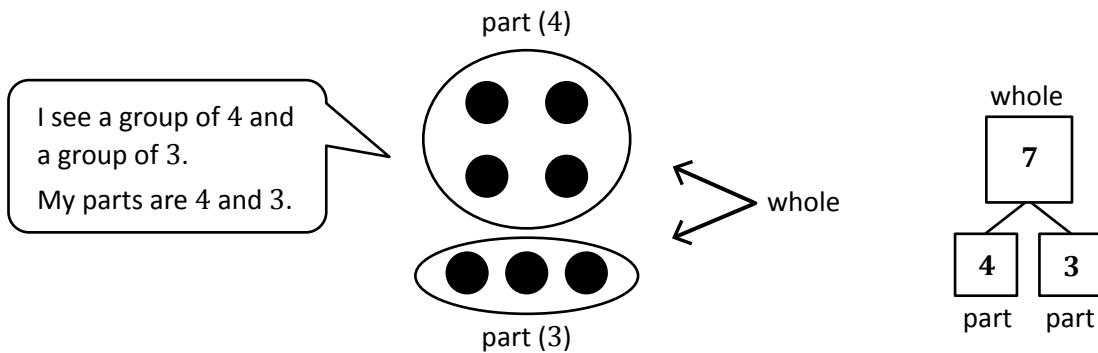
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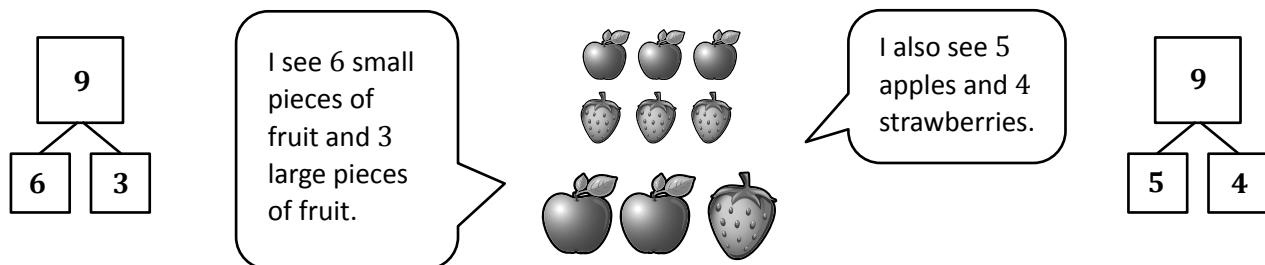
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1. Circle 2 parts you see. Make a number bond to match.



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

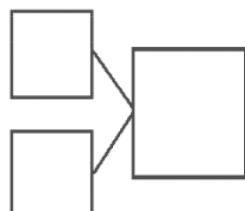
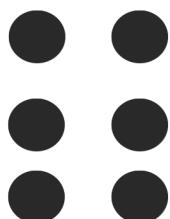


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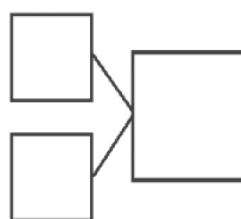
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Circle 2 parts you see. Make a number bond to match.

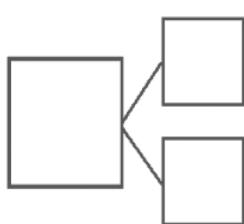
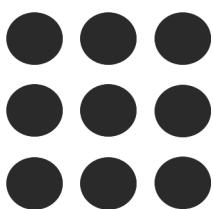
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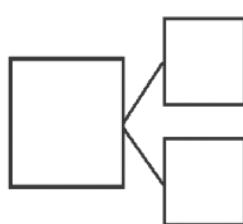
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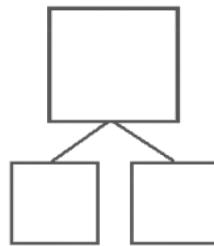
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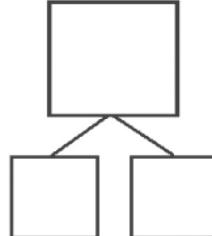
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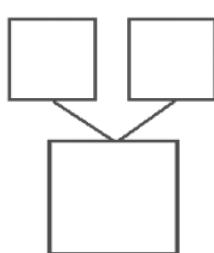
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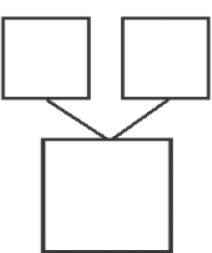
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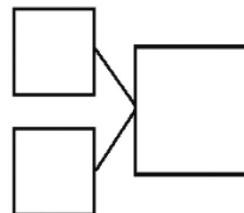
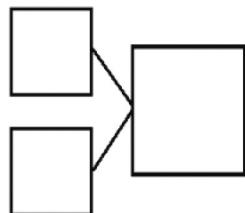
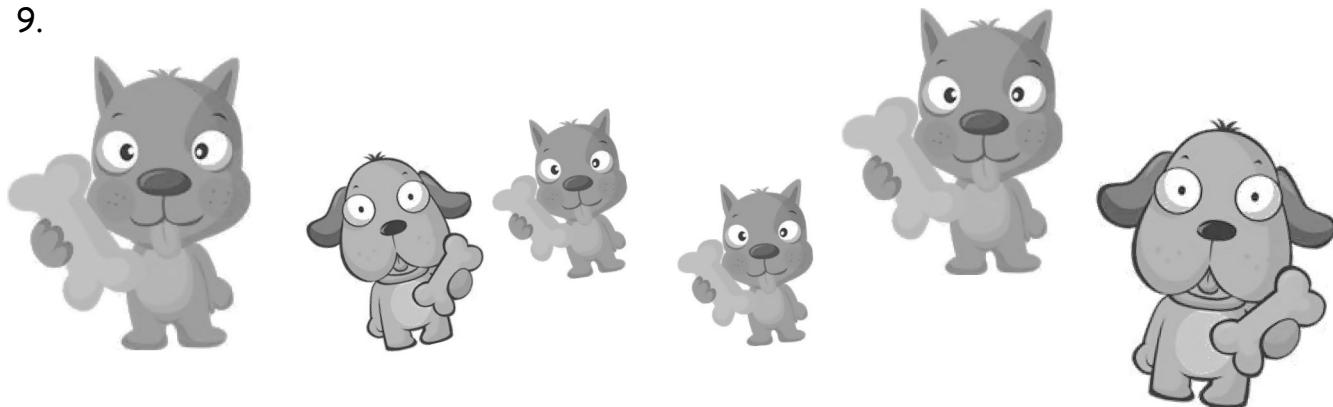


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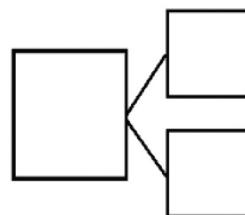
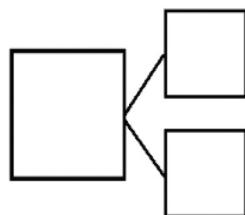
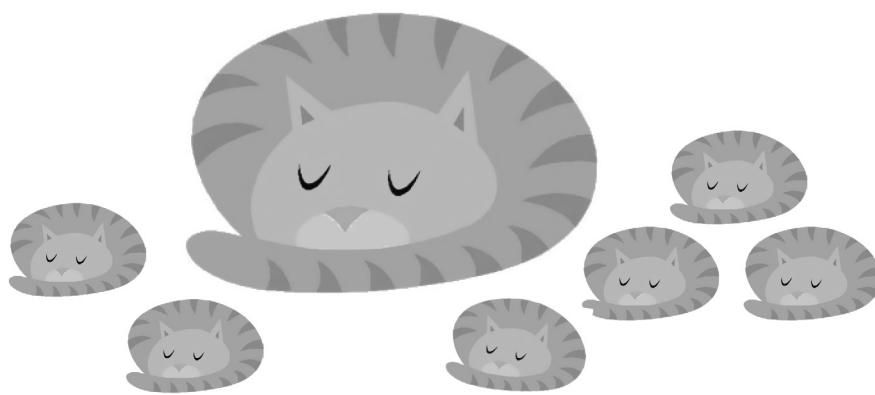


How many animals do you see? Write at least 2 different number bonds to show different ways to break apart the total.

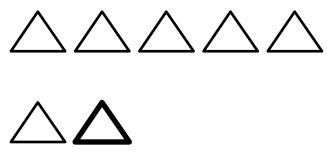
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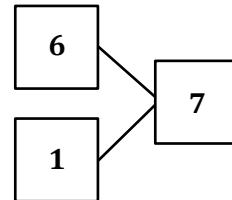


Draw one more in the 5-group. In the box, write the numbers to describe the new picture.



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

1 more than 6 is 7.
 $6 + 1 = \underline{7}$

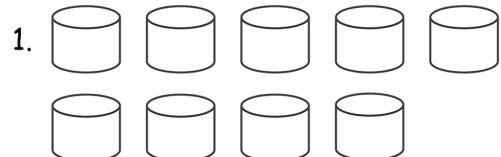
**Lesson 3:**

See and describe numbers of objects using *1 more* within 5-group configurations.

Name _____

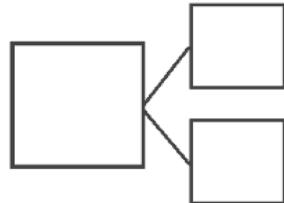
Date _____

How many objects do you see? Draw one more. How many objects are there now?



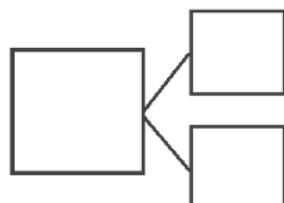
1 more than 9 is ____.

$$9 + 1 = ____$$



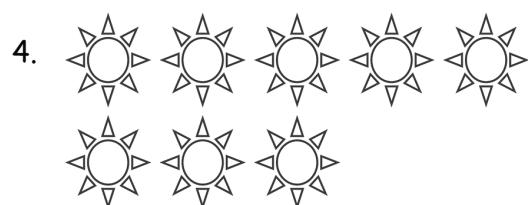
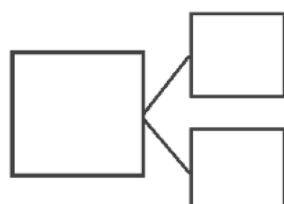
____ is 1 more than 7.

$$____ = 7 + 1$$



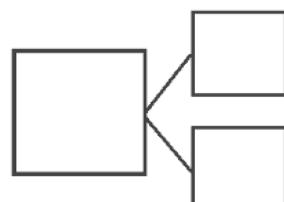
____ is 1 more than 5.

$$____ = 5 + 1$$



1 more than 8 is ____.

$$____ + 1 = ____$$

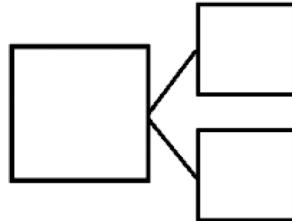


5. Add 1 more pencil to the picture.

Then, write the numbers in the number bond and number sentences.

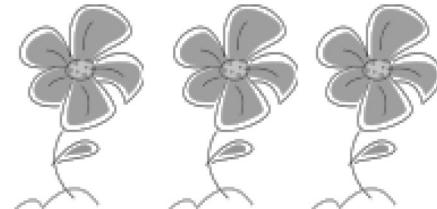
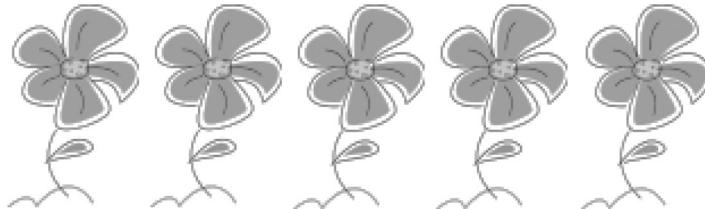


1 more than 5 is ____.
 $5 + 1 =$ ____

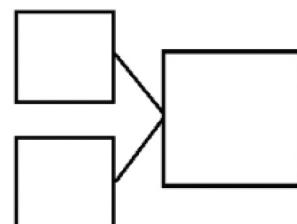


6. Add 1 more flower to the picture.

Then, write the numbers in the number bond and number sentences.



____ is 1 more than 8.
 $____ + 1 =$ ____



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).

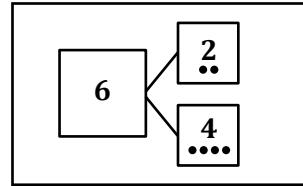
- Some of the flashcards may have the full number bond and number sentence.

Front: Number Sentence

$$2 + 4 = 6$$

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

Back: Number Bond



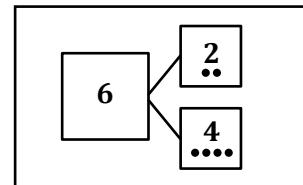
- Others may have the number bond and just the expression.

Front: Expression

$$2 + 4$$

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

Back: Number Bond

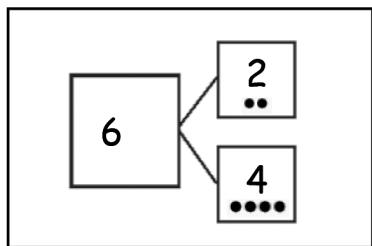


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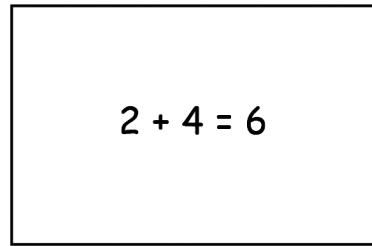
Date _____

Today, we learned the different combinations that make 6. For homework, cut out the flashcards below, and write the number sentences that you learned today on the back. Keep these flashcards in the place where you do your homework to practice ways to make 6 until you know them really well! As we continue to learn different ways to make 7, 8, 9, and 10 in the upcoming days, continue to make new flashcards.

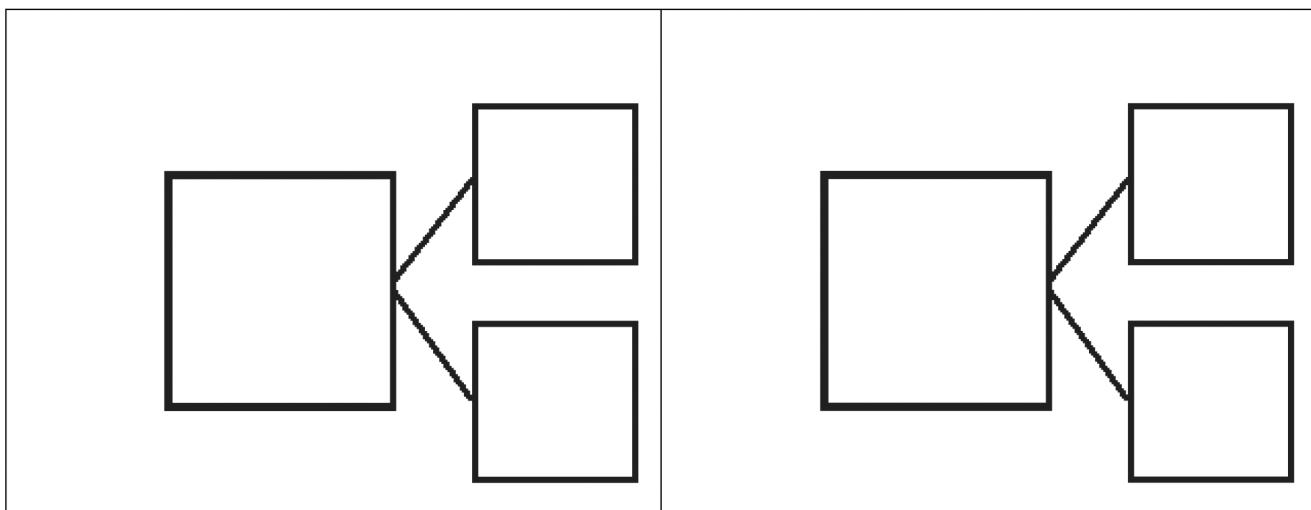
*Note to families: Be sure students make each of the combinations that make 6. The flashcards can look something like this:

