

This “Section-level slidedeck” uses the full unit slidedeck as a base. Only the slides aligning with the Section-level planning guide are revealed. The slides are color-coded to match the purple-orange-purple flow of the Section-level planning guides. Make a copy of the slidedeck to customize as you wish!



Adding and Subtracting Within 20

Grade 1: Unit 3

**Priority Unit (All
Sections): Major Grade-
level Work ... [identified](#)
[by IM authors](#)**

Section-Level Slidedeck



Standards addressed: 1.OA.A, 1.OA.B., 1.OA.C., 1.OA.D, NBT.A, 1.NBT.B.,

Unit 3 Progression Overview

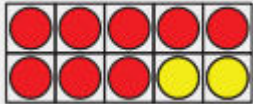
Adding and Subtracting Within 20

Section A

Lessons 1-7

1.OA.A, 1.OA.B., 1.OA.C., 1.OA.D.7, 1.OA.D.

- Build toward fluency with adding and subtracting within 10

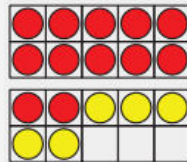


Section B

Lessons 8-14

1.NBT.A, 1.NBT.B., 1.OA.A, 1.OA.B, 1.OA.C, 1.OA.D

- Add and subtract one-digit numbers from teen numbers.
- Find the value of an addition expression where one addend is 10 or a subtraction expression where the difference is 10.
- Understand 10 ones as a ten and the numbers 11 to 19 as a ten and some ones.

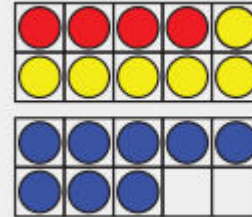


Section C

Lessons 15-21

1.OA.A, 1.OA.B, 1.OA.C, 1.OA.D.

- Add within 20, including 3 addends.

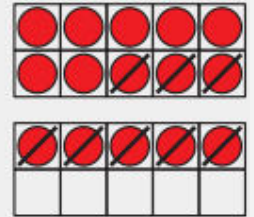


Section D

Lessons 22-28

1.NBT.A., 1.OA.A., 1.OA.B., 1.OA.C., 1.OA.D

- Subtract within 20.



Composing and Decomposing with Fingers



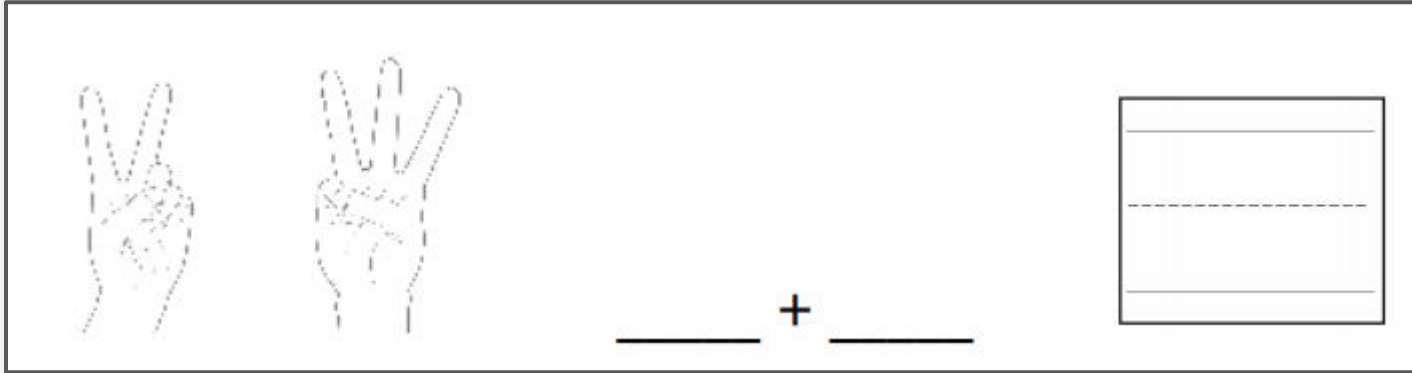
Let's make 10 with our fingers

Warm
up

What Do You Know About:

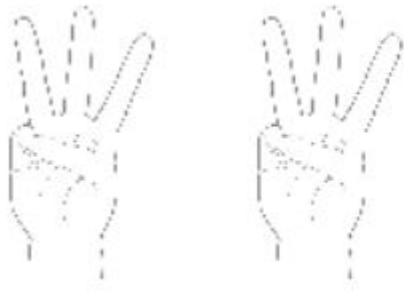


Fingers and Expressions




The box contains two dashed hand drawings. The first hand has two fingers extended upwards. The second hand has five fingers extended upwards. To the right of these hands is a plus sign (+) positioned between two horizontal lines. Further to the right is a rectangular area with three horizontal lines, intended for writing the result of the addition.

Fingers and Expressions



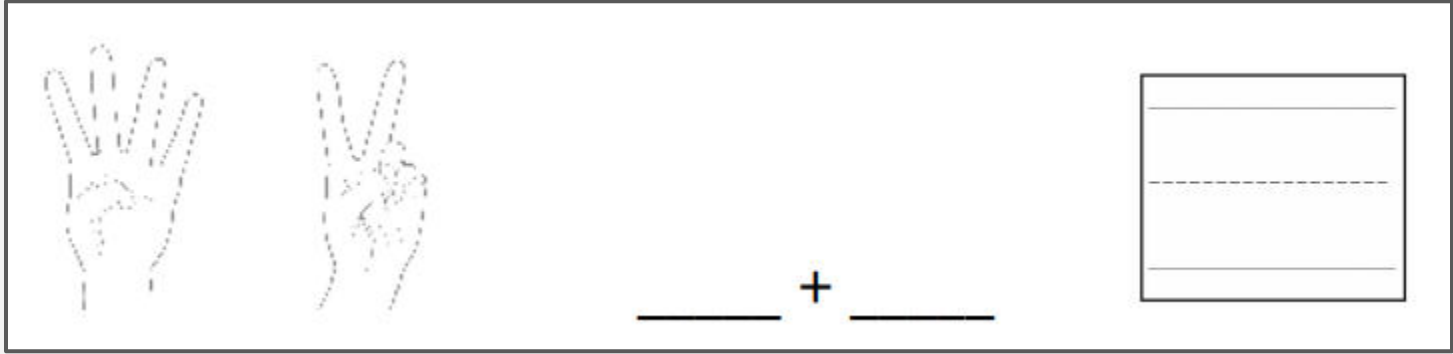
Two dashed-line drawings of a hand with five fingers spread, used for tracing practice.

