UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

2023-2024

Reveal MATH®

UAE Edition
Grade 2 • Volume 1
Student Edition

Mc Graw Hill

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Student Edition

Grade 2 • Volume 1

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Contents in Brief

Volume 1

Volume 2

Welcome to *Reveal Math*!

We are excited that you have made us part of your math journey.

Throughout the school year, you will explore new concepts and develop new skills. You will expand your math thinking and problem-solving skills. You will be encouraged to persevere as you solve problems, working both on your own and with your classmates.

With *Reveal Math*, you will experience activities to spark your curiosity and challenge your thinking. In each lesson, you will engage in sense-making activities that will make you a better problem solver. You will have different learning experiences to help you build understanding.

We look forward to revealing to you the wonder and excitement of math.

The *Reveal Math* authors

The *Reveal Math* Authorship Team

McGraw-Hill teamed up with expert mathematicians to create a program centered around you, the student, to make sure each and every one of you can find joy and understanding in the math classroom.

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Creator of learning tools that make connections through visual-kinesthetic techniques.

Unit 1

Math Is...

Unit 2

Place Value to 1,000

Unit 3

Patterns within Numbers

Unit 4

Meanings of Addition and Subtraction

Unit 5

Strategies to Fluently Add within 100

Unit 6

Strategies to Fluently Subtract within 100

Jump into Learning!

You can find all the resources you need from your **Student Dashboard**.

1. See your work in the To-Do List.
2. See the work you already completed.
3. Go to your Interactive Student Edition.

You can use your **Interactive Student Edition** for all your math work.

1. Use the slide numbers to find your page number.
2. Type or draw to work out problems.
3. Check your answers as you go.

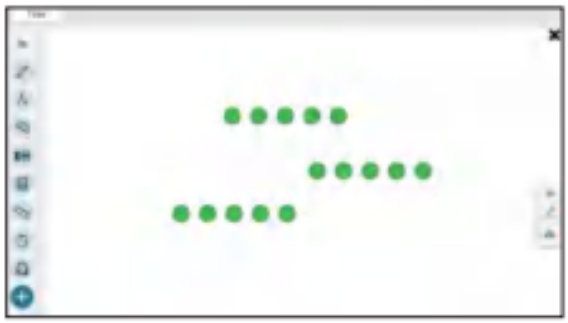
Access Lesson Supports Online!

You can also use these to support while you practice.

MATH REPLAY | GO ONLINE

Need an Instant Replay of the Lesson Content?

Each lesson has a **Math Replay** video that provides a 1–2 minute overview of the lesson concept.



Virtual Tools to Help You Problem-Solve

You can access the eToolkit at any time from your Student Dashboard. You can access these tools:

- Counters
- Base-Ten Blocks
- Array Builder
- Fraction Model
- Bucket Balance
- Geometry Sketch
- Money
- Fact Triangles
- Number Line
- and more!

Key Concepts and Learning Objectives

Key Concept **Habits of Mind and Classroom Norms**

- I can make sense of problems and think about numbers and quantities. (Unit 1)
- I can share my thinking with my classmates. (Unit 1)
- I can make sense of problems. (Unit 1)
- I can use patterns to solve problems. (Unit 1)
- I can describe my math story. (Unit 1)
- I can work well with my classmates. (Unit 1)

Key Concept **Addition and Subtraction**

- I can write equations to describe arrays. (Unit 3)
- I can represent and solve one- and two-step word problems using addition and subtraction strategies. (Units 4, 5, 6, 9, 10)
- I can add addends in any order to find the sum. (Unit 5)
- I can add and subtract fluently within 20. (Units 5, 6)
- I can use tools to help me add and subtract. (Units 5, 6)
- I can add and subtract 2-digit and 3-digit numbers with and without regrouping. (Units 5, 6, 9, 10)
- I can mentally add 10 and 100 to a 3-digit number and subtract 10 and 100 from a 3-digit number. (Units 9, 10)
- I can explain how to use strategies to add and subtract 3-digit numbers. (Units 9, 10)