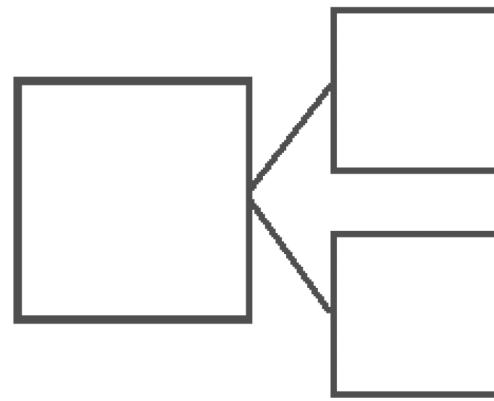
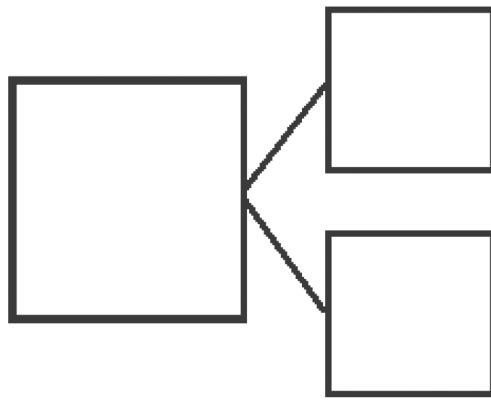
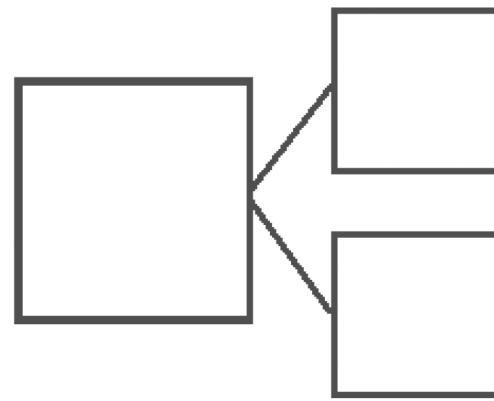
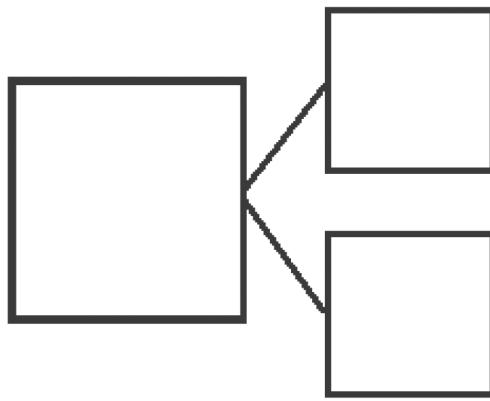
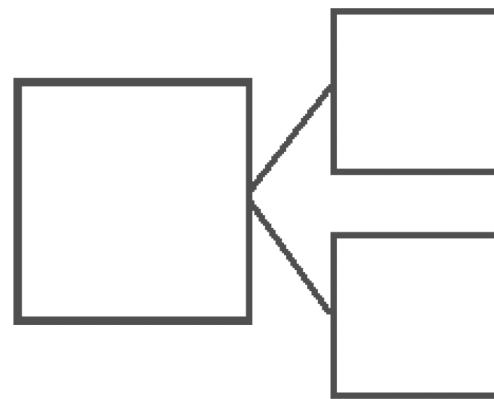
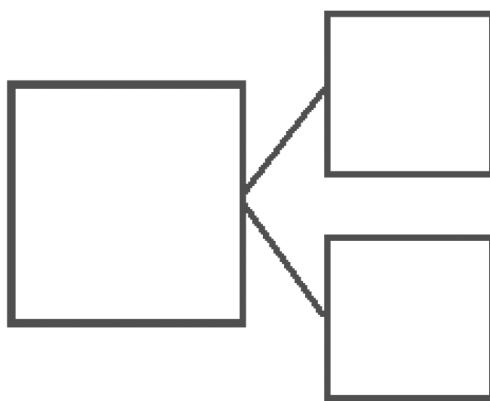


Front of Card

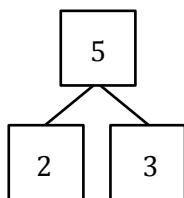


Back of Card

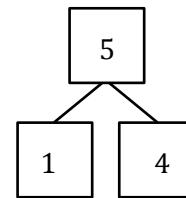




1. Make 2 number sentences. Use the number bonds for help.



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

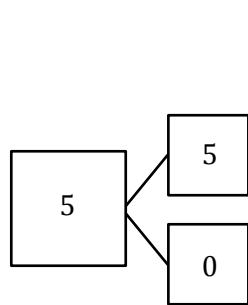


$$\boxed{5} \quad = \quad \boxed{1} \quad \bigcirc + \quad \boxed{4}$$

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.

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

One sentence can start with my biggest part.

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

The other one can start with my smallest part.

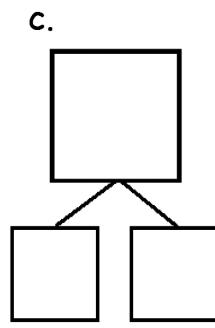
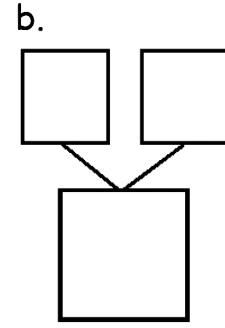
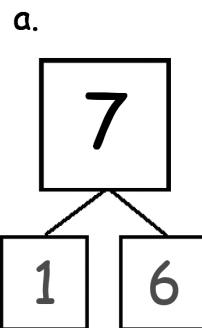
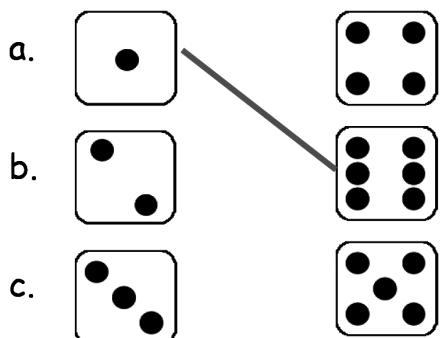
In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 7 (7 and 0, 6 and 1, 5 and 2, 4 and 3).



Name _____

Date _____

1. Match the dice to show different ways to make 7. Then, draw a number bond for each pair of dice.

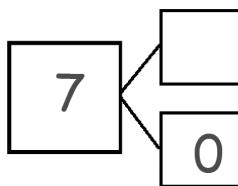


2. Make 2 number sentences. Use the number bonds above for help.

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

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

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

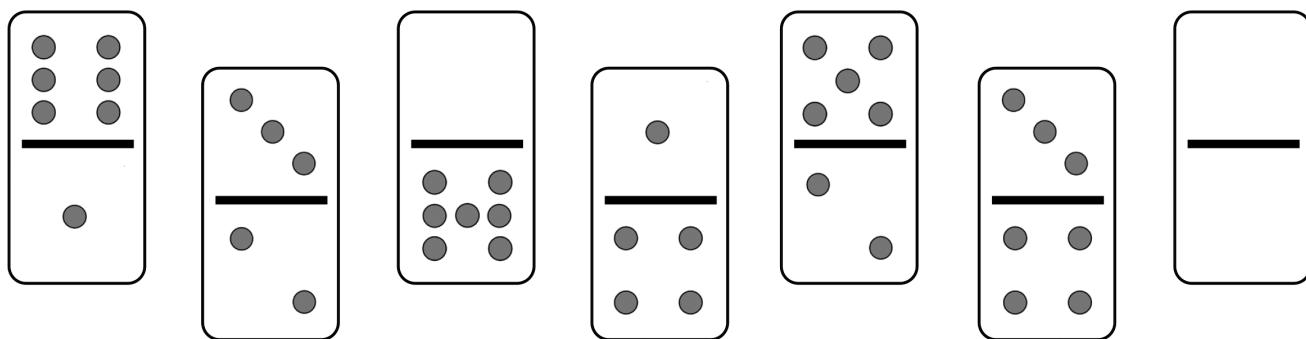


$$\boxed{7} = \boxed{\quad} + \boxed{\quad}$$

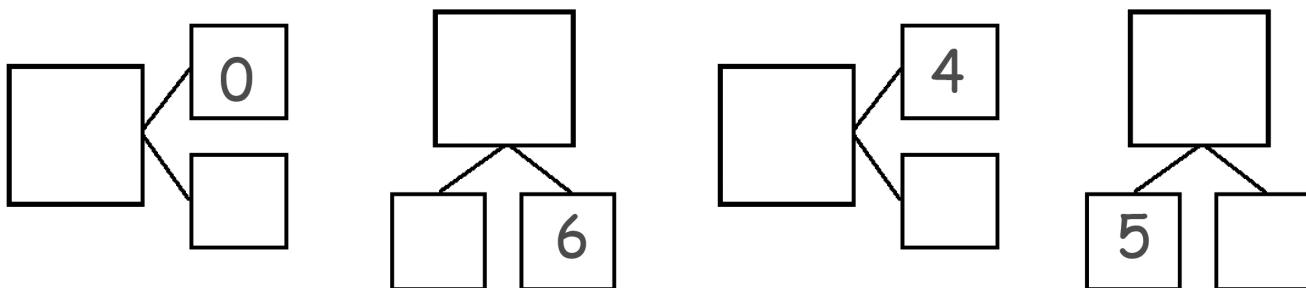
$$\boxed{7} = \boxed{\quad} + \boxed{\quad}$$



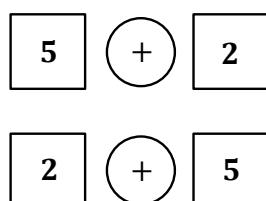
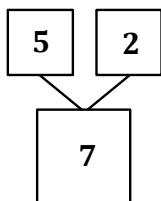
4. Color the dominoes that make 7.



5. Complete the number bonds for the dominoes you colored.

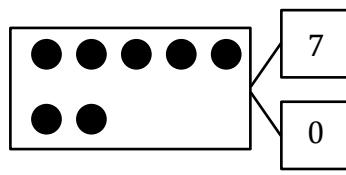


1. Show 2 ways to make 7. Use the number bond for help.



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.



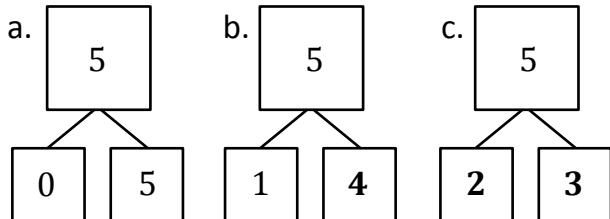
$$\begin{array}{r} 7 \\ + \\ 0 \\ \hline 7 \end{array}$$

$$\begin{array}{r} 7 \\ = \\ 0 \\ + \\ 7 \end{array}$$

When I add the equal sign and total, it's called a number sentence.



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



I made all the number bonds for 5.

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

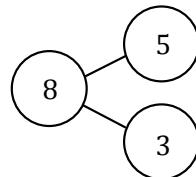
Expression

$$5 + 3$$

Picture

X X X X X
O O O

Number Bond



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

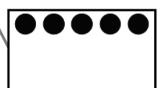
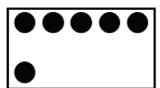
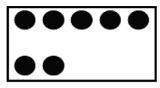
I can use my picture to *count on* and find the total.
Fiiiiive...

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).

Name _____

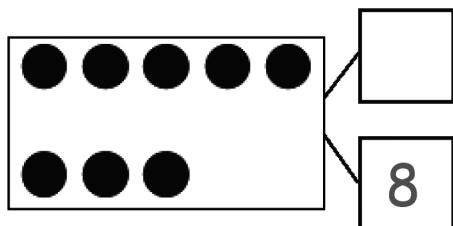
Date _____

1. Match the dots to show different ways to make 8. Then, draw a number bond for each pair.

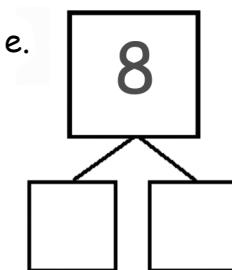
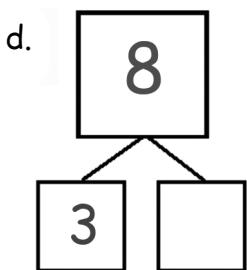
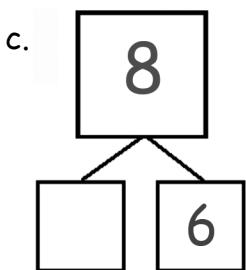
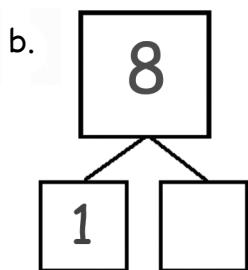
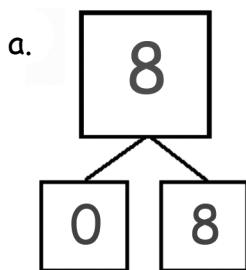


2. Show 2 ways to make 8. Use the number bonds above for help.

3. Fill in the missing number in the number bond. Write 2 addition sentences for the number bond you made. Notice where the equal sign is to make your sentence true.

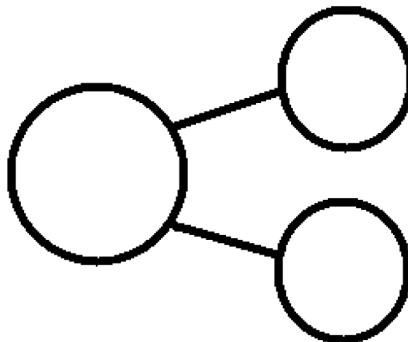


4. These number bonds are in an order starting with the smallest part first. Write to show which number bonds are missing.



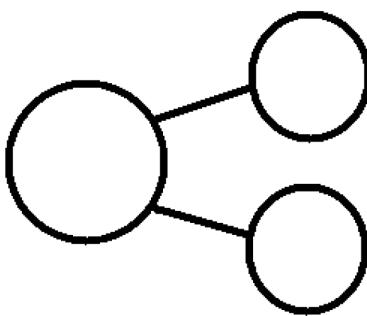
5. Use the expression to write a number bond and draw a picture that makes 8.

$$\boxed{2} + \boxed{6}$$

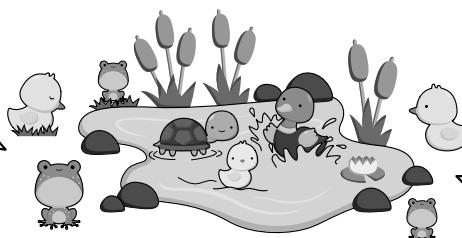


6. Use the expression to write a number bond and draw a picture that makes 8.

$$\boxed{0} + \boxed{8}$$

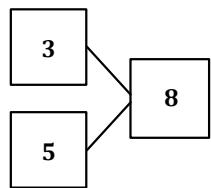


Use the pond picture to help you write the expressions and number bonds to show all of the different ways to make 8.



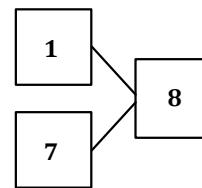
3 animals are in the pond.
5 animals are on land.
There are 8 animals in all.

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



$$\begin{array}{r} 3 \\ + \\ 5 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 5 \\ + \\ 3 \\ \hline 8 \end{array}$$



$$\begin{array}{r} 1 \\ + \\ 7 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 7 \\ + \\ 1 \\ \hline 8 \end{array}$$

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

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).

**Lesson 7:**

Represent *joining* situations with number bonds. Count on from one embedded number or part to totals of 8 and 9, and generate all expressions for each total.

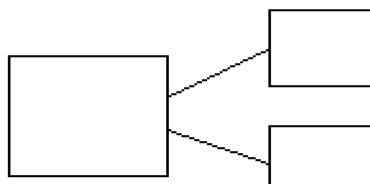
Name _____

Date _____

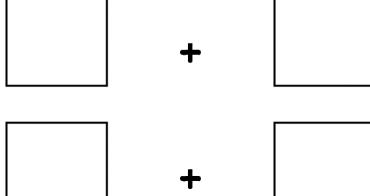
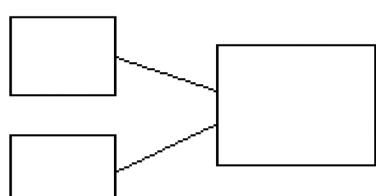
Ways to Make 9

Use the bookshelf picture to help you write the expressions and number bonds to show all of the different ways to make 9.

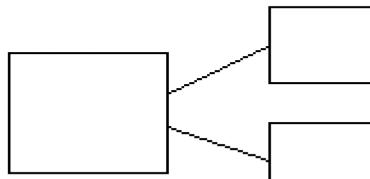
$$\boxed{\quad} + \boxed{\quad}$$



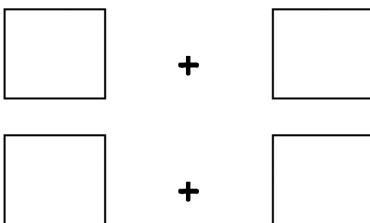
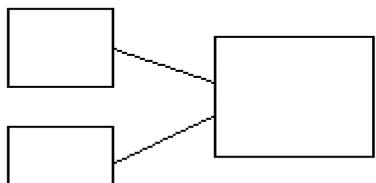
$$\boxed{\quad} + \boxed{\quad}$$



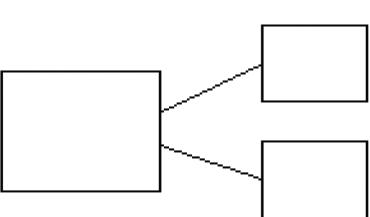
$$\boxed{\quad} + \boxed{\quad}$$



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



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



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



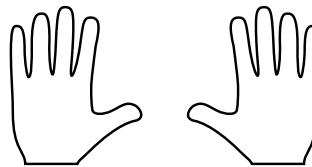
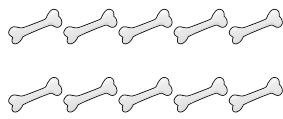


9 books picture card

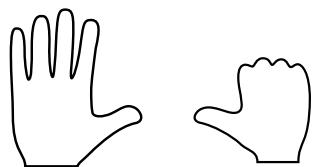
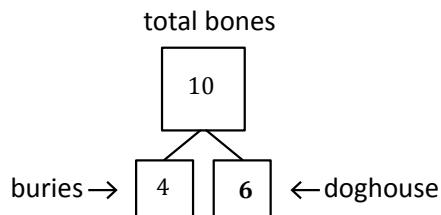
**Lesson 7:**

Represent *joining* situations with number bonds. Count on from one embedded number or part to totals of 8 and 9, and generate all expressions for each total.