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




A rectangular box containing four horizontal lines: a solid top line, a dashed middle line, and two solid bottom lines, intended for writing practice.

Fingers and Expressions




_____ + _____

Fingers and Expressions



_____ + _____



Fingers and Expressions

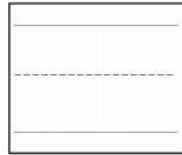
$2 + 1$



$5 + 2$



$2 + 2$



$5 + 5$



10 Fingers

1.  $\underline{\quad} + \underline{\quad}$


The image shows two hands against a red background. The left hand is open, showing five fingers. The right hand is clenched into a fist, also showing five fingers. To the right of the hands is a simple addition problem consisting of two horizontal lines with a plus sign between them.

10 Fingers

2.  $\underline{\quad\quad} + \underline{\quad\quad}$

The image shows two hands against a red background. The left hand is open with all five fingers extended. The right hand is also open with all five fingers extended. Below the hands is a simple addition problem: a blank line followed by a plus sign followed by another blank line.

10 Fingers

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

The image shows two hands against a red background. The left hand is open with all five fingers extended, and the right hand is also open with all five fingers extended. Below the hands is a simple addition problem consisting of two horizontal lines, a plus sign, and another horizontal line.

10 Fingers

4.  $\underline{\quad} + \underline{\quad}$

The image shows two hands, palms facing forward, with all ten fingers extended. The hands are positioned against a red background. To the right of the hands is a simple addition problem consisting of two horizontal lines, a plus sign, and another horizontal line.

10 Fingers



5.

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

$$8 + 2 = 10$$

How can you use fingers to show this equation



Where do you see the 8 on the hands?

Where do you see the 10 on the hands?



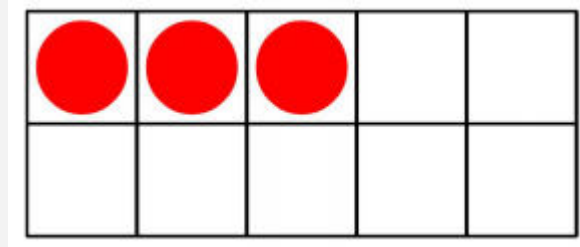
How Many Are Missing?



I can find the partner for a number to make 10

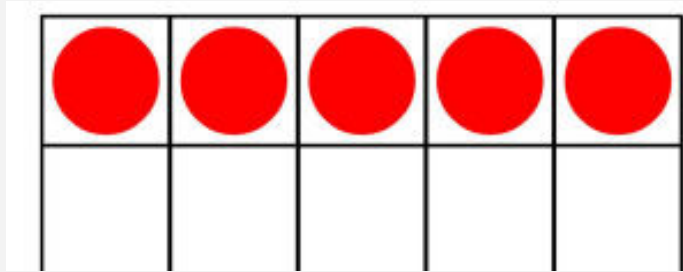
How Many Do You See? 10-frames

Warm
up



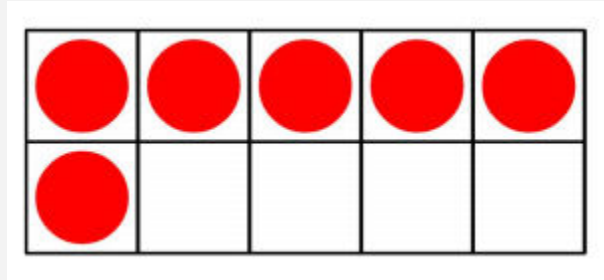
How Many Do You See? 10-frames

Warm
up



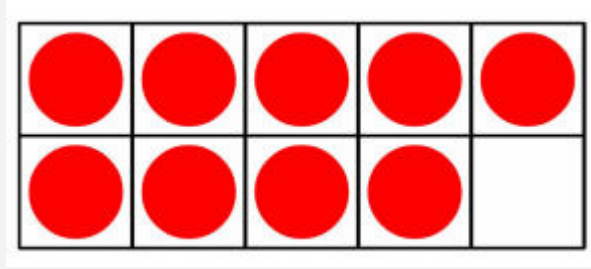
How Many Do You See? 10-frames

Warm
up



How Many Do You See? 10-frames

Warm
up



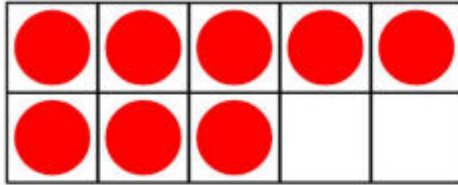
Shake, Spill, and Arrange with 10

1. Shake and spill all 10 counters. Arrange your counters in the 10-frame.
2. Use your red and yellow crayons to show what the counters look like in the 10-frame.
3. Fill in an expression to represent the red and yellow counters.
4. Take turns playing until you fill in all the expressions.

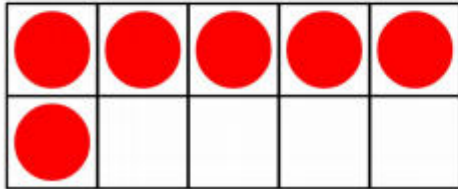
<table border="1"><tr><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td></tr></table>											$\underline{\quad\quad} + \underline{\quad\quad}$

How Many to Get 10?

1.

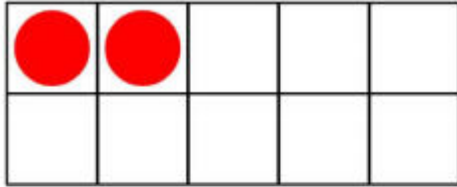


2.

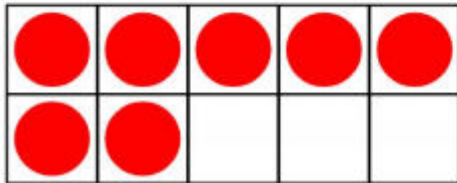


How Many to Get 10?

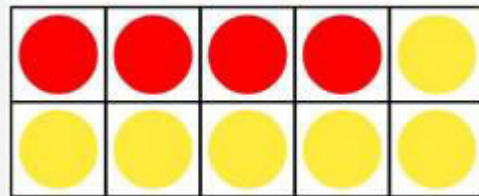
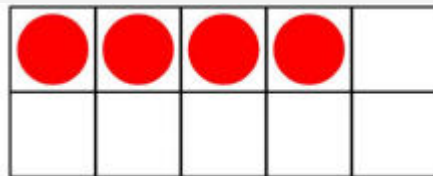
3.



4.



Jada spilled 10 counters. Here are the red counters Jada got when she was playing Shake and Spill.