Key Concept Whole Numbers

- I can identify the digits in a 3-digit number. (Unit 2)
- I can read and write numbers to 1,000. (Unit 2)
- I can decompose 3-digit numbers in different ways. (Unit 2)
- I can compare 3-digit numbers. (Unit 2)
- I can identify and describe patterns when counting by 1s, 5s, 10s, and 100s. (Unit 3)
- I can determine the value of a group of coins. (Unit 8)
- I can tell time from analog and digital clocks. (Unit 8)

Key Concept Measurement

- I can measure and compare lengths using customary and metric units. (Unit 7)
- I can use everyday items to help estimate length in customary and metric units. (Unit 7)
- I can solve problems involving length. (Unit 7)
- I can collect measurement data. (Unit 11)
- I can interpret data on a line plot. (Unit 11)
- I can make a line plot to show data. (Unit 11)

Key Concept Describe and Analyze Shapes

- I can describe 2-dimensional and 3-dimensional shapes. (Unit 12)
- I can identify equal shares. (Unit 12)
- I can partition 2-dimensional shapes into equal shares. (Unit 12)
- I can partition rectangles into rows and columns of equal-sized squares. (Unit 12)

Math is...

How would you complete this sentence?

Math is...

Math is not just adding and subtracting.

Math is...

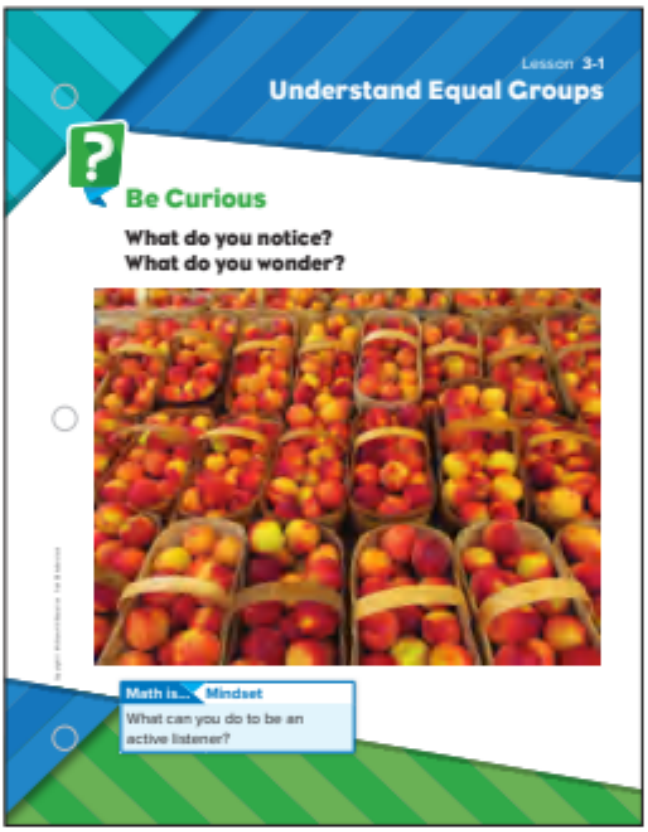
- working together
- finding patterns
- sharing ideas
- listening thoughtfully to our classmates
- sticking with a task even when it is a little challenging

In *Reveal Math,* you will develop the habits of mind that strong doers of math have. You will see that math is all around us.

Let's be Doers of Mathematics

Remember, math is more than getting the right answer. It is a tool for understanding the world around you. It is a language to communicate and collaborate. Be mindful of these prompts throughout the year to access the power of math.

1. **Math is... Mine**
   - Mindset
2. **Math is... Exploring and Thinking**
   - Planning
   - Connections
   - Thinking
3. **Math is... My World**
   - In My World
   - Modeling
   - Choosing Tools
4. **Math is... Explaining and Sharing**
   - Explaining
   - Sharing
   - Precision
5. **Math is... Finding Patterns**
   - Patterns
   - Generalizations
6. **Math is... Ours**
   - Mindset



Math is... Mindset

What can you do to be an active listener?

Explore the Exciting World of STEM!

Ever wonder how math applies in the real world? In every unit, you will learn about a STEM career, from protecting our parks to exploring outer space. You will learn about the STEM career through digital simulations and projects.