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 parts of the number bonds.



My 10 fingers can represent the 10 bones.



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

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

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

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

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

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

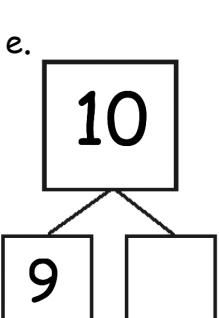
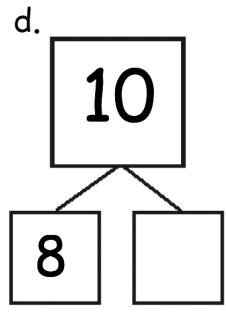
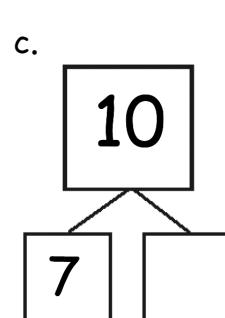
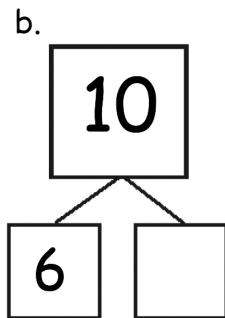
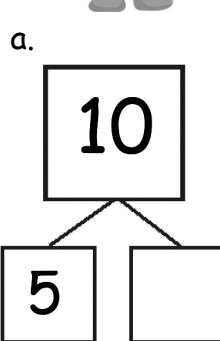
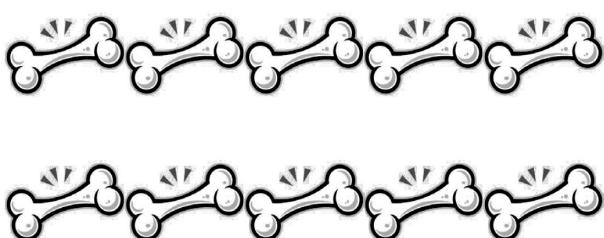
In addition to tonight's Homework, students may wish to create flashcards that will help them build fluency with all the ways to make 10 (10 and 0, 9 and 1, 8 and 2, 7 and 3, 6 and 4, 5 and 5).



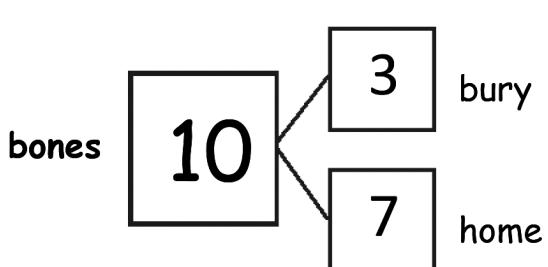
Name _____

Date _____

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 parts of the number bonds.



2. He decided to bury 3 bones and bring 7 bones back home. Write all the adding sentences that match this number bond.



$$3 + 7 = 10$$

$$7 + 3 = 10$$

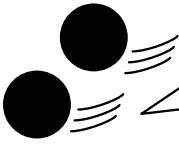
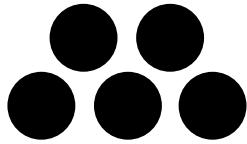


$$10 = 3 + 7$$

$$10 = 7 + 3$$

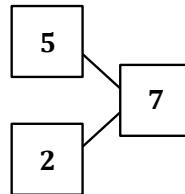


1. a. Use the picture to tell a math story.



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

b. Write a number bond to match your story.

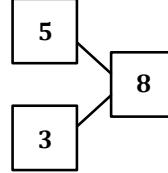
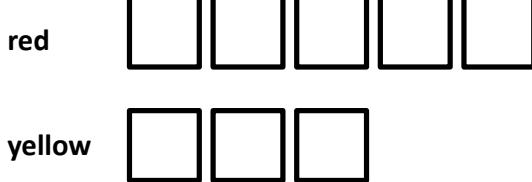


c. Write a number sentence to tell the story.

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

d. 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!

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

Marcus has 8 blocks

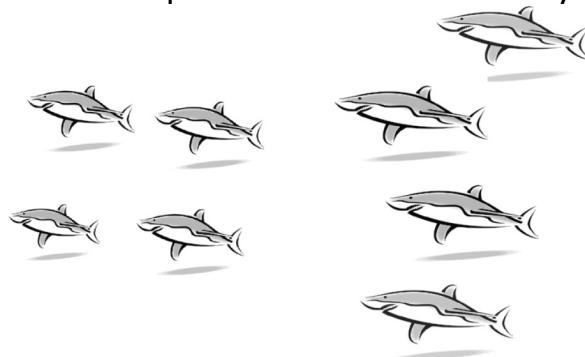
Then I can answer the question with a number sentence and word sentence.



Name _____

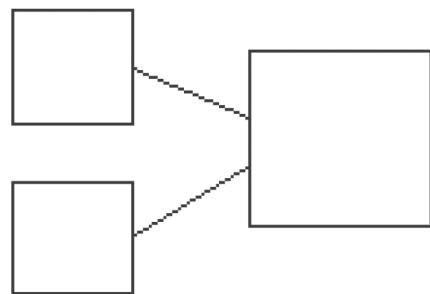
Date _____

1. Use the picture to tell a math story.



Write a number sentence to tell the story.

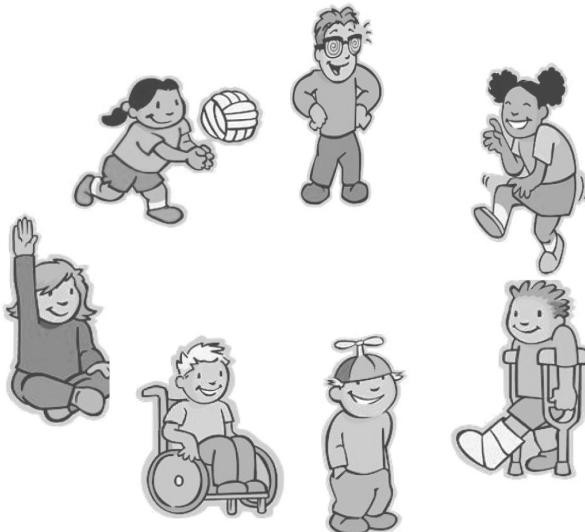
Write a number bond to match your story.



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

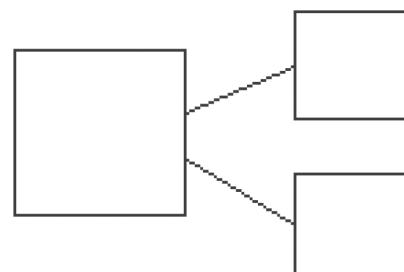
There are _____ sharks.

2. Use the picture to tell a math story.



Write a number sentence to tell the story.

Write a number bond to match your story.



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

There are _____ students.



Draw a picture to match the story.

3. Jim has 4 big dogs and 3 small dogs. How many dogs does Jim have?

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

Jim has _____ dogs.

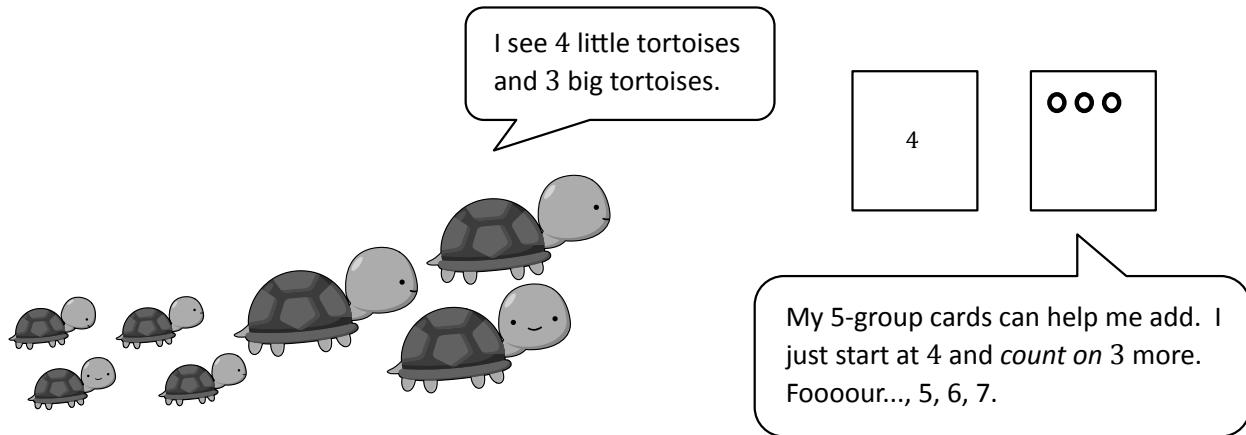
4. Liv plays at the park. She plays with 3 kids with long hair and 6 kids with short hair. How many kids does she play with at the park?

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

Liv plays with _____ kids.

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

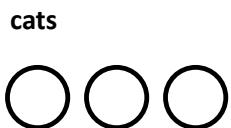
b. Draw the other 5-group card to show what you did.



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

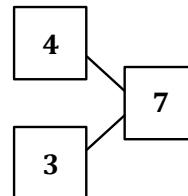
My number sentence shows that 4 little tortoises plus 3 big tortoises equals 7 total tortoises.

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



My math picture can be just circles!

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



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

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

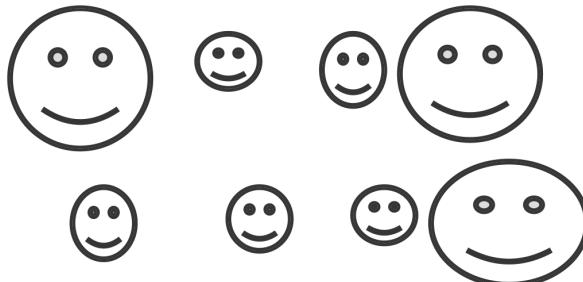
Kira has ____ pets.



Name _____

Date _____

1. Use your 5-group cards to solve.



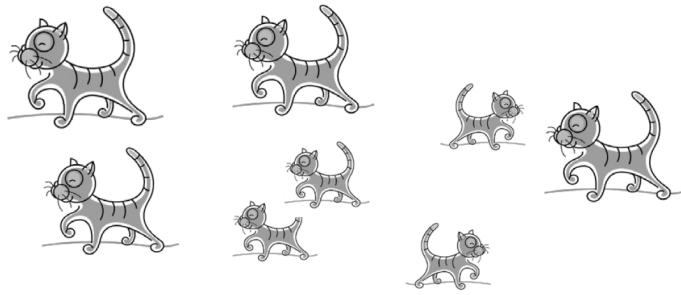
$$\boxed{} + \boxed{} = \boxed{}$$

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

$$\boxed{5}$$



2. Use your 5-group cards to solve.



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

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

$$\boxed{4}$$



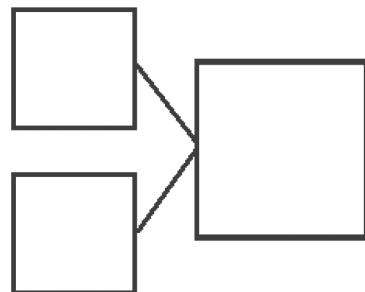
3. There are 4 tall students and 5 short students. Draw to show how many students there are in all.

There are _____ students in all.

Write a number bond to match the story.

Write a number sentence to show what you did.

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



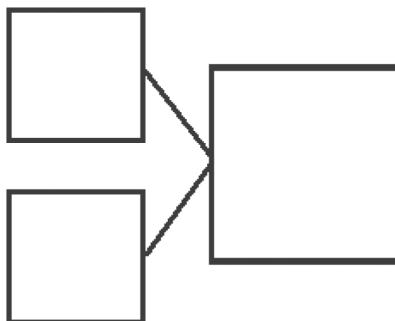
4. There are 3 children wearing short sleeve shirts and 5 children wearing long sleeve shirts. Draw to show how many children there are altogether.

There are _____ children altogether.

Write a number bond to match the story.

Write a number sentence to show what you did.

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

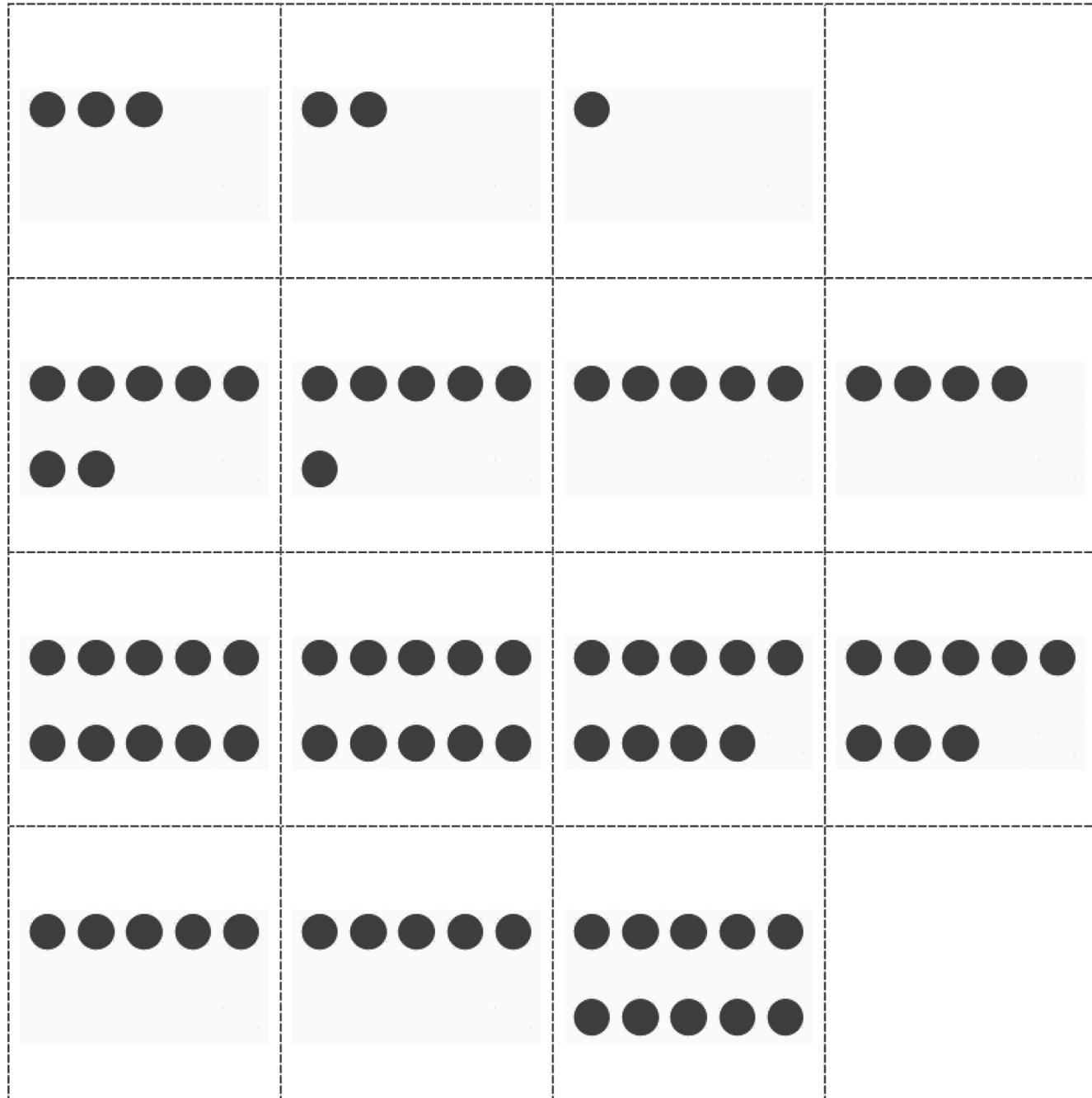


0	1	2	3
4	5	<u>6</u>	7
8	<u>9</u>	10	10
	10	5	5

5-group cards, numeral side

**Lesson 10:**

Solve *join with result unknown* math stories by drawing and using 5-group cards.



5-group cards, dot side

**Lesson 10:**

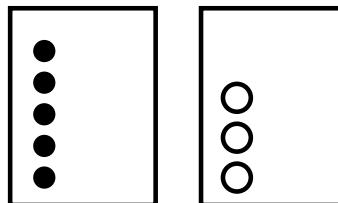
Solve *join with result unknown* math stories by drawing and using 5-group cards.



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

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

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



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

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

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

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

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

had brother



Larry's brother gave him **6** books.