How many yellow counters did Jada get?
How do you know?



There are 4 red counters and 6 yellow counters and 10 counters total. I can also write $4 + 6 = 10$

10 Ones and Some More Ones



Let's use 10 to make larger numbers.

Choral Count: Half at a Time

Group 1:

Count as a group from 1
until you tell them to stop.

Group 2:

Count on where the first
group leaves off.

What number always comes after 10?

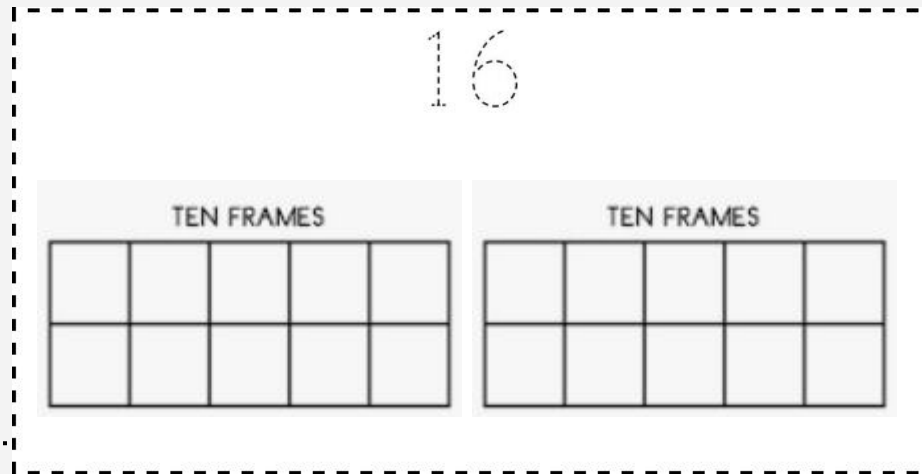
Putting Together Numbers 11-19

Activity
#1

- Walk around and find a partner.
 - If you have a 10-frame on your card, find a partner who does not have a 10-frame on their card.
 - If you do not have a 10-frame on your card, find a partner who does have a 10-frame
- Tell your partner how many dots you have on your card. Then work together to figure out how many dots you both have altogether.
- Switch cards and find a new partner.

Making Number Cards

- Make each number. You can cut out the 10-frames and the dots to help you make each number.
- When you're finished, trace each number.



Writing Number 20

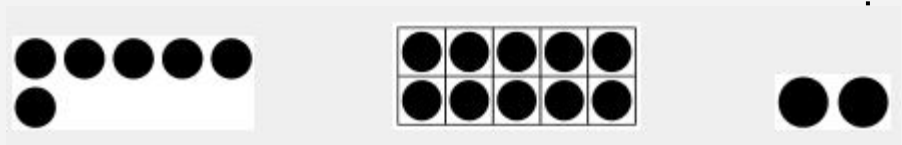
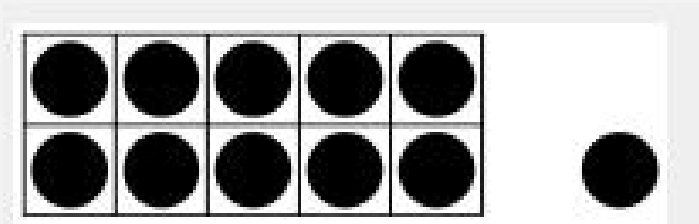
- Practice writing the number 20.

20

20

20

Elena says there are 11 dots. Clare says there are 10 dots and 1 dot. What do you think?



Which two images can we put together to make 12? How do you know?



Composing with a Full 10-frame

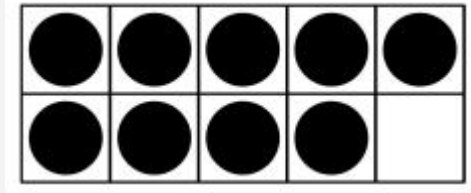


Let's make numbers using a full 10-frame

Warm
up

How Many Do You See: Teen Numbers on a 10-Frame

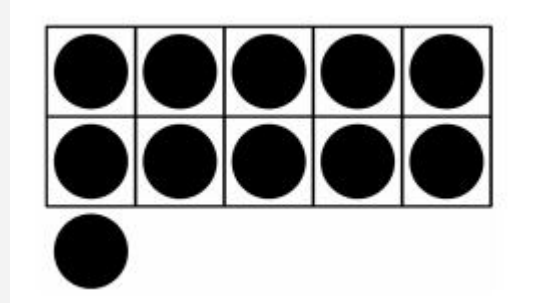
*How many do you
see?*



*How do you see
them?*

How Many Do You See: Teen Numbers on a 10-Frame

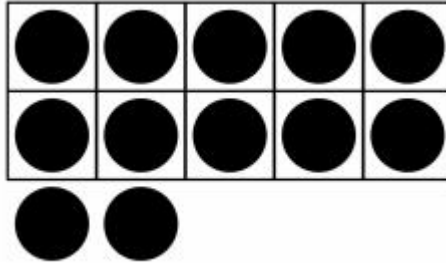
How many do you
see?



How do you see
them?

How Many Do You See: Teen Numbers on a 10-Frame

How many do you
see?

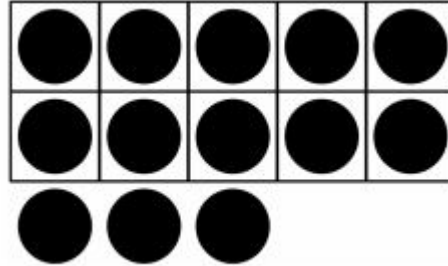


How do you see
them?

Warm
up

How Many Do You See: Teen Numbers on a 10-Frame

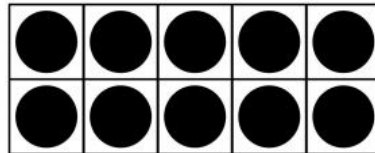
How many do you
see?



How do you see
them?

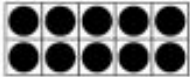
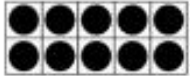
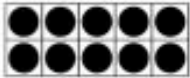
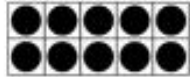
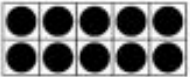
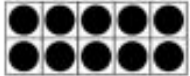
Adding More Counters

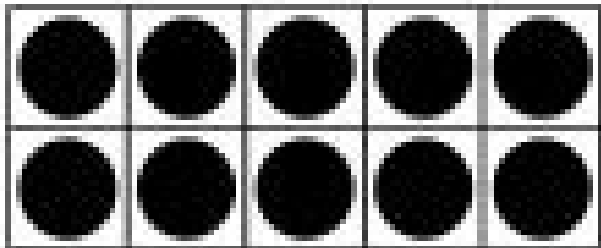
1. Flip over 1 card.
2. Add that many dots to your 10-frame.
3. Write a number to show how many dots there are now.
4. Work with your partner to finish the rest of the problems.