STEM Career Kid: Meet Sienna

Let the STEM Career Kid introduce his or her career and talk about the different job responsibilities.

Math In Action: Nutritionist

Watch the Math in Action to see how the math you are learning applies to the real world.

Hi, I'm Sienna.

I want to be a nutritionist to help people eat to feel great!

Math Is...

Focus Question

What does it mean to do math?

IGNITE!

Name _____

At the School Fair

You have 30 tickets to use at the school fair. How will you use your tickets?

Be Curious

What do you notice?
What do you wonder?

Learn

Math is all around us. We use it every day. We use it in school, at home, and in our neighborhood. We use it when we play games or practice our hobbies. We all have a math story.

Let's learn about our teacher's math story.

How have you used math in the past?

Math is... Mindset

How do I use math during my day?

How do you use math now?

Math is... Mindset

How can I stay positive when I do math?

How do you think you will use math in your future?

Math is... Mindset

What do I want to learn about math?

Do you see yourself as good in math?

Math is... Mindset

What are my strengths in math?

How do you use math when doing your favorite things?

Math is... Mindset

How does math help me with my hobby?

Work Together

What are some other questions you can ask your teacher about their math story?

On My Own

MATH REPLAY | GO ONLINE

Name _____

What is my math story?

Reflect

What about my math story do I want someone else to know?

Be Curious

What do you notice?
What do you wonder?

Learn

Jack is building with blocks. He has the blocks shown.

How many blocks does Jack have in all?

When we do math, we use many strategies to make sense of problems.

I know Jack has:

- 7 red blocks,
- 7 blue blocks,
- 3 green blocks.

Math is... Exploring

What do I know about the problem?

I can ask:

- How can I show the problem?
- Do I need to add or subtract?

Math is... Planning

What questions can I ask myself?

When we do math, sometimes the first try doesn't work. We keep trying and don't give up.

I can think of another way to add the numbers.

- I can add $7 + 3 = 10$.
- Then I can add $10 + 7$.

Math is... Perseverance

What is another way to think about the problem?

When we do math, we think about numbers in different ways.

I can add numbers in any order and the sum will be the same.

- $7 + 7 + 3$ has the same sum as $7 + 3 + 7$

Math is... Thinking

How can I think about the numbers?

When we do math, we think about how the numbers go together.

I can look for facts I know.

- $7 + 3 = 10$
- $7 + 7 = 14$

Math is... Connections

How do the numbers go together?

Work Together

Sue is building with blocks, too. She has 6 red blocks, 8 blue blocks, and 4 green blocks. How many blocks does Sue have in all? Tell or show how you know.

On My Own

Name _____

There are 3 red blocks, 8 blue blocks, and 8 green blocks left in the bin. How many blocks are left in the bin? Tell or show how you know.

Reflect

What are some numbers you know how to break apart? How can you break them apart?

Be Curious

What do you notice?
What do you wonder?

Learn

Each teacher has 54 stickers to give out.

Ms. Pete gives out 30 stickers.

Ms. Jay gives out 20 stickers.

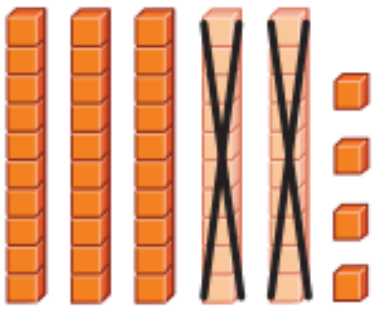
Mr. Lee gives out 40 stickers.

How many stickers does each teacher have left?

When we do math, we make models of problems to help us solve the problems.

I can represent the problem with base-ten blocks.

- I can show 54 stickers with 5 rods and 4 units.
- I can cross off 2 rods to show the number of stickers Ms. Jay gives out.



Math is... In My World

How can I represent the problem?

I can write these equations.

- $54 - 30 = ?$
- $54 - 20 = ?$
- $54 - 40 = ?$

Math is... Modeling

What equations can I write for the problem?

When we do math, we use different tools to help us.

I can make a drawing to show the problem.

$54 - 40 = \mathbf{14}$

Math is... Choosing Tools

What tools can I use to show the problem?