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

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

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

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

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

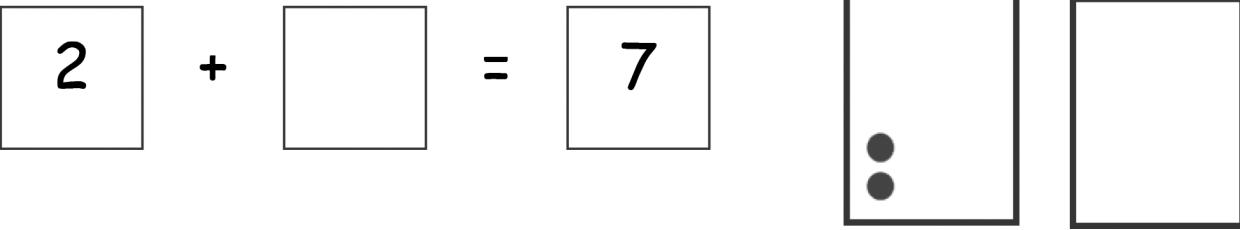


Name _____

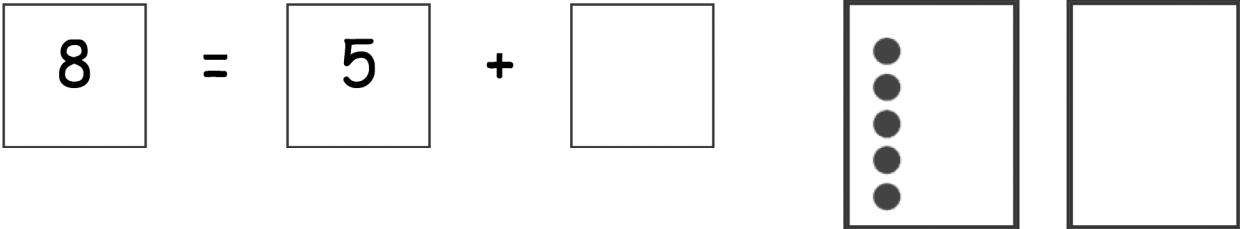
Date _____

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

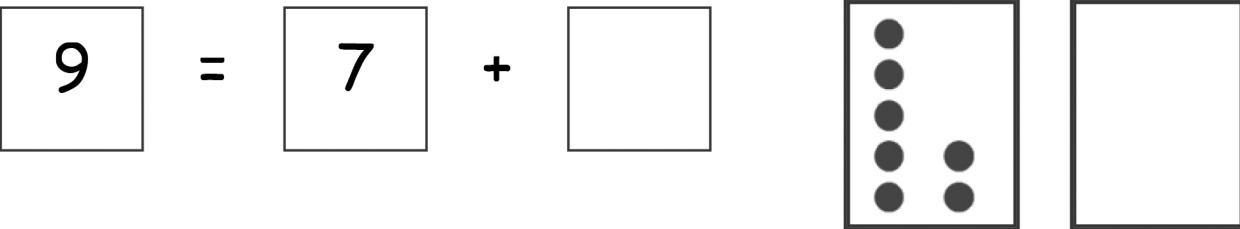
a. $2 + \square = 7$



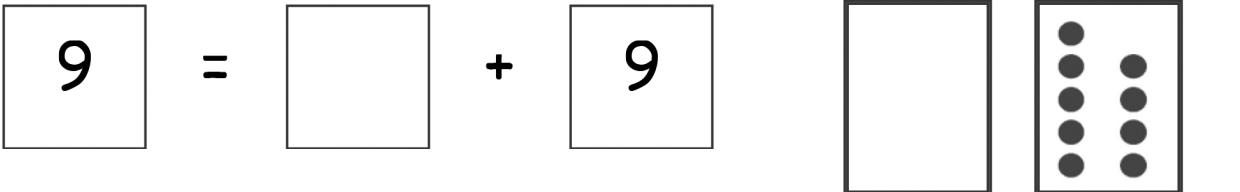
b. $8 = 5 + \square$



c. $9 = 7 + \square$



d. $9 = \square + 9$

**Lesson 11:**

Solve *add to with change unknown* math stories as a context for counting on by drawing, writing equations, and making statements of the solution.

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

a. Scott has 3 cookies. His mom gives him some more. Now, he has 8 cookies. How many cookies did his mom give him?

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

Scott's mom gave him _____ cookies.

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

b. Kim sees 6 birds in the tree.

Some more birds fly in.

Kim sees 9 birds in the tree. How many birds flew to the tree?

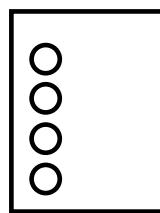
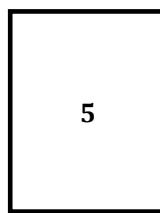
$$\boxed{4} + \boxed{?} = \boxed{8}$$

_____ birds flew to the tree.

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

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

The mystery number is 4

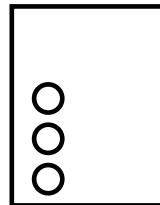
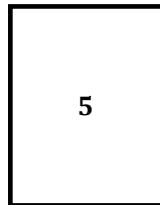


I can count on from 5 to find the mystery number.
Fiiiiive..., 6, 7, 8, 9.
I counted on 4 more, so the mystery number is 4.

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

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

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



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

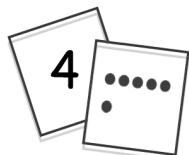
I drew 3 more dots.
The “mystery number” is 3.

Shana bought 3 hats.



Name _____

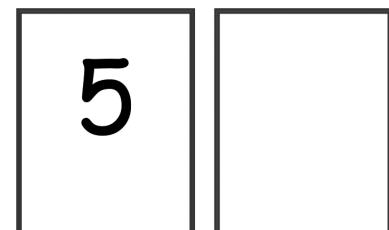
Date _____



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

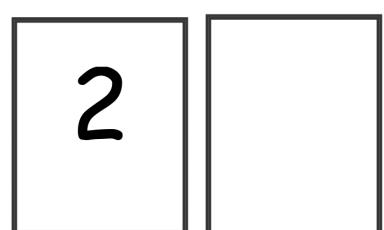


1. $5 + ? = 7$



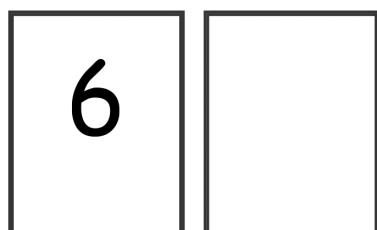
The mystery number is

2. $2 + ? = 8$



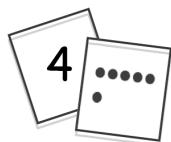
The mystery number is

3. $6 + ? = 9$



The mystery number is





Use your 5-group cards to count on and solve the math stories. Use the boxes to show your 5-group cards.

4. Jack reads 4 books on Monday. He reads some more on Tuesday. He reads 7 books total. How many books does Jack read on Tuesday?

--	--

	+		=	
--	---	--	---	--

Jack reads _____ books on Tuesday.

5. Kate has 1 sister and some brothers. She has 7 brothers and sisters in all. How many brothers does Kate have?

--	--

	+		=	
--	---	--	---	--

Kate has _____ brothers.

6. There are 6 dogs in the park and some cats. There are 9 dogs and cats in the park altogether. How many cats are in the park?

--	--

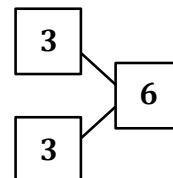
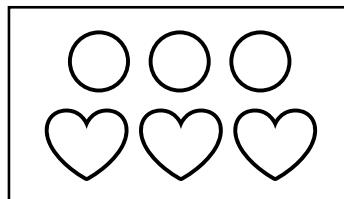
	+		=	
--	---	--	---	--

There are _____ cats total.

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 $3 + 3 = 6$.

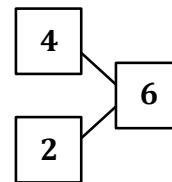
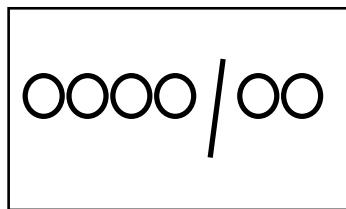


I have an idea! I baked 3 round cookies and 3 heart-shaped cookies. I baked 6 cookies in total. I can draw the cookies to show my story.

I can make a number bond to match my story!

2. $4 + \square = 6$

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.

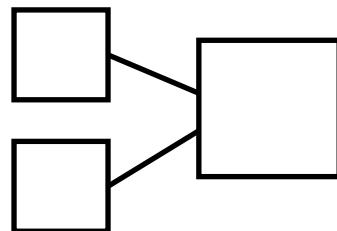
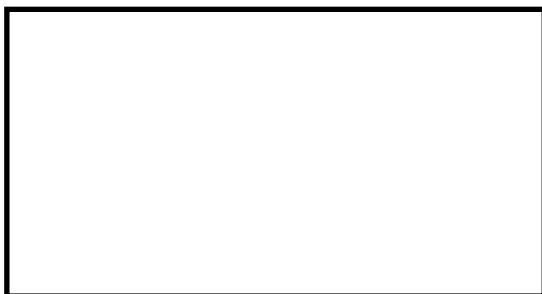


Name _____

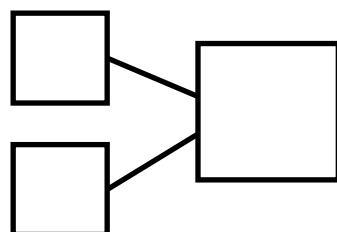
Date _____

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

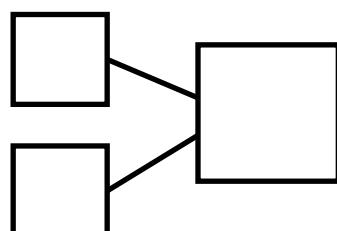
1. $5 + 2 = 7$



2. $3 + 6 = 9$



3. $7 + \square = 9$



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.

6, ... 7, 8



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

5, ... 6, 7, 8



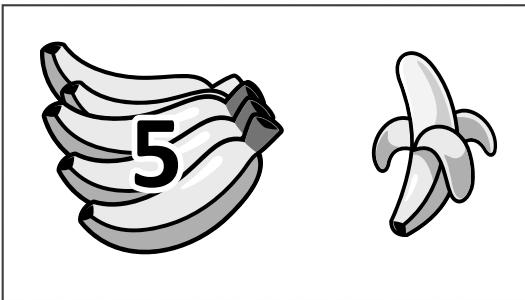
b. $8 = 5 + 3$



Name _____

Date _____

Count on to add.



a.

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

5, 6



Write what you say when you count on.

b.

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



c.

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



d.

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



e.

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

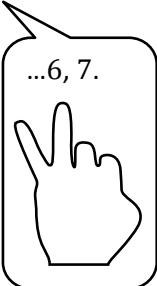


Use your 5-group cards or your fingers to count on to solve.

1.

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

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



Show the strategy you used to add.

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

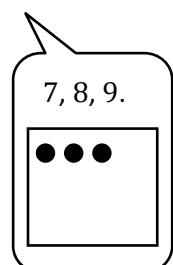


I used my
fingers as a
strategy, so I'll
draw them!

2.

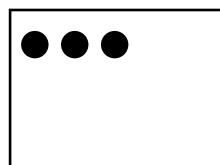
$$\boxed{6} + \boxed{3} = \boxed{9}$$

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



Show the strategy you used to add.

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



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



Name _____

Date _____



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

1.
$$\boxed{5} + \circlearrowleft \boxed{3} = \boxed{\quad}$$

2.
$$\boxed{6} + \circlearrowleft \boxed{2} = \boxed{\quad}$$

3.
$$\boxed{7} + \circlearrowleft \boxed{3} = \boxed{\quad}$$

Show the strategy you used to add.

$$6 + 2 = \boxed{\quad}$$

4.
$$\boxed{\quad} = \boxed{8} + \circlearrowleft \boxed{2}$$

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

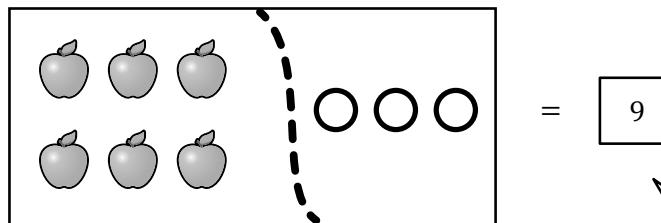
5.
$$\boxed{\quad} = \boxed{6} + \circlearrowleft \boxed{3}$$

6.
$$\boxed{\quad} = \boxed{7} + \circlearrowleft \boxed{2}$$



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.
Siiiiiiix...



9

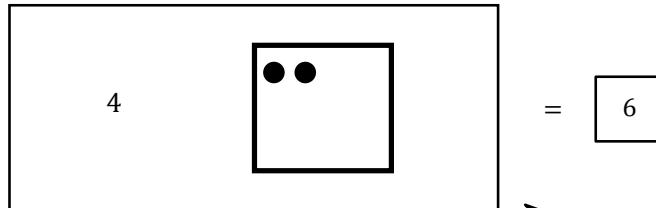
...7, 8, 9.

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

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.

$$\boxed{4} \quad + \quad \boxed{2} \quad = \quad \boxed{6}$$

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



Name _____

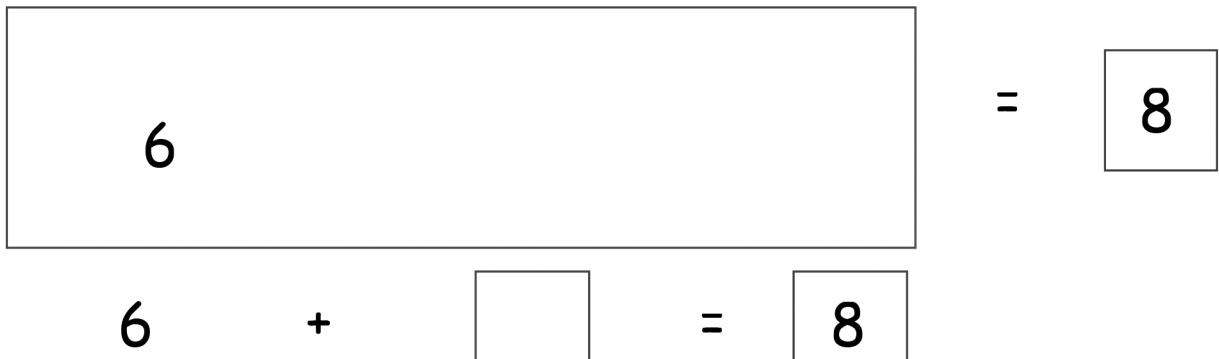
Date _____

1. Use simple math drawings. Draw more to solve $4 + ? = 6$.



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

2. Use your 5-group cards to solve $6 + ? = 8$



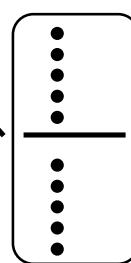
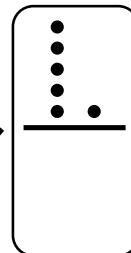
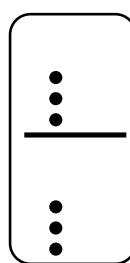
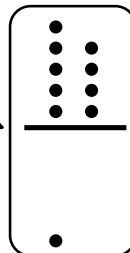
3. Use counting on to solve $7 + ? = 10$

**Lesson 16:**

Count on to find the unknown part in missing addend equations such as $6 + \underline{\hspace{1cm}} = 9$. Answer, "How many more to make 6, 7, 8, 9, and 10?"

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

There are 10 dots on each of these dominoes.



$$\underline{3 + 3} = \underline{6 + 0}$$

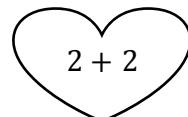
I can write a true number sentence for the dominoes.

9 and 1 makes 10. 5 and 5 also makes 10. So, $9 + 1$ equals $5 + 5$.

$$\underline{9 + 1} = \underline{5 + 5}$$

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

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



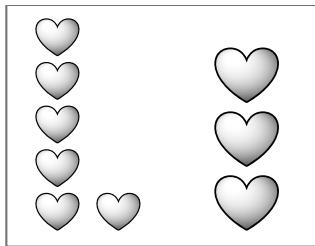
a. $\underline{2 + 3} = \underline{1 + 4}$

b. $\underline{3 + 1} = \underline{2 + 2}$

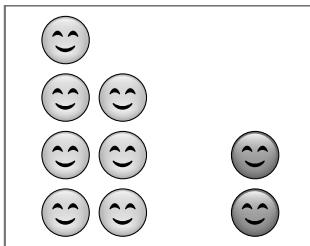
I can use these equal expressions to make a true number sentence.



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



$$\underline{6 + 3}$$



$$\underline{7 + 2}$$

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

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

$6 + 0 = 4 + 2$

$5 + 2 = 6 + 1$

$5 + 2 = 6 + 1$

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.

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

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

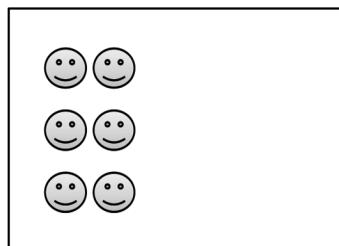
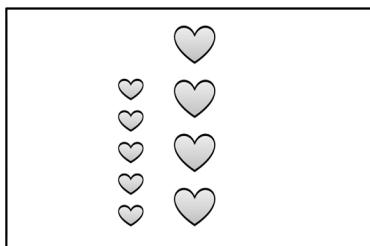
I know that $7 + 1$ equals 8. So, the other side must also equal 8 for this to be a true number sentence. I know my doubles: $4 + 4 = 8$. The missing part is 4.