Finish the Representation

Draw more dots to finish the representation of each number.

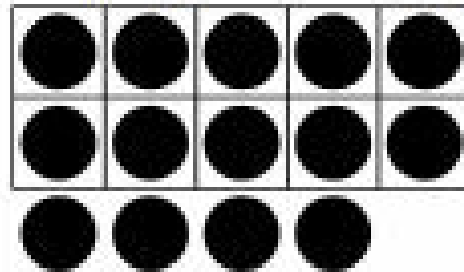
11		17	
19		14	
15		12	



How many dots are there? How do you know?

We don't need to touch and count each dot. We know that when the 10-frame is full, there are 10 dots.

How many dots are there?
How do you know?



Expressions and Numbers



Let's look at expressions for numbers 11–19.

Warm
up

Number Talk: 3 +



Add

$$3 + 0$$

Warm
up

Number Talk: $3 + \underline{\quad}$



Add

$$3 + 1$$

Warm
up

Number Talk: 3 +



Add

$$3 + 2$$

Warm
up

Number Talk: 3 +



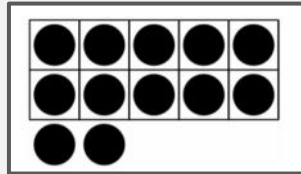
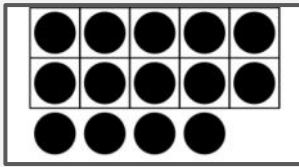
Add

$$3 + 3$$

Expressions and 10-frames

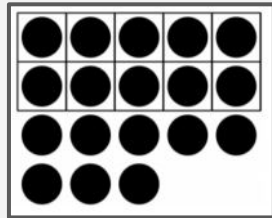
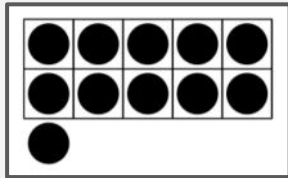
Activity
#1

Match each expression to the image it represents



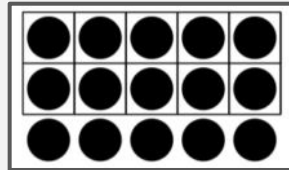
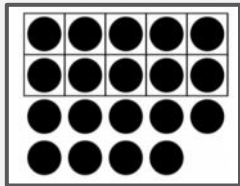
$$10 + 9$$

$$10 + 8$$



$$10 + 1$$

$$10 + 5$$



$$10 + 4$$

$$10 + 2$$

Organizing Expressions and Numbers

Activity
#2

Work with your group to organize the cards in a way that makes sense to you.

14

12

15

13

11

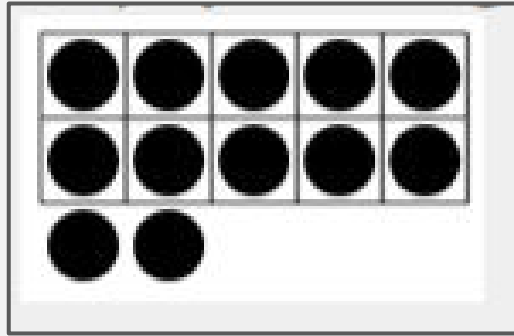
$10 + 1$

$10 + 4$

$10 + 3$

$10 + 2$

$10 + 5$



Andre says that there are 12 dots. Clare says that there are $10 + 2$ dots.

What do you think?



Section A Goals

- Build toward fluency with adding and subtracting within 10.

The Addition Table

What do
you notice?

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

What do you
wonder?

Sums I've Got

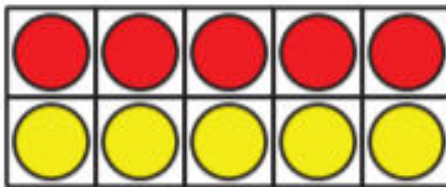
Lesson 1
Activity #2

1. Place your cards in a pile face down.
2. Flip the card and say the expression.
3. If you can say the sum quickly, place it under “got it”.
4. If it takes you some time to find the sum, place it under “not yet.”

got it	not yet

How Many Do You See: Sums within 10

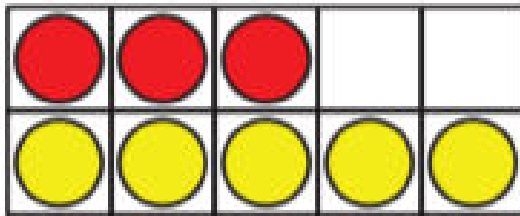
*How many do
you see?*



*How do you see
them?*

How Many Do You See: Sums within 10

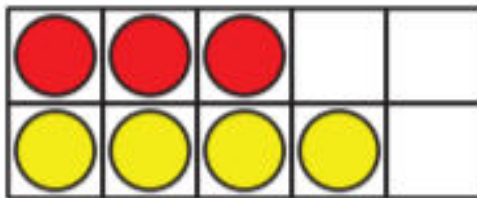
*How many do
you see?*



*How do you see
them?*

How Many Do You See: Sums within 10

*How many do
you see?*



*How do you see
them?*

Shake and Spill Story Problems

Lesson 2
Activity #1

1. Priya is playing Shake and Spill. She spills 7 red counters and 2 yellow counters.



How many counters did she spill in all?
Show your thinking using drawings, numbers, or words.

Equation:

2. Tyler spills 5 red counters and 3 yellow counters. How many counters did he spill in all? Show your thinking using drawings, numbers, or words.

Equation:

Shake and Spill Story Problems

Lesson 2
Activity #1

3. Clare spills 2 red counters and 8 yellow counters.

How many counters did she spill in all?

Show your thinking using drawings, numbers, or words.

Equation:

4. Han spills 3 red counters and 6 yellow counters.

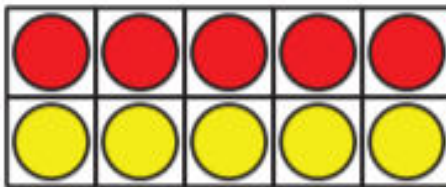
How many counters did he spill in all?

Show your thinking using drawings, numbers, or words.