I can use a number chart to help me add or subtract.

21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70

$54 - 30 = \mathbf{24}$

Math is... Choosing Tools

What tool can I use to solve the problem?

Work Together

Each teacher has 77 stickers to give out. Ms. Brown gives out 50 stickers. Mr. Smith gives out 70 stickers. How many stickers does each teacher have left?

On My Own

MATH REPLAY | GO ONLINE

Name _____

Four teachers have 95 stickers to give out. Mr. Johns gives out 60 stickers. Mr. Dennis gives out 30 stickers. Mrs. Kim gives out 80 stickers. Mrs. Rijo gives out 20 stickers. How many stickers does each teacher have left?

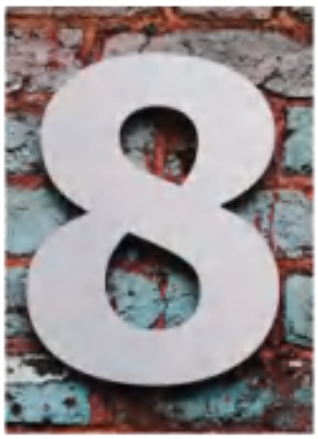
Reflect

Tools can help us work with math problems. What tools do you know how to use? What tools do you like to use the most?

Math Is Explaining and Sharing

Be Curious

What do you notice?
What do you wonder?



Learn

Amy has the digit cards 6, 8, 5, 4, and 7.

She makes a 2-digit number and a 1-digit number.
The sum is between 60 and 80.

What numbers might she make?

When we do math, we explain our thinking.
We use words, numbers, and pictures.

I can use drawings, words, or equations to explain my thinking.

- 58 is a 2-digit number.
- 7 is a 1-digit number.
- 58 + 7 = 65
- 65 is between 60 and 80.

Math is... Explaining

How can I explain my thinking?

When we do math, we listen to the arguments of others and think about what makes sense.

I can listen to others' ideas about the problem.

- 65 is a 2-digit number.
- 8 is a 1-digit number.
- 65 + 8 = 73
- 73 is between 60 and 80.
- It makes sense that there could be another solution.

Math is... Critiquing

Do the ideas of others make sense to me?

When we make arguments, we try to be precise.

We use correct vocabulary and make sure our calculations are accurate. We label our drawings and include units of measurement.

My answer is clear.

- 58 is a 2-digit number.
- 6 is a 1-digit number.
- $58 + 6 = 64$
- 64 is between 60 and 80.

Math is... Precision

Is my argument clear and exact?

Work Together

Kate has the digit cards 3, 4, 0, 2, and 5.

She makes two 2-digit numbers that have a sum less than 60.

What numbers might she make?

On My Own

MATH REPLAY | GO ONLINE

Name _____

Maha has the digit cards 1, 7, 8, 3, 4, and 5.

She makes two 2-digit numbers.

The two numbers have a sum of 49.

What numbers might she make?