Name _____

Date _____

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



2. Circle the true number sentences, and rewrite the false sentences to make them true.

a.

$$4 = 4$$

b.

$$5 + 1 = 6 + 1$$

c.

$$3 + 2 = 5 + 0$$

d.

$$6 + 2 = 4 + 4$$

e.

$$3 + 3 = 6 + 2$$

f.

$$9 + 0 = 7 + 2$$

g.

$$4 + 3 = 2 + 4$$

h.

$$8 = 8 + 0$$

i.

$$6 + 3 = 5 + 4$$



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

a.

$8 + 0 = \underline{\quad} + 4$

b.

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

c.

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

d.

$5 + \underline{\quad} = 6 + 0$

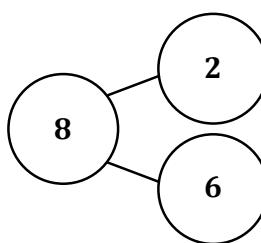
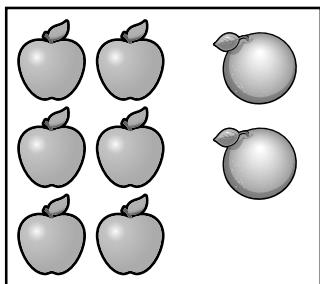
e.

$6 + \underline{\quad} = 4 + 3$

f.

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

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



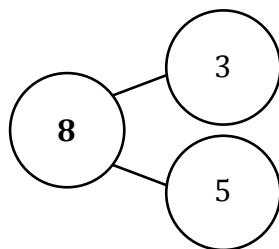
$$\underline{2} + \underline{6} = \underline{8}$$

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

I can add in any order, but it is quicker for me to start at 6 and count on 2.

Siiiiix, seven, eight! I love the counting on strategy!

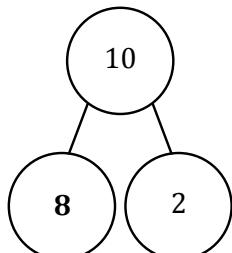
2. Write the number sentences to match the number bonds.



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

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

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



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

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

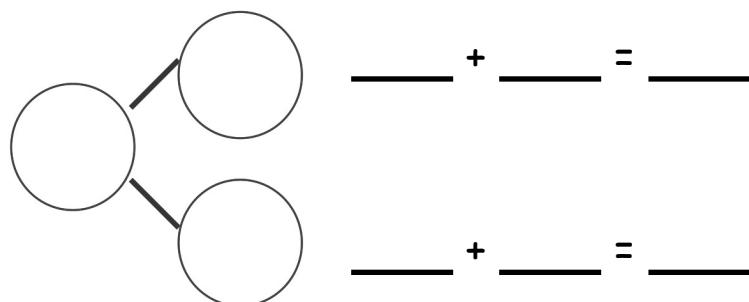
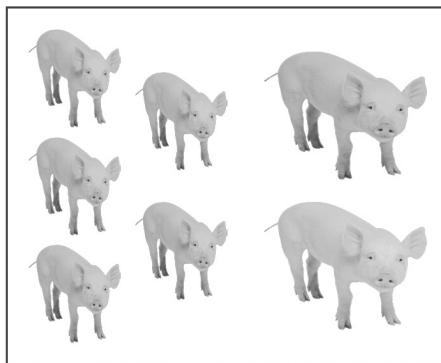
Since 10 is the total and one part is 2, I know the other part must be eight. I know my partners to 10, and I can add them in any order, $8 + 2$ or $2 + 8$.



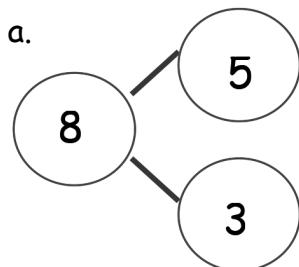
Name _____

Date _____

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

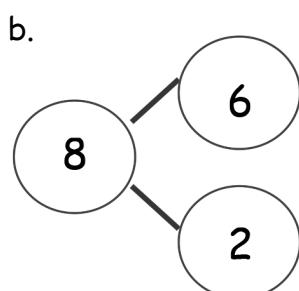


2. Write the number sentences to match the number bonds.



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

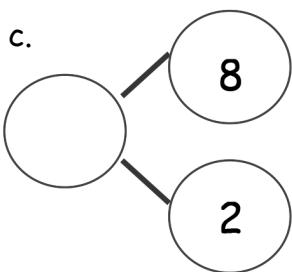
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} = \underline{\quad} + \underline{\quad}$$

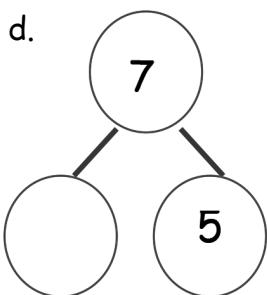
$$\underline{\quad} = \underline{\quad} + \underline{\quad}$$





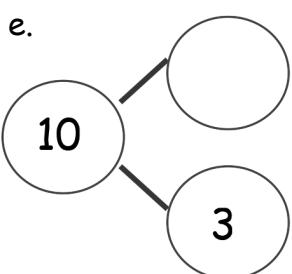
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



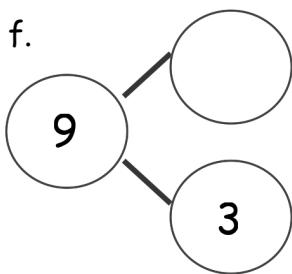
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$

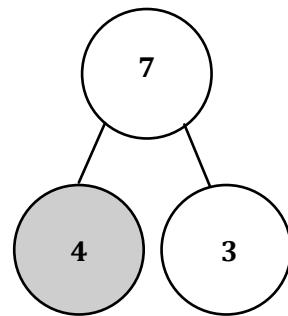
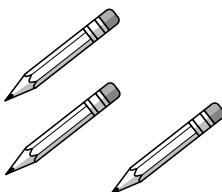
$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$$



$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

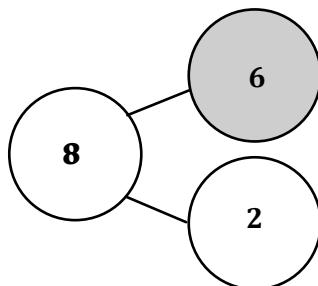
$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

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



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

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



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

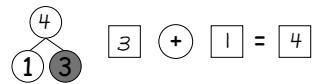
When I start with the larger addend, 6, I don't have to count on as much: Siiix, seven, eight?

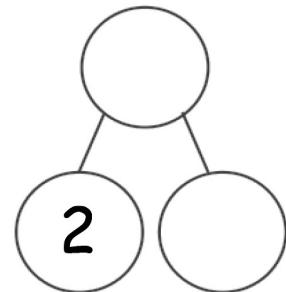


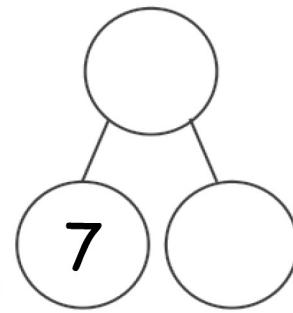
Name _____

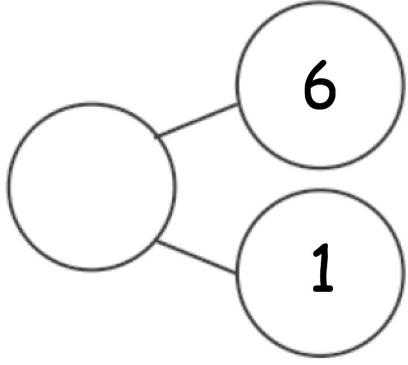
Date _____

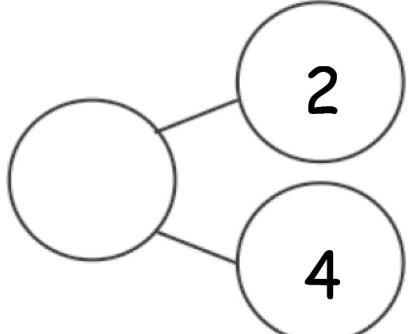
Color the larger part, and complete the number bond.
Write the number sentence, starting with the larger part.


$$\textcircled{1} \textcircled{3} \quad \boxed{3} \quad + \quad \boxed{1} = \boxed{4}$$

1.   
$$\boxed{\quad} + \boxed{\quad} = \boxed{\quad}$$

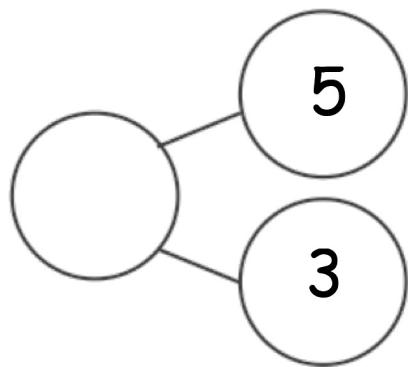
2.  
$$\boxed{\quad} + \boxed{\quad} = \boxed{\quad}$$

3. 
$$\boxed{\quad} + \boxed{\quad} = \boxed{\quad}$$

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

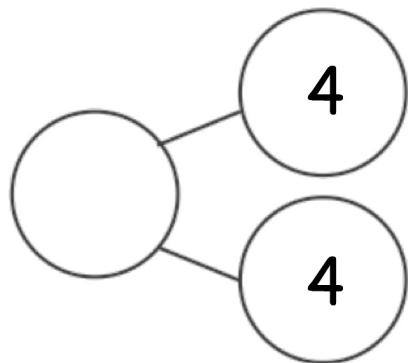


5.



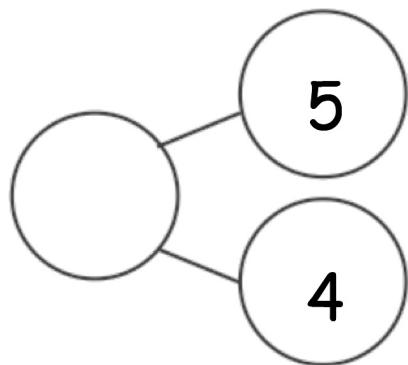
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

6.



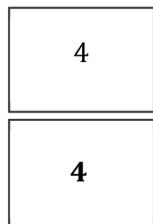
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

7.



$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

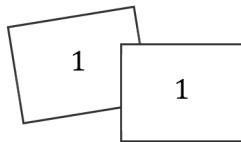
1. Draw the 5-group card to show a double. Write the number sentence to match the card.



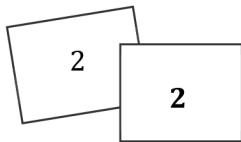
I can add the same number two times, like $4 + 4 = 8$. This is called a doubles fact. I can picture flashing doubles fingers in my mind... 4 and 4 makes 8.

$$\underline{4 + 4 = 8}$$

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



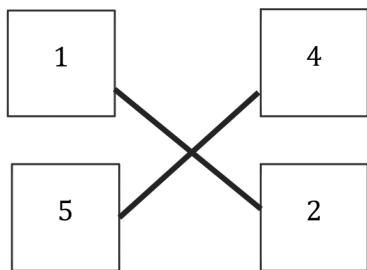
$$\underline{1 + 1 = 2}$$



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

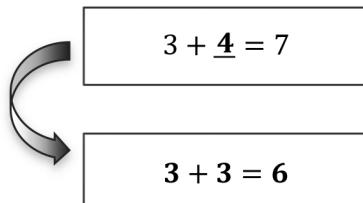
I know my doubles facts: $1 + 1 = 2$. $2 + 2 = 4$. The next one would be $3 + 3 = 6$. It's just like counting by 2s: 2, 4, 6.

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.



Name _____

Date _____

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

2
2

$$2 + 2 = 4$$

a.

4

b.

--

c.

5

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

a.

1	1
---	---

b.

2	
---	--

c.

--	--

d.

4	
---	--

e.

--	--



3. Solve the number sentences.

a. $3 + 3 = \underline{\quad}$

b. $5 + \underline{\quad} = 10$

c. $1 + \underline{\quad} = 2$

d. $4 = \underline{\quad} + 2$

e. $8 = 4 + \underline{\quad}$

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

a. 1

b. 4

c. 3

d. 2

5

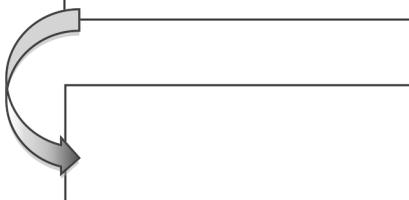
2

3

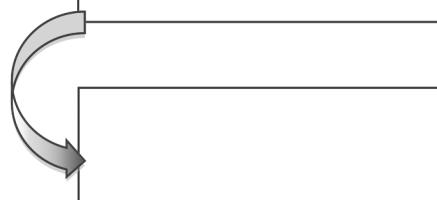
4

5. Solve the number sentences. Write the double fact that helped you solve the double plus 1.

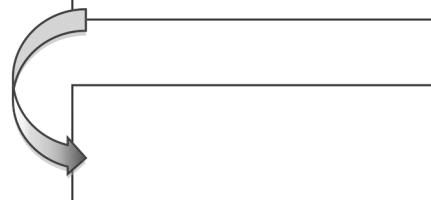
a. $2 + 3 = \underline{\quad}$

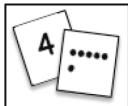


b. $3 + \underline{\quad} = 7$



c. $4 + \underline{\quad} = 9$





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!

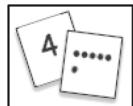
In parts a and b, I can add 1 each time, and the total goes up by 1. It's just the next counting number!

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



Name _____

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

Step 1: Color the problems with "+ 1" or "1 +" blue.

Step 2: Color the remaining problems with "+ 2" or "2 +" green.

Step 3: Color the remaining problems with "+ 3" or "3 +" yellow.

a. $7 + 1 = \underline{\quad}$	b. $8 + \underline{\quad} = 9$	c. $3 + 1 = \underline{\quad}$	d. $5 + 3 = \underline{\quad}$
e. $5 + \underline{\quad} = 7$	f. $4 + \underline{\quad} = 7$	g. $6 + 3 = \underline{\quad}$	h. $8 + \underline{\quad} = 10$
i. $2 + 1 = \underline{\quad}$	j. $1 + \underline{\quad} = 2$	k. $1 + \underline{\quad} = 4$	l. $6 + 2 = \underline{\quad}$
m. $3 + \underline{\quad} = 6$	n. $6 + \underline{\quad} = 7$	o. $3 + 2 = \underline{\quad}$	p. $5 + 1 = \underline{\quad}$
q. $2 + 2 = \underline{\quad}$	r. $4 + \underline{\quad} = 6$	s. $4 + 1 = \underline{\quad}$	t. $7 + 2 = \underline{\quad}$
u. $2 + \underline{\quad} = 3$	v. $9 + 1 = \underline{\quad}$	w. $7 + 3 = \underline{\quad}$	x. $1 + \underline{\quad} = 3$



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

$5 + 2$	$5 + 3$
7	8
$6 + 2$	$6 + 3$
8	9
$7 + 2$	$7 + 3$
9	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!

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



Name _____

Date _____

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

1.

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

2.

$6 + 1$	$6 + 2$
$7 + 1$	
	$8 + 2$
$9 + 1$	

3.

$4 + 4$	$4 + 5$	
$5 + 4$		
$6 + 4$		

4.

$2 + 4$		$2 + 6$
	$3 + 5$	



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

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

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

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

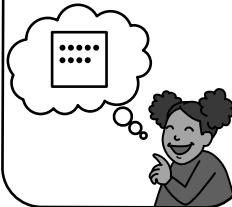
$$3 + 3 = \underline{6}$$

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

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

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

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



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

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

$$4 + 4 = 8$$

$$8 + 2 = 10$$

$$8 + 4 = 7$$

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 $3 + 4 = 7$.



Name _____

Date _____

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

$5 + 1 = \underline{\hspace{2cm}}$

$6 + 2 = \underline{\hspace{2cm}}$

$2 + 3 = \underline{\hspace{2cm}}$

$3 + 3 = \underline{\hspace{2cm}}$

$7 + 1 = \underline{\hspace{2cm}}$

$2 + 2 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} = 4 + 4$

$8 + 2 = \underline{\hspace{2cm}}$

$3 + 4 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} = 5 + 4$

$10 = 1 + \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} = 5 + 2$

Doubles	Doubles +1	+1	+2	Mentally visualized 5-groups

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

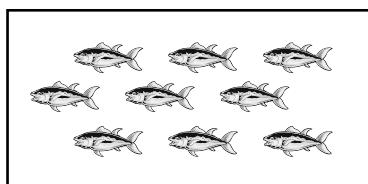


Solve and practice math facts.

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

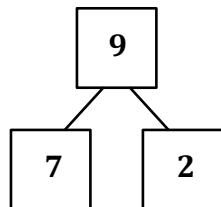
1. Break the total into parts. Write a number bond and addition and subtraction number sentences to match the story.

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



$$\begin{array}{r} 7 \\ + \\ 2 \\ \hline 9 \end{array}$$

$$\begin{array}{r} 9 \\ - \\ 7 \\ \hline 2 \end{array}$$



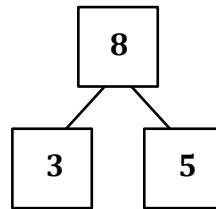
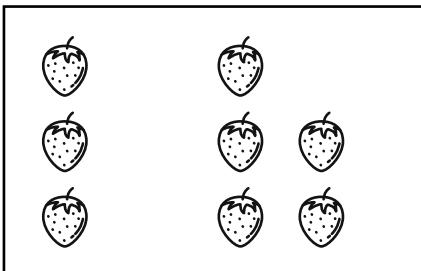
Jane caught 2 fish after lunch.