Equation:

How Many Do You See: Sums within 10

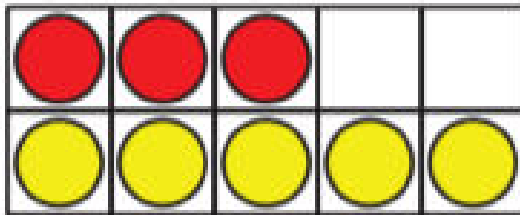
*How many do
you see?*



*How do you see
them?*

How Many Do You See: Sums within 10

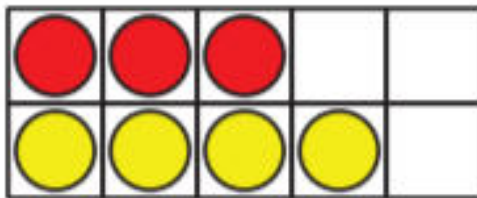
*How many do
you see?*



*How do you see
them?*

How Many Do You See: Sums within 10

*How many do
you see?*



*How do you see
them?*

Scavenger Hunt!

1. Find a group of objects or picture that shows $5 + 5$
2. Find a group of objects or picture that shows $6 + 4$

True or False: Equivalent Expressions

Is it true?
Is it false?

$$3 + 5 = 8$$

How do you know?

True or False: Equivalent Expressions

Is it true?
Is it false?

$$6 + 3 = 8$$

How do you know?

True or False: Equivalent Expressions

Is it true?
Is it false?

$$3 + 5 = 5 + 3$$

How do you know?

Equations with Equivalent Expressions

Lesson 3
Activity #2

Determine whether each equation is true or false.
Be ready to explain your reasoning in a way that others can understand.

$$1.4 + 2 = 2 + 4$$



True or False

$$2.3 + 6 = 6 + 4$$



True or False

$$3.5 + 3 = 1 + 7$$



True or False

$$4.6 + 4 = 5 + 3$$



True or False

$$5.6 + 3 = 9 + 2$$



True or False

All The Ways To Make 10

Lesson 4
Activity
#2



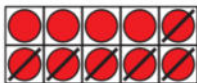
1. Show all the ways to make 10.
2. How do you know that you have found all of the ways? Be ready to explain your thinking in a way that others will understand.

Different Ways to Find the Difference

Lesson 5
Activity #1

Mai, Diego, and Noah found all the ways to make 10. Now, they are finding the difference for $10 - 6$:

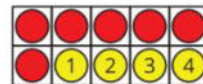
1. Diego says, "I can take away."



What does Diego mean?

Be ready to share your thinking in a way that others will understand.

2. Mai says, "I can count up."



What does Mai mean?

Be ready to share your thinking in a way that others will understand.

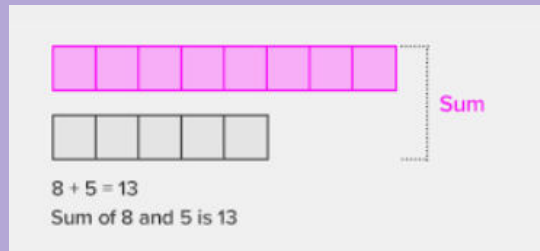
3. Noah says, "I can use what I know about $6 + 4$ to help me."

What does Noah mean?

Be ready to share your thinking in a way that others will understand.

Sort Addition Expressions

- Sort your addition expressions that have the same sum.
- Work with your partner. Make sure that each partner has a chance to find the sum of the card before you place it with its sum. If you and your partner disagree, work together to find the sum. Then when you are finished, keep your sums sorted.



Some Subtraction Problems

Lesson 5
Activity
#3

Find the difference.