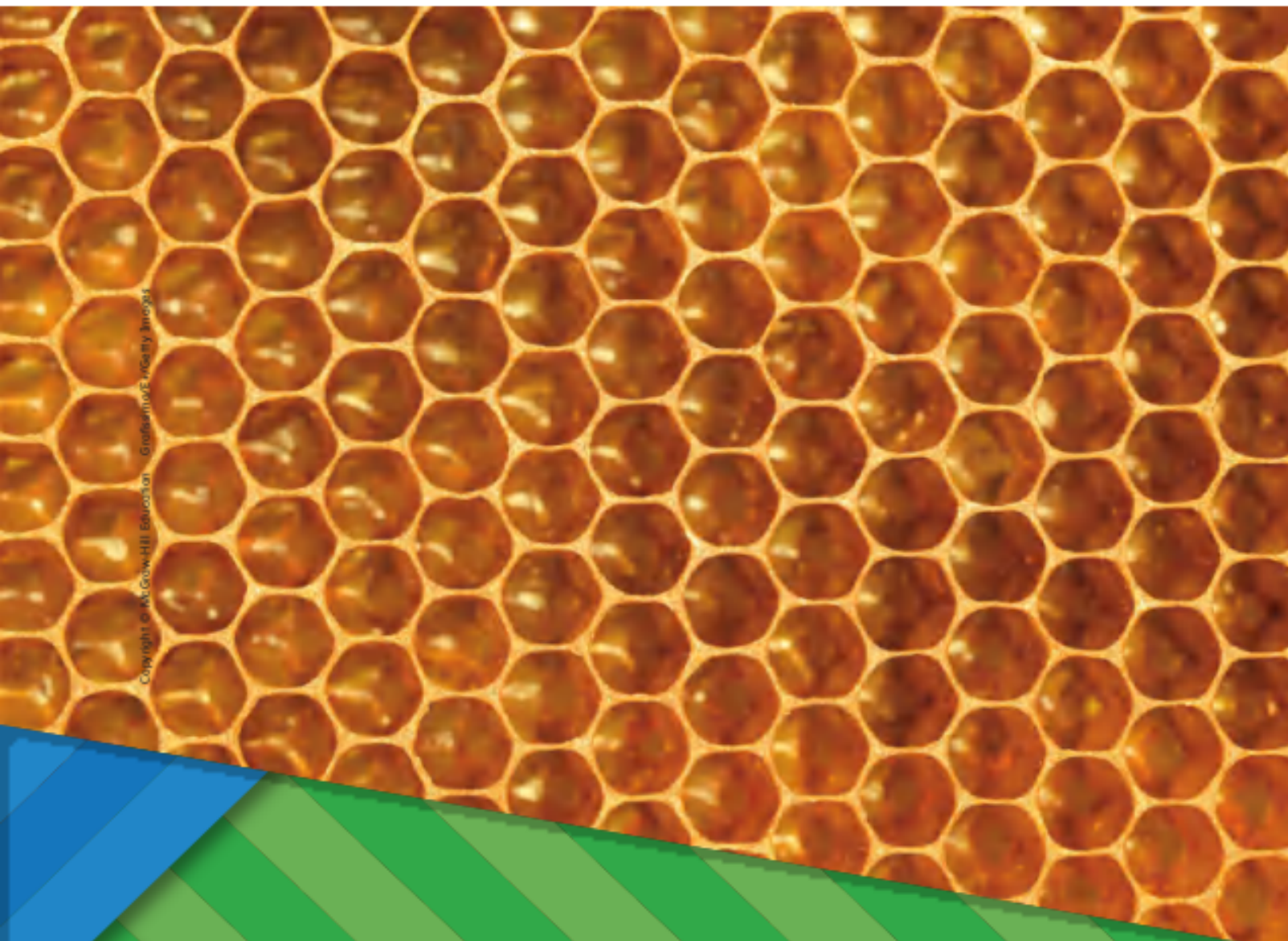
Reflect

In math, students and teachers share their thinking. What does it mean to be a good listener? How do you know if someone is being a good listener?

Math Is Finding Patterns

Be Curious

What do you notice?
What do you wonder?



Learn

What are some other equations that are related to these?

$14 - 8 = 6$ $14 - 9 = 5$

$13 - 8 = 5$ $13 - 9 = 4$

$12 - 8 = 4$ $12 - 9 = 3$

Math is full of patterns and relationships.

When we do math, we notice patterns and relationships.

I know I see a pattern when I see something again and again.

- Each of these subtracts 8.

$15 - 8 = 7$

$14 - 8 = 6$

$13 - 8 = 5$

$12 - 8 = 4$

Math is... Patterns

How do I know that I see a pattern?

Patterns can help me solve a problem.

- If I subtract 9 from a number, it will be one less than if I subtract 8.

$15 - 8 = 7$ $15 - 9 = 6$

$14 - 8 = 6$ $14 - 9 = 5$

Math is... Patterns

How can the pattern help me solve the problem?

Patterns can help you solve problems.

It is always true that when you subtract 9 from a number you will have one less than when you subtract 8.

$18 - 8 = 10$ $18 - 9 = 9$

Math is... Generalizations

Is this always true? Does this always work?

I can use this pattern to solve other problems.