I can use counting on and an addition sentence to solve. See seven, 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?



$$\begin{array}{r} 3 \\ + \\ 5 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 8 \\ - \\ 3 \\ \hline 5 \end{array}$$

Sanjay gave her 5 strawberries.

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

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

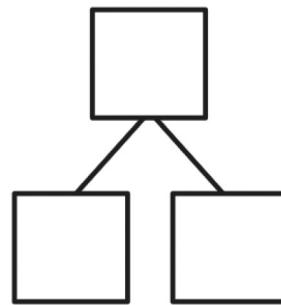
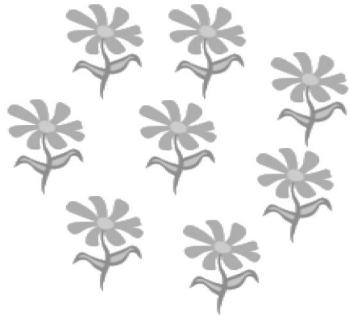


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Break the total into parts. Write a number bond and addition and subtraction number sentences to match the story.

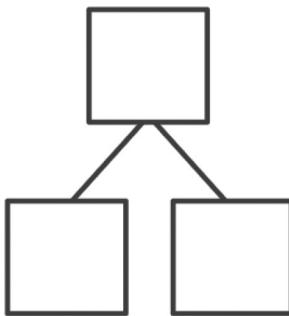
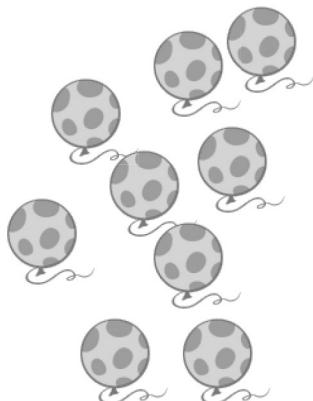
1. Six flowers bloomed on Monday. Some more bloomed on Tuesday. Now, there are 8 flowers. How many flowers bloomed on Tuesday?



$$\begin{array}{c} \boxed{} \\ + \\ \boxed{} \end{array} \quad \boxed{} = \boxed{}$$
$$\begin{array}{c} \boxed{} \\ - \\ \boxed{} \end{array} \quad \boxed{} = \boxed{}$$

_____ flowers bloomed on Tuesday.

2. Below are the balloons that Mom bought. She bought 4 balloons for Bella, and the rest of the balloons were for Jim. How many balloons did she buy for Jim?



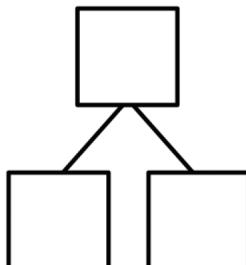
$$\begin{array}{c} \boxed{} \\ + \\ \boxed{} \end{array} \quad \boxed{} = \boxed{}$$
$$\begin{array}{c} \boxed{} \\ - \\ \boxed{} \end{array} \quad \boxed{} = \boxed{}$$

Mom bought Jim _____ balloons.



Draw a picture to solve the math story.

3. Missy buys some cupcakes and 2 cookies. Now, she has 6 desserts. How many cupcakes did she buy?

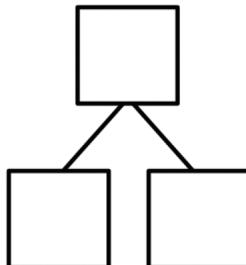


$$\square + \square = \square$$

$$\square - \square = \square$$

Missy bought _____ cupcakes.

4. Jim invited 9 friends to his party. Three friends arrived late, but the rest came early. How many friends came early?

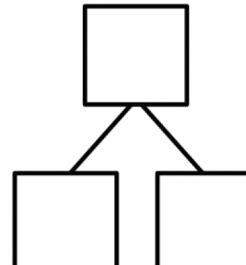


$$\square + \square = \square$$

$$\square - \square = \square$$

_____ friends came early.

5. Mom puts a ring on each of her fingers on both hands. First, she puts on 2 gold rings. Then, she puts a silver ring on each of her other fingers. How many silver rings did she put on?



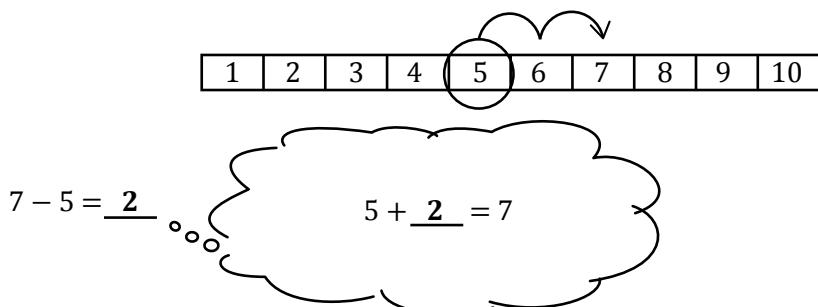
$$\square + \square = \square$$

$$\square - \square = \square$$

Mom puts on _____ silver rings.

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 $5 + 2 = 7$.



2. Use the number path to help you solve.



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

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

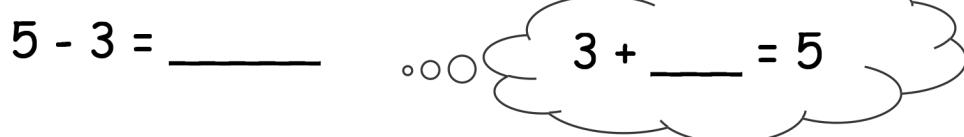
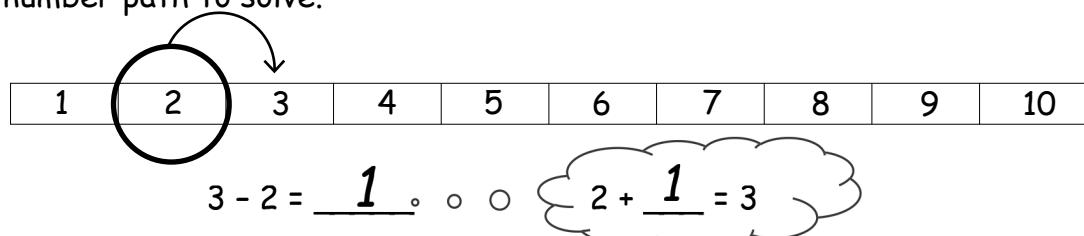
Now that I have practiced, I don’t actually have to circle the number on the number path and draw arrows. I can just use my pencil point to imagine the hops. To solve $9 - 6$, I’m going to start at 6 and count up until I get to 9. That’s like solving my missing addend problems. $6 + 3 = 9$, so $9 - 6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



Name _____

Date _____

Use the number path to solve.



a. $8 - 6 =$ $6 +$ $= 8$

b. $7 - 4 =$ $4 +$ $= 7$

c. $8 - 2 =$

d. $9 - 6 =$



Use the number path to solve. Match the addition sentence that can help you.

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

3. a. $6 - 4 =$ _____

$$6 + 4 = 10$$

b. $9 - 5 =$ _____

$$10 = 7 + 3$$

c. $10 - 6 =$ _____

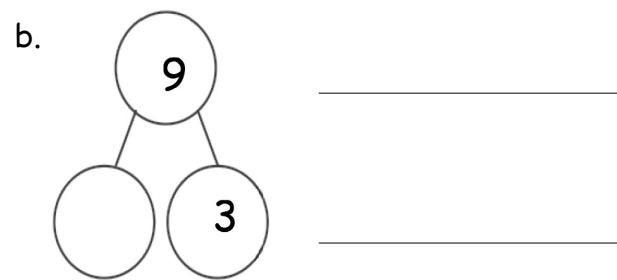
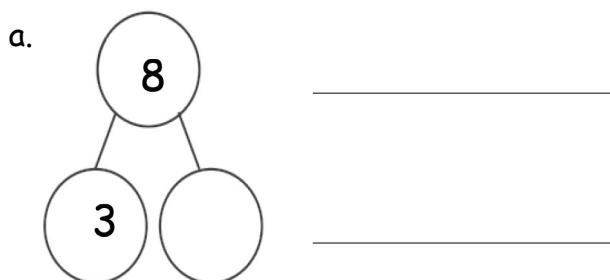
$$4 + 5 = 9$$

d. $10 - 7 =$ _____

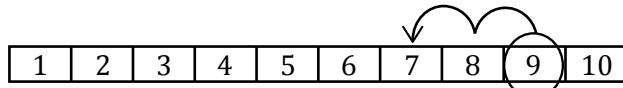
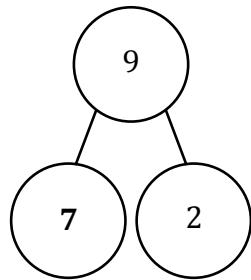
$$6 = 4 + 2$$

4. Write an addition and subtraction number sentence for the number bond. You may use the number path to solve.

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



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

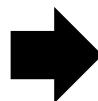


$$\underline{9 - 2 = 7}$$

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

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

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



Count on

Count back

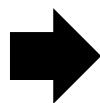
a. $9 - 1 = \underline{8}$

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

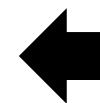
For $9 - 1$, it's faster to count back, since that would just be 1 hop back. $9 - 1 = 8$. 8 and 7 are close together though, so it's faster to count on from 7. $7 + 1 = 8$, so that's just 1 hop forward.



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

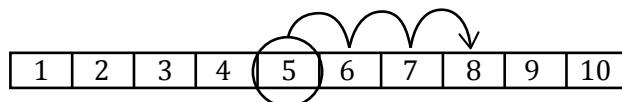


Count on



Count back

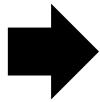
$$8 - 5 = \underline{3}$$



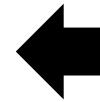
I counted on because it needed fewer hops.

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.



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



$$7 + 2 = 9$$

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

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

Name _____

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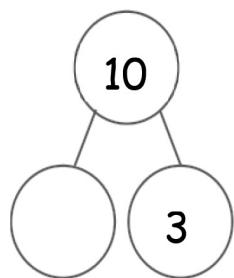
Use the number path to complete the number bond, and write an addition and a subtraction sentence to match.

1.

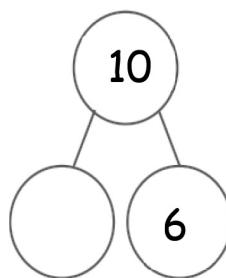
Number Path

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

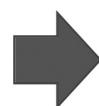
a.



b.



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



Count on

Count back

a. $9 - 7 =$ _____

b. $8 - 2 =$ _____

c. $7 - 5 =$ _____



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

Count on

Count back



a. $7 - 5 =$ _____



I counted _____ because it needed fewer hops.

b. $9 - 1 =$ _____



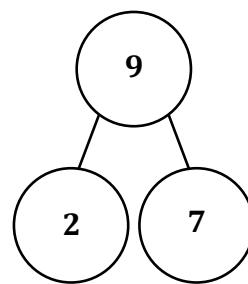
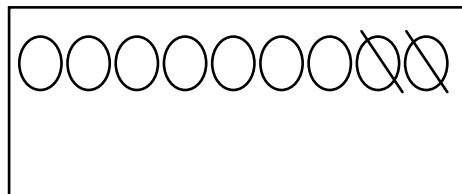
I counted _____ because it needed fewer hops.

c. $10 - 8 =$ _____

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

Read the story. Make a math drawing to solve.

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



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

7 cars are still in the bag.

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

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

$$9 - 2 = 7.$$

**Lesson 28:**

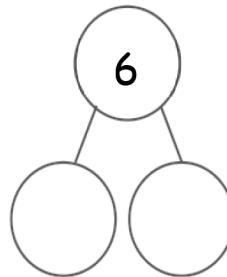
Solve *take from with result unknown* math stories with math drawings, true number sentences, and statements, using horizontal marks to cross off what is taken away.

Name _____

Date _____

Read the story. Make a math drawing to solve.

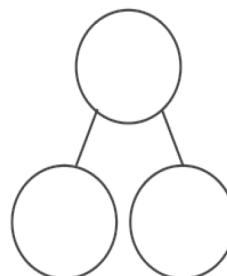
1. There were 6 hot dogs on the grill. Two finish cooking and are removed. How many hot dogs remain on the grill?



$$6 - \underline{\quad} = \underline{\quad}$$

There are _____ hot dogs remaining on the grill.

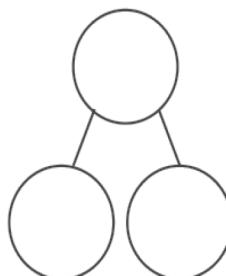
2. Bob buys 8 new toy cars. He takes 3 out of the bag. How many cars are still in the bag?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

_____ cars are still in the bag.

3. Kira sees 7 birds in the tree. Three birds fly away. How many birds are still in the tree?

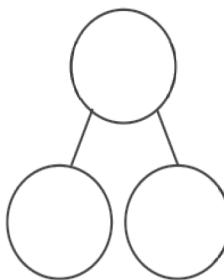


$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

_____ birds are still in the tree.



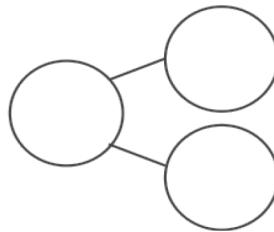
4. Brad has 9 friends over for a party. Six friends get picked up. How many friends are still at the party?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$\underline{\quad}$ friends are still at the party.

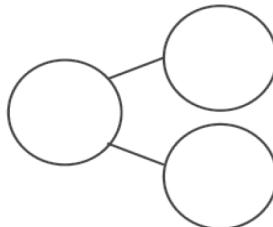
5. Jordan was playing with 10 cars. He gave 7 to Kate. How many cars is Jordan playing with now?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

Jordan is playing with $\underline{\quad}$ cars now.

6. Tony takes 4 books from the bookshelf. There were 10 books on the shelf to start. How many books are on the shelf now?

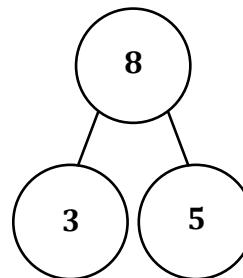
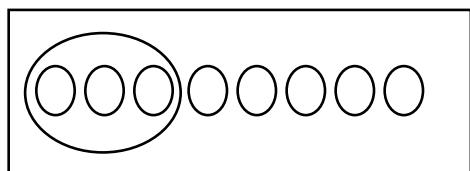


$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

$\underline{\quad}$ books are on the shelf now.

Read the math stories. Make math drawings to solve.

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



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

5 crayons are not red.

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

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

$$8 - 3 = 5$$

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

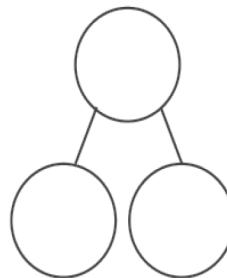
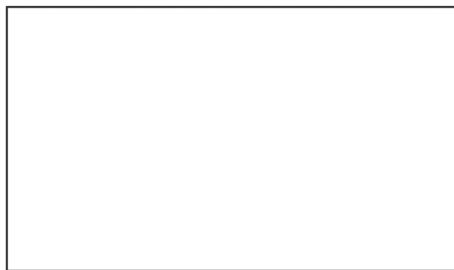


Name _____

Date _____

Read the math stories. Make math drawings to solve.

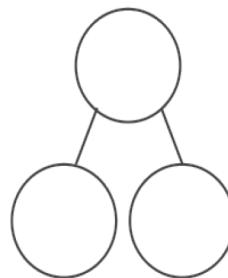
1. Tom has a box of 7 crayons. Five crayons are red. How many crayons are not red?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

_____ crayons are not red.

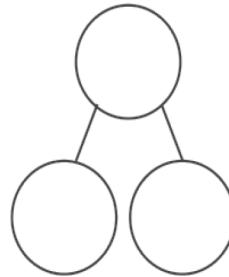
2. Mary picks 8 flowers. Two are daisies. The rest are tulips. How many tulips does she pick?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

Mary picks _____ tulips.

3. There are 9 pieces of fruit in the bowl. Four are apples. The rest are oranges. How many pieces of fruit are oranges?

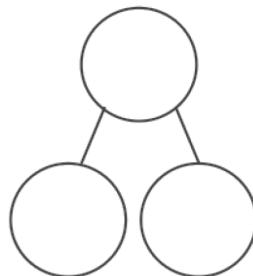


$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

The bowl has _____ oranges.



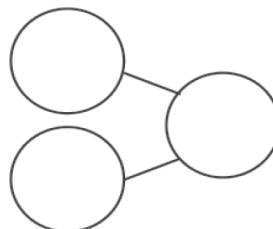
4. Mom and Ben make 10 cookies. Six are stars. The rest are round. How many cookies are round?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

There are round cookies.

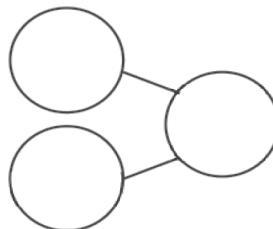
5. The parking lot has 7 spaces. Two cars are parked in the lot. How many more cars can park in the lot?