$$1. 9 - 6$$

$$2. 10 - 3$$

$$3. 7 - 3$$

$$4. 9 - 5$$

$$5. 8 - 6$$

$$6. 6 - 5$$

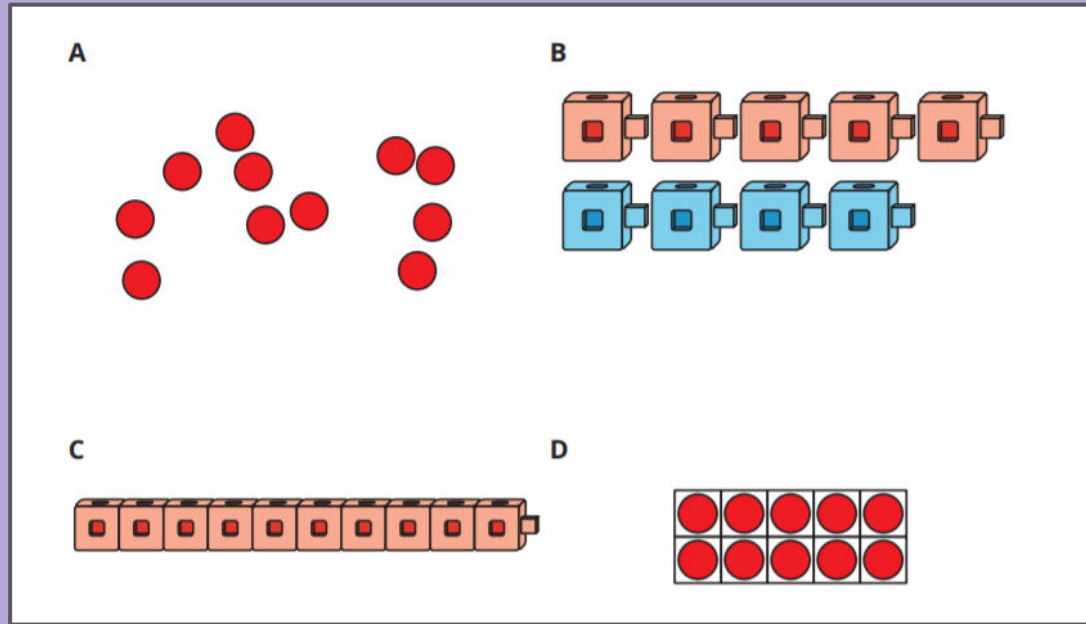
$$7. 9 - 4$$

$$8. 10 - 7$$

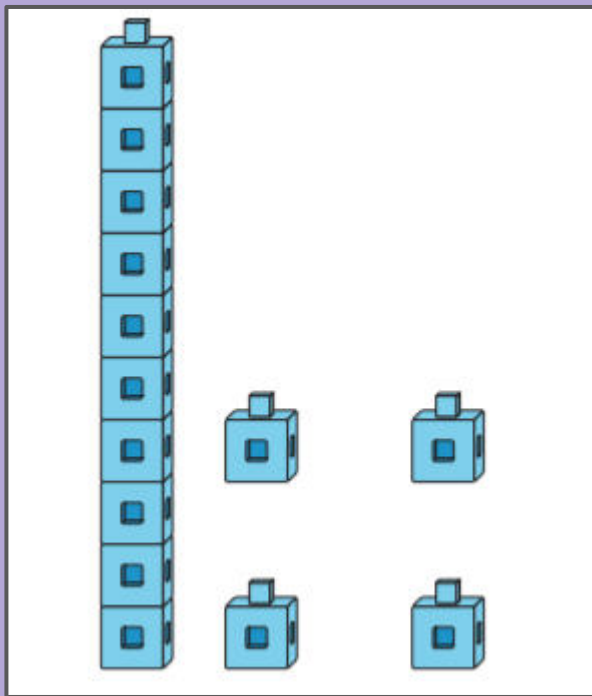
Section B Goals

- Understand 10 ones as a ten and the numbers 11 to 19 as a ten and some ones.
- Find the value of an addition expression where one addend is 10 or a subtraction expression where the difference is 10.
- Add and subtract one-digit numbers from teen numbers.

Which One Doesn't Belong: Groups of 10



Building Teen Numbers



Choose 4 numbers to represent.
Circle them.

Use connecting cubes to show each
number like Clare did.

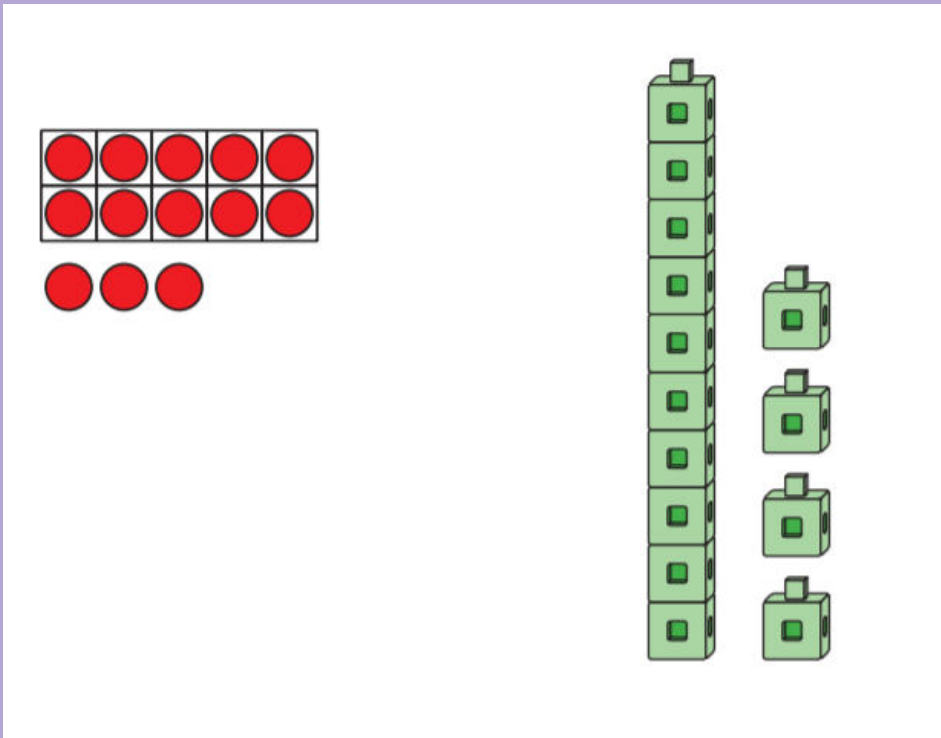
10	15
11	16
12	17
13	18
14	19

What did you notice as you were building towers?

Notice and Wonder: Two Teen Numbers

Lesson 9
Warm-up

What do you notice?

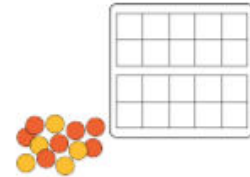


What do you wonder?

Make It: Teen Numbers and 10-Frames

Lesson 9
Activity #1

Use your 10-frames to build teen numbers.
Write an equation that matches the teen number.



teen number	equation

True or False: Teen Numbers

Lesson 11
Warm-up

Decide whether each
statement is true or false.

Be prepared to explain
your reasoning.

$$10 + 4 = 10 + 5$$

True or False: Teen Numbers

Lesson 11
Warm-up

Decide whether each
statement is true or false.

Be prepared to explain
your reasoning.

$$10 + 3 = 2 + 1 + 10$$

True or False: Teen Numbers

Lesson 11
Warm-up

Decide whether each
statement is true or false.

Be prepared to explain
your reasoning.

$$14 = 10 + 4 + 5$$

Mancala



Kiran is playing Mancala.

So far he has captured 14 seeds.

On his next turn he captures 3 more seeds.

How many seeds has he captured all together?

Show your thinking using drawings, numbers, and words.

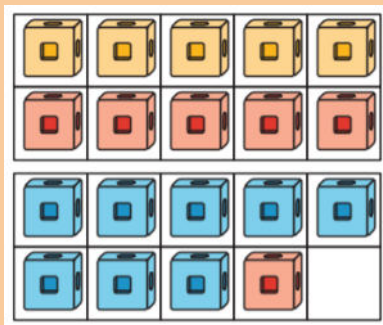
Equation: _____

Noah's Collection

Lesson 12
Activity #1

Noah likes to collect game pieces.

He has 19 game pieces arranged like this in his bin:



He takes out 8 game pieces to play with.

- How many game pieces are left in the bin?
- Show your thinking using drawings, numbers, or words.
- Write an equation to represent the problem.

Related Equations

Mai is solving $16 - 10 = \square$.

She says, "I can use what I know about 10 and some ones to help me solve."

What does Mai mean?

Related Equations

Lesson 10
Activity #2

Find the missing value that makes each equation true.
Show your thinking using drawings, numbers, or words.

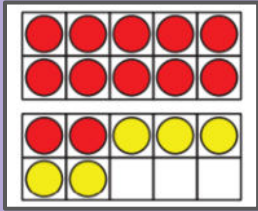
1. $15 - 10 =$

3. $8 = 18 -$

2. $\square = 13 - 3$

4. $2 + \square = 12$

Write Equations: Adding on to Teen Numbers



- Find the missing value so that each equation is true.
- Show your thinking using drawings, numbers, or words

1. $12 + 5 =$

2. $6 + 11 =$

3. $= 17 + 2$

4. $4 + 14 =$

5. $= 15 + 4$

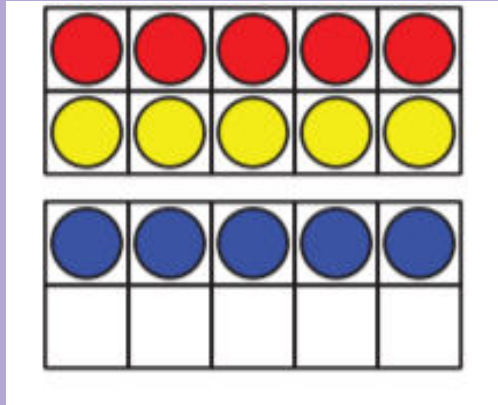
6. $16 + 2 =$

Section C Goals

- Add within 20, including 3 addends

How Many Do You See: 10-Frames

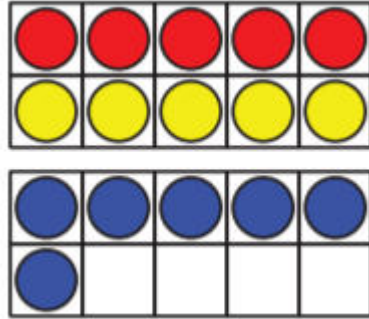
How many do
you see?



How do you
see them?

How Many Do You See: 10-Frames

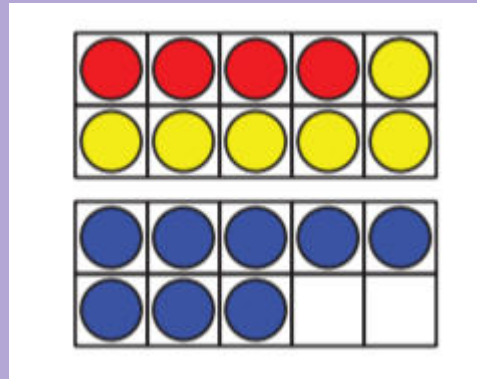
How many do
you see?



How do you
see them?

How Many Do You See: 10-Frames

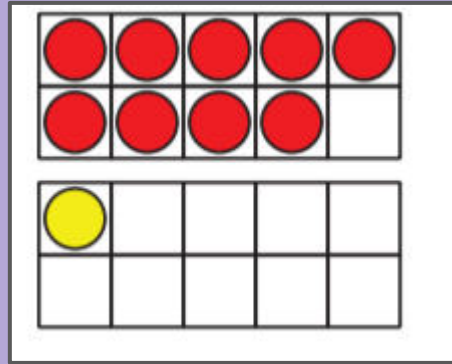
How many do
you see?



How do you
see them?

How Many Do You See: Double 10-Frames

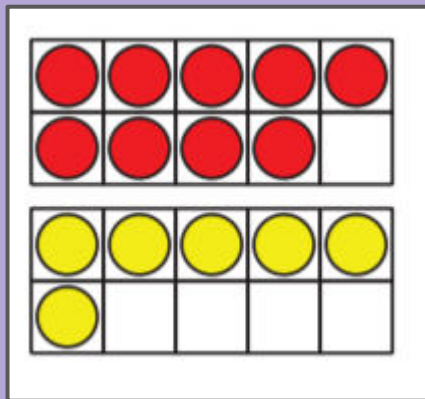
How many do
you see?



How do you
see them?

How Many Do You See: Double 10-Frames

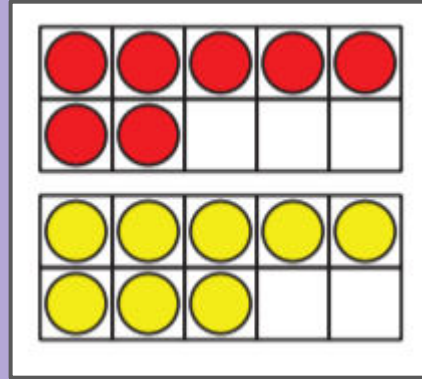
How many do
you see?



How do you
see them?

How Many Do You See: Double 10-Frames

How many do
you see?



How do you
see them?

5 Practices: Elena's Balloons



Some kids are going to a party.

Lin brings 3 balloons to the party.

Noah brings 8 balloons to the party.

Clare brings 7 balloons to the party.

How many balloons did Lin, Noah, and Clare bring to the party all together?

Show your thinking using objects, drawings, numbers, or words.

Write an equation that matches how you solved the problem.

Number Talk: Related Expressions

**Find the value of each
expression mentally**

$$7 + 2 + 8$$

Number Talk: Related Expressions

**Find the value of each
expression mentally**

$$7 + 10$$

Number Talk: Related Expressions

**Find the value of each
expression mentally**

$$4 + 9 + 6$$

Number Talk: Related Expressions

**Find the value of each
expression mentally**

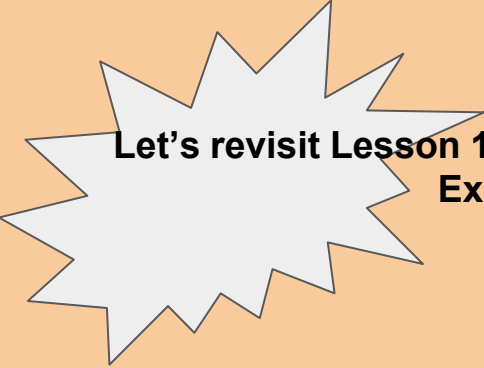
$$10 + 9$$

Match Expressions

Draw a line to match each expression to one that has the same sum.

expressions with 3 addends	$10 + \square$ expression
A. $4 + 6 + 8$	1. $10 + 1$
B. $3 + 6 + 7$	2. $10 + 2$
C. $9 + 1 + 1$	3. $10 + 3$
D. $8 + 4 + 2$	4. $10 + 4$
E. $5 + 5 + 9$	5. $10 + 5$
F. $7 + 3 + 3$	6. $10 + 6$
G. $5 + 10 + 5$	7. $10 + 7$
H. $4 + 7 + 6$	8. $10 + 8$
I. $9 + 5 + 1$	9. $10 + 9$
J. $2 + 10 + 2$	10. $10 + 10$

Revisiting Explore Activities



Let's revisit Lesson 17, Warm-up responses from the Explore section.

Clare's Cars

Lesson 17
Activity #2

1. Clare has toy cars.
She has 3 red cars and 9 blue cars.
How many cars does she have?
Show your thinking using drawings, numbers, or words.

2. Clare is cleaning her room.
She finds 6 toy cars under her bed.
Then she finds 8 more in her closet.
How many cars did Clare find?
Show your thinking using drawings, numbers, or words.