$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

 more cars can park in the lot.

6. Liz has 2 fingers with bandages. How many fingers are not hurt?



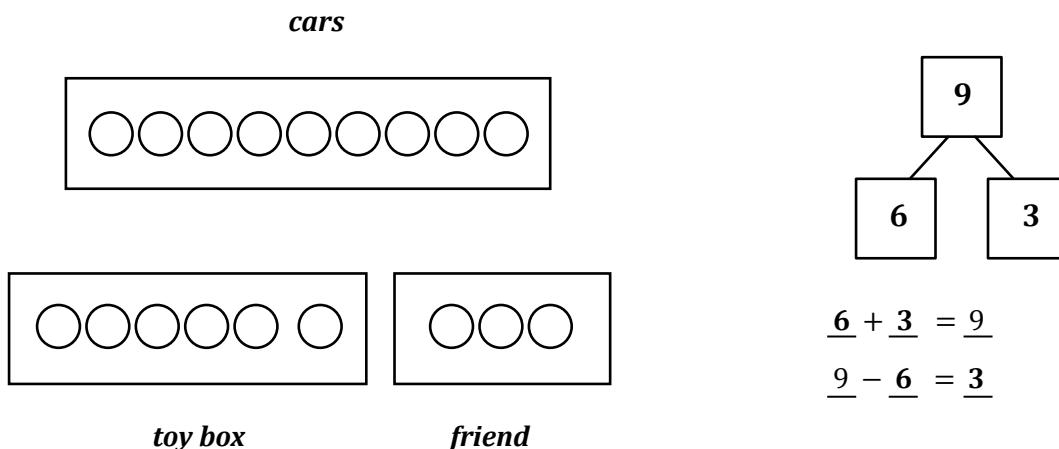
$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

Write a statement for your answer:



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

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



Lee takes 3 cars to his friend.

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.” That’s 3 more cars. Lee takes 3 cars to his friend.

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.

$$6 + 3 = 9.$$

$$9 - 6 = 3.$$

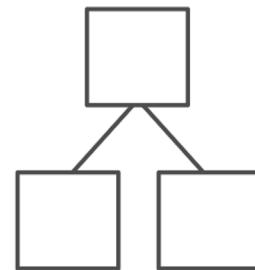
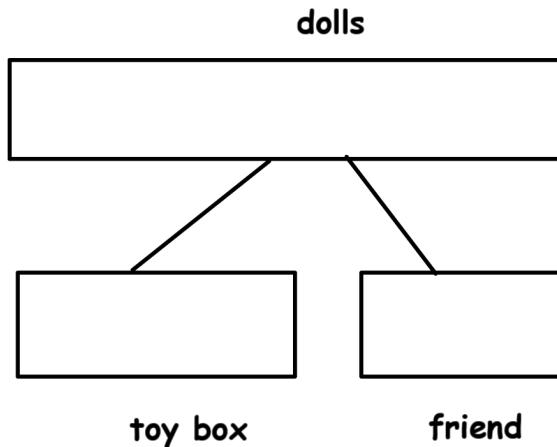


Name _____

Date _____

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

1. Grace has a total of 7 dolls. She puts 2 in the toy box and takes the rest to her friend. How many dolls does she take to her friend?

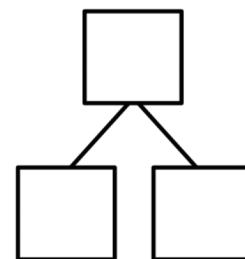


$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = 7$$

$$7 - =$$

Grace takes dolls to her friend.

2. Jack can invite 8 friends to his birthday party. He makes 3 invitations. How many invitations does he still need to make?



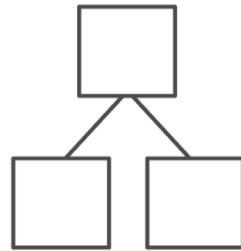
Jack still needs to make invitations.

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = 8$$

$$8 - \underline{\quad} = \underline{\quad}$$



3. There are 9 dogs at the park. Five dogs play with balls. The rest are eating bones. How many dogs are eating bones?



$$\underline{\quad} + \underline{\quad} = 9$$

 dogs are eating bones.

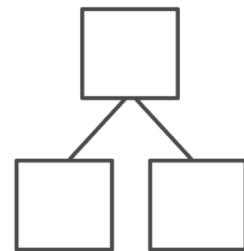
$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

4. There are 10 students in Jim's class. Seven bought lunch at school. The rest brought cold lunch. How many students brought cold lunch?

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

 students brought cold lunch.



The sample problem below shows two possible number sentences. Both are considered reasonable and correct. If your student chooses to write the first number sentence, suggest that they 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?

Math Drawing: A drawing of two circles (shirts) crossed out with a large oval. A line with four circles (shirts) is drawn through it, with a line through the middle two circles.

Number Bond: A number bond diagram for 6. A box at the top contains 6, with lines pointing down to two boxes containing 2 and 4 respectively.

Reasoning: A speech bubble says: "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."

Equation 1: $6 - \square = 2$

Equation 2: $6 - \square = 4$

Reasoning: A speech bubble says: "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."

Conclusion: A speech bubble says: "Both of my number sentences match my number bond! Addition and subtraction both have parts and a whole."

Answer: 4 shirts were sold.



Name _____

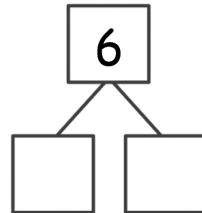
Date _____

Make a math drawing, and circle the part you know.

Cross out the unknown part.

Complete the number sentence and number bond.

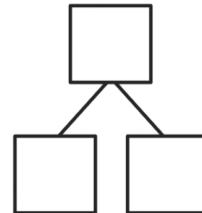
1. Missy gets 6 presents for her birthday. She unwraps some. Four are still wrapped. How many presents did she unwrap?



Missy unwrapped _____ presents.

$$\boxed{6} \text{ } \bigcirc \text{ } \boxed{-} \text{ } \boxed{} \text{ } = \text{ } \boxed{}$$

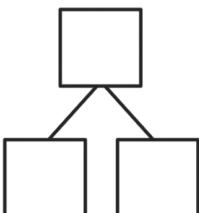
2. Ann has a box of 8 markers. Some fall on the floor. Six are still in the box. How many markers fell on the floor?



_____ markers fell on the floor.

$$\boxed{} \text{ } \bigcirc \text{ } \boxed{-} \text{ } \boxed{} \text{ } = \text{ } \boxed{}$$

3. Nick makes 7 cupcakes for his friends. Some cupcakes were eaten. Now, there are 5 left. How many cupcakes were eaten?

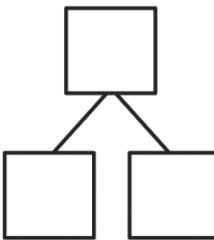


_____ cupcakes were eaten.

$$\boxed{} \text{ } \bigcirc \text{ } \boxed{-} \text{ } \boxed{} \text{ } = \text{ } \boxed{}$$



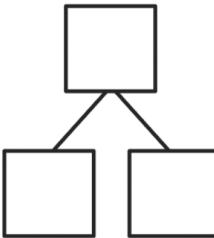
4. A dog has 8 bones. He hides some. He still has 5 bones. How many bones are hidden?



_____ bones are hidden.

$$\boxed{\quad} - \boxed{\quad} = \boxed{\quad}$$

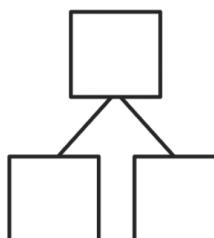
5. The cafeteria table can seat 10 students. Some of the seats are taken. Seven seats are empty. How many seats are taken?



_____ seats are taken.

$$\boxed{\quad} - \boxed{\quad} = \boxed{\quad}$$

6. Ron has 10 sticks of gum. He gives one stick to each of his friends. Now, he has 3 sticks of gum left. How many friends did Ron share with?



Ron shared with _____ friends.

$$\boxed{\quad} - \boxed{\quad} = \boxed{\quad}$$

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

a.

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

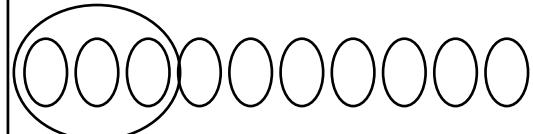


$$\boxed{3} + \boxed{7} = \boxed{10}$$

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

b.

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



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

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

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

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



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

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

$2 + 4 = 6$

$6 - 4 = 2$

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.

Name _____

Date _____

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

1. a.

There are 10 flowers in a vase.
6 are red.
The rest are yellow.
How many flowers are yellow?

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

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

b.

There are 9 apples in a basket.
6 are red.
The rest are green.
How many apples are green?

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

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

c.

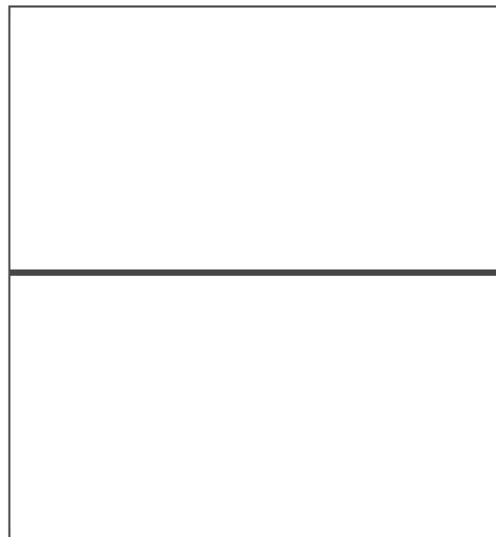
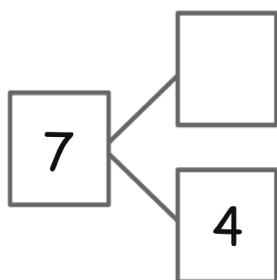
Kate has a finger puppet
on each of her fingers.
3 puppets are bears.
The rest are tigers.
How many finger puppets
are tigers?

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

$$\boxed{10} - \boxed{6} = \boxed{}$$


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

2.

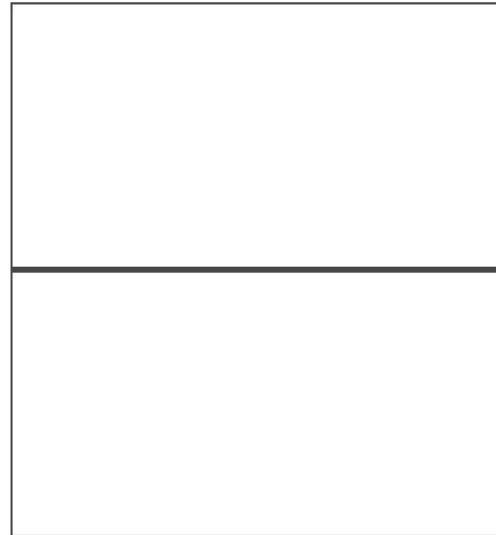
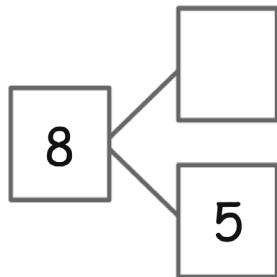


A large empty rectangular box for drawing a picture related to the number bond.

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

3.



A large empty rectangular box for drawing a picture related to the number bond.

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

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



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

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

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

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



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

I am going to draw this one to solve it.

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

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

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



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

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

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

$$0 = 8 - \underline{8}$$

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

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



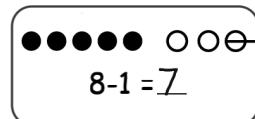
Name _____

Date _____

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

1.

2.



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

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

3.

4.

$6 - \underline{\quad} = 6$

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

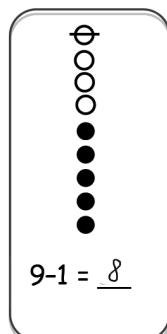
Show the subtraction. If you want, use a 5-group drawing like the model for each problem.

5.

6.

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

$8 = 8 - \underline{\quad}$



7.

8.

$10 - \underline{\quad} = 9$

$7 - \underline{\quad} = 7$



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

9.  \ominus

10.  $\circ \circ$

11.  $\circ \circ \circ \ominus$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

12. 

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

13. 

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

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

a. $7 - \underline{\quad} = 6$

b. $0 = 7 - \underline{\quad}$

c. $8 - \underline{\quad} = 7$

d. $6 - \underline{\quad} = 5$

e. $8 = 9 - \underline{\quad}$

f. $9 = 10 - \underline{\quad}$

g. $10 - \underline{\quad} = 10$

h. $9 - \underline{\quad} = 8$

1. Cross off to subtract.



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

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

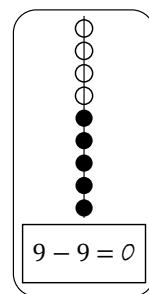


$$1 = 5 - \underline{4}$$



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

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



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

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



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

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

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

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



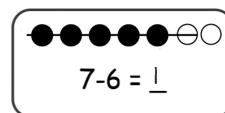
Name _____

Date _____

Cross off to subtract.

1. ● ● ● ● ○ ○ ○ ○

2. ● ● ● ● ○ ○ ○ ○



10 - 10 = _____

9 - 8 = _____

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

3.

4.

1 = _____ - 7

8 - _____ = 0

5.

6.

0 = _____ - 7

6 - _____ = 1

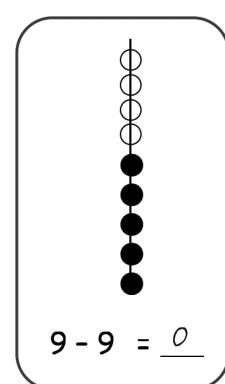
Make a 5-group drawing like the model for each problem. Show the subtraction.

7.

8.

9 - _____ = 1

0 = 8 - _____



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

9. 

10. 

11. 

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

12.



13.



$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

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

a. $7 - \underline{\quad} = 0$

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

c. $8 - \underline{\quad} = 1$

d. $6 - \underline{\quad} = 0$

e. $0 = 9 - \underline{\quad}$

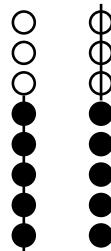
f. $1 = 10 - \underline{\quad}$

g. $10 - \underline{\quad} = 0$

h. $9 - \underline{\quad} = 1$

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

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

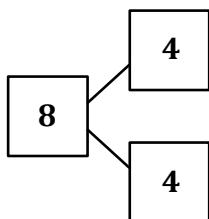


To subtract 3, I can just cross off the three white dots. Then I will be left with a group of 5. I don't have to count those dots because I know there are 5 black dots in my 5-group drawing.

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

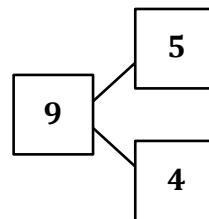
$$8 - 3 = \underline{5}$$

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.

$$8 - 4 = \underline{4}$$



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

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

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

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.

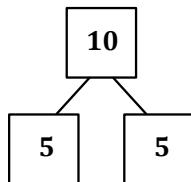
$$8 - \underline{5} = 3$$

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

$$8 - 3 = 5$$



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

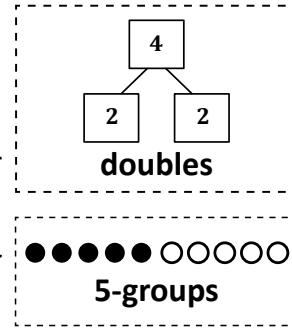


$$10 - 5 = \underline{5}$$

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

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

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



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

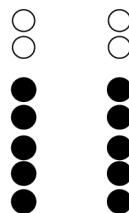
The 5-group that makes 6 is 5 and 1. That won't help me much. Let me think of the double that makes 6... 3 and 3. Yes, $6 - 3$ is 3. Doubles helped me solve this problem. I'll draw a line to the doubles box.

Name _____

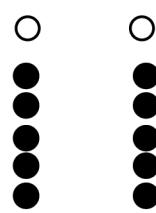
Date _____

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

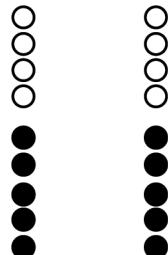
1.



2.



3.



$$\begin{array}{r}
 \text{O} \quad \text{O} \\
 \bullet \bullet \bullet \bullet \\
 \hline
 6 - 1 = 5
 \end{array}$$

$$\begin{array}{r}
 \text{O} \quad \text{O} \\
 \bullet \bullet \bullet \bullet \\
 \hline
 6 - 5 = 1
 \end{array}$$

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

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

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

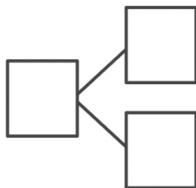
$7 - 2 = \underline{\quad}$

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

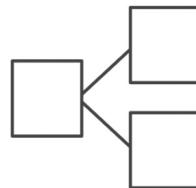
$9 - \underline{\quad} = 5$

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

4.



5.



$10 - 5 = \underline{\quad}$

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

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

6. Solve. Visualize 5-groups to help you.

a. $9 - \underline{\quad} = 4$

b. $\underline{\quad} - 5 = 5$

c. $8 - \underline{\quad} = 5$

d. $\underline{\quad} - 5 = 2$

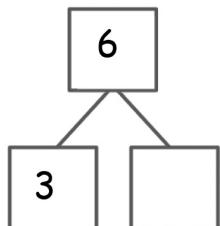
e. $\underline{\quad} - 5 = 3$

f. $\underline{\quad} - 4 = 5$

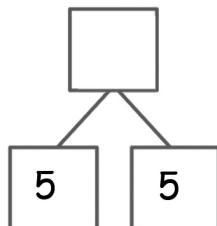


Complete the number sentence and number bond for each problem.