3. Clare wants to know how many cars have stripes.
She counts 7 cars with white stripes and 5 cars with black stripes.
How many of her cars have stripes?
Show your thinking using drawings, numbers, or words.



How Did You Add?

- Choose an addition expression card.
- Each partner find the sum independently.
- Each partner gives a signal when they are ready to explain their thinking.
- Each partner shares their thinking.
- Each partner writes the equation.

Choose your favorite equation.

Show how you found the sum using drawings, numbers, or words.

Write $10 + n$ Expressions

Lesson 16
Activity
#3

Write the related $10 + _$ expression and find the sum.

$$1.5 + 7 + 5$$

$$2.3 + 7 + 6$$

$$3.1 + 9 + 9$$

$$4.4 + 8 + 6$$

$$5.8 + 10 + 2$$

More Story Problems

Lesson 20
Activity
#2

1. Jada cut up vegetables to make a salad.
She cut up 3 tomatoes, 6 cucumbers, and 7 carrots.
How many vegetables did Jada cut for the salad?
Show your thinking using drawings, numbers, or words.



2. Jada is making a fruit salad.
She used 8 apples.
Then she added 4 bananas.
Lastly, she used 3 melons. How many pieces of fruit did she put
in her fruit salad in all?
Show your thinking using drawings, numbers, or words.



3. Jada's mom bought some drinks.
She bought 8 bottles of water, 7 bottles of sports drink, and 4
bottles of lemonade.
How many drinks did Jada's mom buy?
Show your thinking using drawings, numbers, or words.



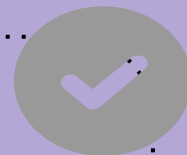
In this section, we worked on different ways to add within 20.

What are you most proud of?
What do you still need to practice?

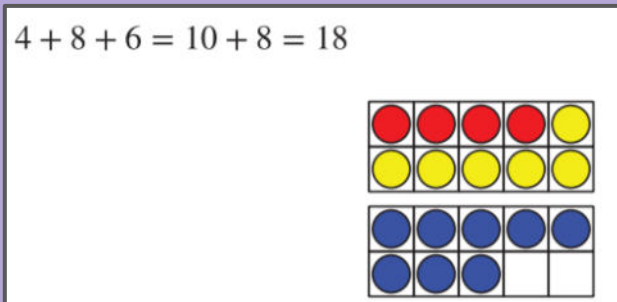




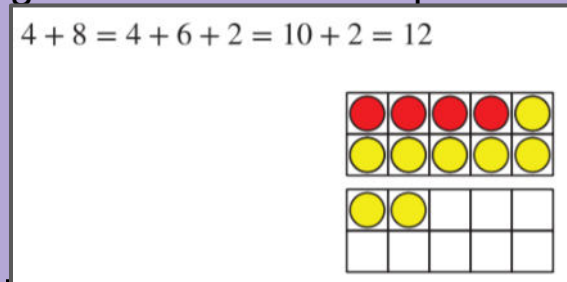
Section C Summary



We saw that making a ten could help when we add 3 numbers together.



We saw that making a ten could also help when we add 2 numbers together.



Section D Goals

- Subtract within 20

Number Talk: Subtraction Problems

**Find the value of each
expression mentally**

$$14 - 4$$

Number Talk: Subtraction Problems

**Find the value of each
expression mentally**

$$14 - 5$$

Number Talk: Subtraction Problems

**Find the value of each
expression mentally**

$$17 - 7$$

Number Talk: Subtraction Problems

**Find the value of each
expression mentally**

$$17 - 9$$

Subtraction Methods

Elena has 16 crayons.



She gives 7 crayons to Diego.

How many crayons does she have left?

Show your thinking using drawings, numbers, or words.

Number Talk: Subtraction

**Find the value of each
expression mentally**

$$17 - 7$$

Number Talk: Subtraction

**Find the value of each
expression mentally**

$$17 - 7 - 1$$

Number Talk: Subtraction

**Find the value of each
expression mentally**

$$17 - 8$$

Number Talk: Subtraction

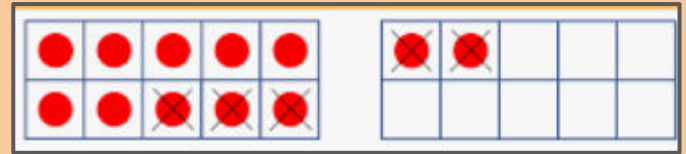
**Find the value of each
expression mentally**

$$17 - 9$$

Number Card Subtraction with 10-Frames

1. Choose a teen number card.
2. Build the number on 10-frames.
3. Choose a number card to subtract.
4. Find the difference.
5. Write an equation.

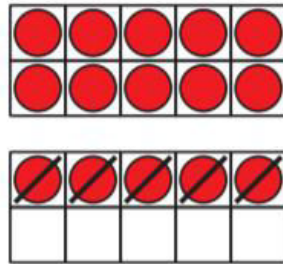
My equations:



Diego and Andre Find the Difference

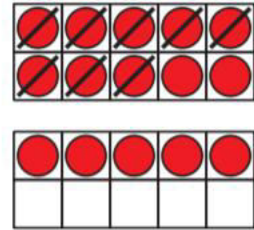
Part 1

Diego is playing Number Card Subtraction.
He started with 15 and then picked an 8.
He started out by doing this:



What could Diego do next to find the difference?

Andre was also trying to find $15 - 8$.
He started out by doing this:



What could Andre do next to find the difference?

Diego and Andre Find the Difference

Part 2

Find the difference using Diego's way or Andre's way.

1. $14 - 5$

Show your thinking using drawings, numbers, or words.

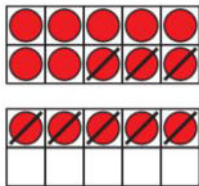
2. $13 - 6$

Show your thinking using drawings, numbers, or words.

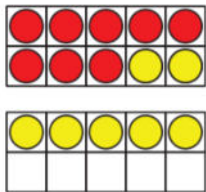
Different Ways to Subtract

Part 1:

Yesterday, we saw Diego's strategy for finding $15 - 8$.
Here's what he did:



Tyler's way:



Part 2:

For each problem, find the difference using Diego's way, then using Tyler's way.

$$1. 16 - 3$$

Diego's Way	Tyler's Way

Different Ways to Subtract

$2.17 - 8$

Diego's Way	Tyler's Way

$3.18 - 15$

Diego's Way	Tyler's Way

Choose Your Own Subtraction Method

Show your thinking using drawings, numbers, or words.

$1. 20 - 15 =$

$2. 19 - 3 =$

$3. 13 - 5 =$

$4. 18 - 9 =$

$5. 17 - 15 =$