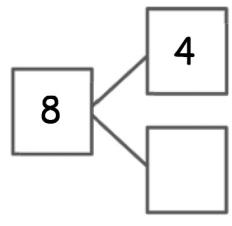
7.



8.



9.



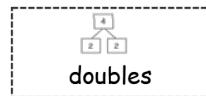
$$6 - 3 = \underline{\quad}$$

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

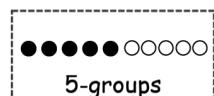
$$8 - \underline{\quad} = 4$$

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

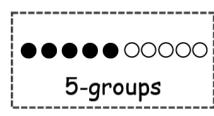
a. $7 - \underline{\quad} = 2$



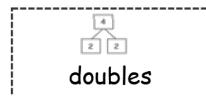
b. $8 - \underline{\quad} = 3$



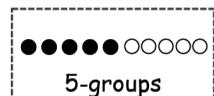
c. $10 - \underline{\quad} = 5$



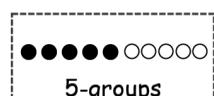
d. $\underline{\quad} - 3 = 3$



e. $8 - \underline{\quad} = 4$

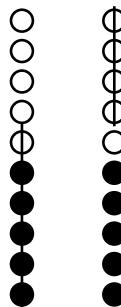


f. $9 - \underline{\quad} = 5$



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

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

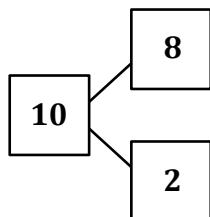


To take away the other part, I can cross off 4 from the end. That would leave me with 6. $10 - 4 = 6$.

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

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

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



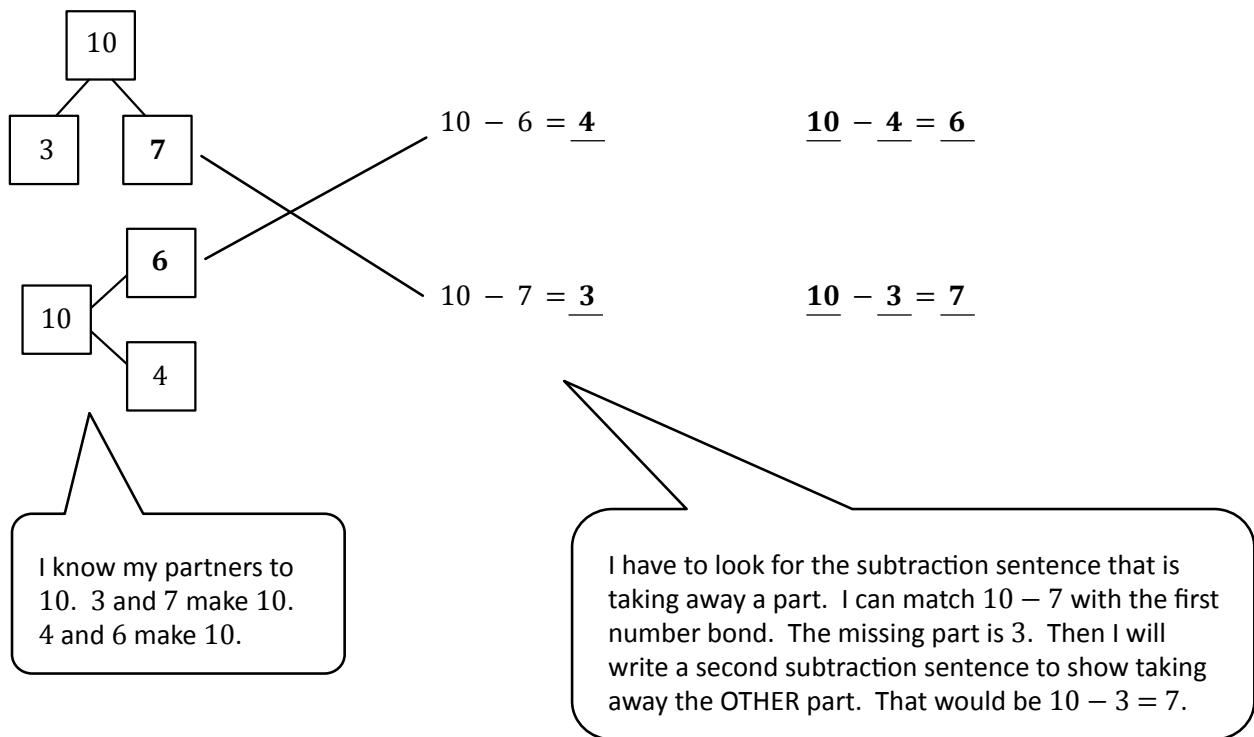
$$10 - 8 = \underline{2}$$

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

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



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



Name _____

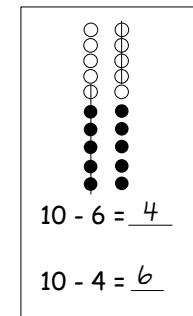
Date _____

Make a math drawing, and solve. Use the first number sentence to help you write a related number sentence that matches your picture.

1.

2.

3.



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

$10 - 1 = \underline{\quad}$

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

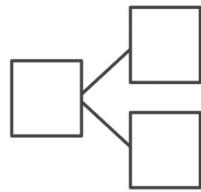
$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

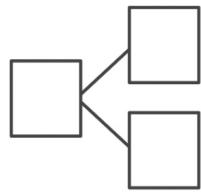
Subtract. Then, write the related subtraction sentence. Make a math drawing if needed, and complete a number bond for each.

4.



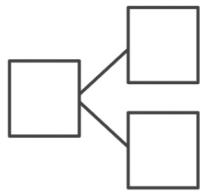
$10 - 2 = \underline{\quad}$

5.



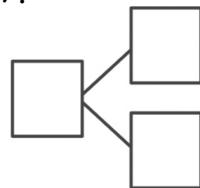
$10 - \underline{\quad} = 9$

6.



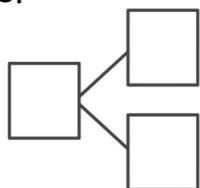
$10 - \underline{\quad} = 6$

7.



$10 - \underline{\quad} = 1$

8.

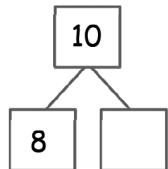


$\underline{\quad} = 10 - 5$



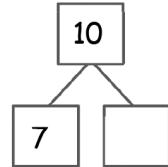
9. Complete the number bond. Match the number bond to the related subtraction sentence. Write the other related subtraction number sentence.

a.



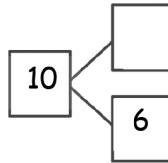
$$10 - 5 = \underline{\hspace{2cm}}$$
 $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

b.



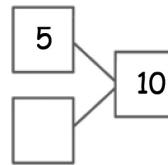
$$10 - 1 = \underline{\hspace{2cm}}$$
 $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

c.



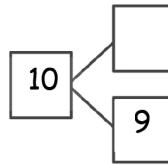
$$10 - 2 = \underline{\hspace{2cm}}$$
 $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

d.



$$10 - 4 = \underline{\hspace{2cm}}$$
 $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

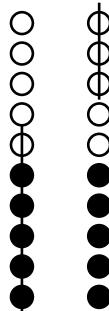
e.



$$10 - 3 = \underline{\hspace{2cm}}$$
 $\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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.
 $9 - 6 = 3$.

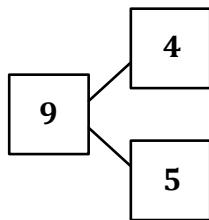


To take away the other part, I can cross off 3 from the edn. That would leave me with 6. $9 - 3 = 6$.

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

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

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



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

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

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



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

A number bond diagram for the number 10. The number 10 is at the top, connected by lines to two boxes below it: 3 on the left and 7 on the right. To the right of this bond is the subtraction sentence $10 - 6 = \underline{4}$.

A number bond diagram for the number 10. The number 10 is on the left, connected by lines to two boxes below it: 6 on the top right and 4 on the bottom right. To the right of this bond is the subtraction sentence $10 - 7 = \underline{3}$.

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 $10 - 3 = 7$.

Name _____

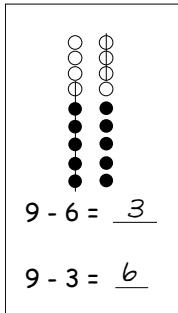
Date _____

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

1.

2.

3.



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

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

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

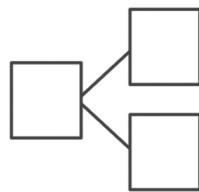
$\underline{\quad} - \underline{\quad} = \underline{\quad}$

$\underline{\quad} - \underline{\quad} = \underline{\quad}$

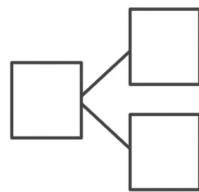
$\underline{\quad} - \underline{\quad} = \underline{\quad}$

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

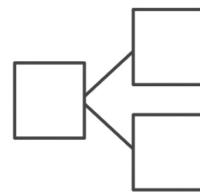
4.



5.



6.



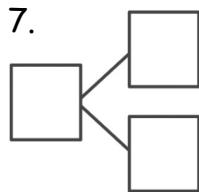
$9 - 7 = \underline{\quad}$

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

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

 $\underline{\quad}$
 $\underline{\quad}$
 $\underline{\quad}$

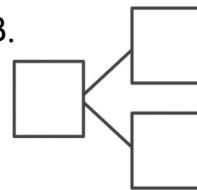
7.



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

 $\underline{\quad}$

8.

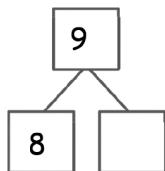


$\underline{\quad} = 9 - 5$

 $\underline{\quad}$


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

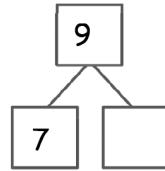
a.



$$9 - 5 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

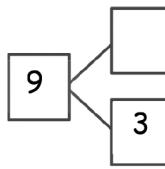
b.



$$9 - 1 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

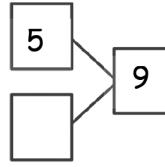
c.



$$9 - 2 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

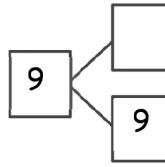
d.



$$9 - 6 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

e.



$$9 - \underline{\hspace{2cm}} = 0$$

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

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

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

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

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

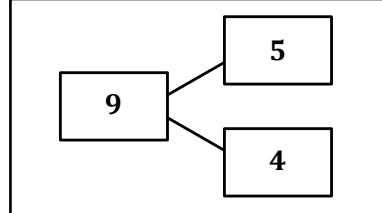
$5 + 5 = 10$ is a double fact and uses a 5-group. Both addends are 5.

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

$$5 + 4 = 9$$

$$9 - 4 = 5$$

5 and 4 are the parts that make 9.



$$9 - 5 = 4$$



Name _____

Date _____

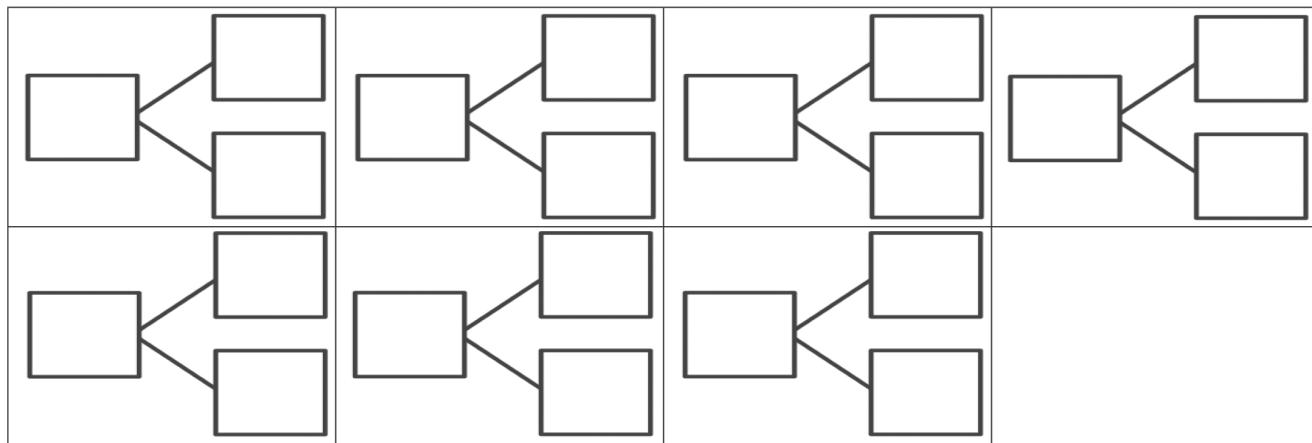
Find and solve the 7 unshaded addition problems that are doubles and 5-groups.

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.

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





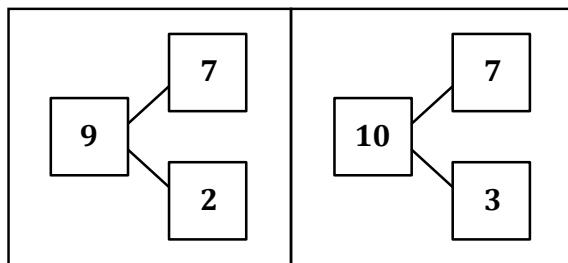
Solve the unshaded addition problems below. Write the two subtraction facts that would have the same number bond. To help you practice your addition and subtraction facts even more, make your own number bond flash cards.

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					

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

$$9 - 7 = 2 \text{ and } 9 - 2 = 7.$$

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



Name _____

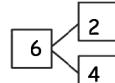
Date _____

Solve the unshaded addition problems below.

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

$4 + 2$

Pick an addition fact from the chart. Use the grid to write the two subtraction facts that would have the same number bond. Repeat in order to make a set of subtraction flash cards. To help you practice your addition and subtraction facts even more, make your own number bond flash cards with the templates on the last page.

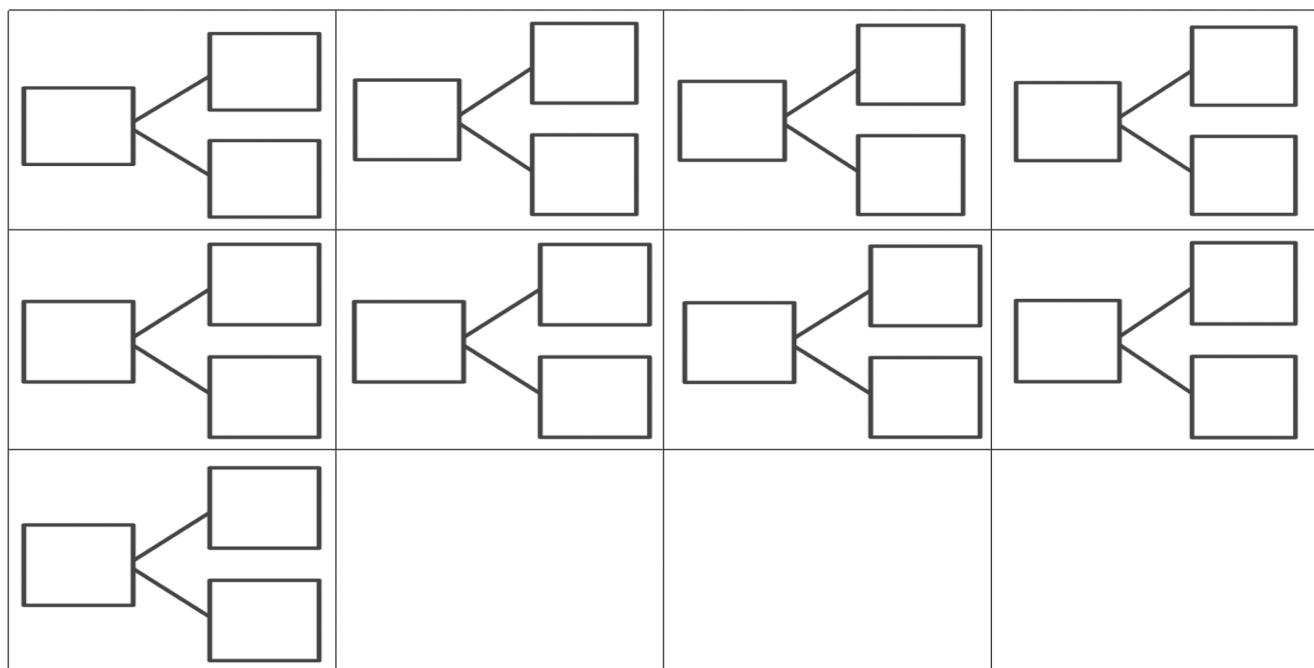
$$\begin{array}{l} 6 - 2 = 4 \\ 6 - 4 = 2 \end{array}$$






Lesson 39: Analyze the addition chart to create sets of related addition and subtraction facts.



**Lesson 39:**

Analyze the addition chart to create sets of related addition and subtraction facts.

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