- When I take one more away there will be one less.
- $10 - 3 = 7$ $10 - 4 = 6$
- 4 is one more than 3.
- 6 is one less than 7.

Math is... Generalizations

Can I use this strategy in other situations?

Work Together

What patterns do you see? How can the patterns help you solve the equations?

$14 - 7 = 7$	$14 - 5 = 9$	$14 - 3 = 11$
$13 - 7 =$ _____	$13 - 5 =$ _____	$13 - 3 =$ _____
$12 - 7 =$ _____	$12 - 5 =$ _____	$12 - 3 =$ _____
$11 - 7 =$ _____	$11 - 5 =$ _____	$11 - 3 =$ _____

On My Own

What pattern do you see? How can the pattern help you solve the equations?

$13 - 10 = 3$	$23 - 10 = 13$	$33 - 10 = 23$
$14 - 10 =$ _____	$24 - 10 =$ _____	$34 - 10 =$ _____
$15 - 10 =$ _____	$25 - 10 =$ _____	$35 - 10 =$ _____
$16 - 10 =$ _____	$26 - 10 =$ _____	$36 - 10 =$ _____
$17 - 10 =$ _____	$27 - 10 =$ _____	$37 - 10 =$ _____

Reflect

What other patterns and relationships do you know about in math? How have those patterns helped you?

Be Curious

What do you notice?
What do you wonder?

Learn

How do we do math?

When we do math, we often work together.

- We listen to our classmates and teachers.
- We share our thinking.
- We respect the ideas of others.
- We think about the ideas of others.
- We share tools and take turns.

Math is... Mindset

What can I do to be a good listener?

When we do math, sometimes we work on our own.

- We work quietly.
- We stay focused on our work.
- We look for help when we feel stuck.

Math is... Mindset

What can I do to stay focused on my work?

When we do math, we solve problems.

- We make sense of problems.
- We understand the quantities.
- We use tools. We select the tool that works best.
- We look for patterns.
- We use patterns to help us solve problems.
- We don't quit. If we get stuck, we look for different ways.

Math is... Mindset

What can I do when I feel stuck?

Work Together

How do we work well with our classmates?

What can we do to be good listeners?

How do we use tools responsibly?

What do I do when I'm stuck?

On My Own

MATH REPLAY | GO ONLINE

Name _____

What can I do to work well during math class?

Reflect

What can I do to make sure we can all learn math well?

Unit Review

Name _____

Vocabulary Review

1. Why is it important to keep trying when you get stuck?

2. Who can you ask for help when you are stuck? Tell why.

3. Why is it important to share our ideas with others when we do math?

4. How can you know which tool to use to solve a problem?

Review

How do we act when we do math in our class? Write three norms for our classroom.

1.

2.

3.

Reflect

Choose one of the norms you wrote and tell why it is important.

Unit 1

Fluency Practice

Name _____

Fluency Strategy

You can count on to add.

$7 + 2 = ?$

Start at 7.
Count on 2 times: 8, 9
So, $7 + 2 = \mathbf{9}$.

You can count back to subtract.

$8 - 1 = ?$

Start at 8.
Count back 1 time: 7
So, $8 - 1 = \mathbf{7}$.

Fluency Flash

What is the sum or difference? Use count on to add or count back to subtract.

1. $10 - 2 =$ _____

2. $5 + 2 =$ _____

Fluency Check

What is the sum or difference?

3. $6 + 1 =$ _____

4. $3 - 2 =$ _____

5. $8 + 0 =$ _____

6. $10 - 1 =$ _____

7. $9 + 1 =$ _____

8. $9 - 1 =$ _____

9. $5 - 0 =$ _____

10. $8 + 2 =$ _____

11. $7 + 0 =$ _____

12. $6 + 2 =$ _____

Fluency Talk

How is counting on like counting back?

How is counting on different from counting back?

Place Value to 1,000

Focus Question

How can I use place value to understand and compare numbers to 1,000?

Hi, I'm Sienna.

I want to be a nutritionist. I like to learn about different foods and plan healthy meals! I know each orange slice has 10 calories. 10 orange slices make 100 calories. Understanding place value will help me do my job!

STEM video GO ONLINE

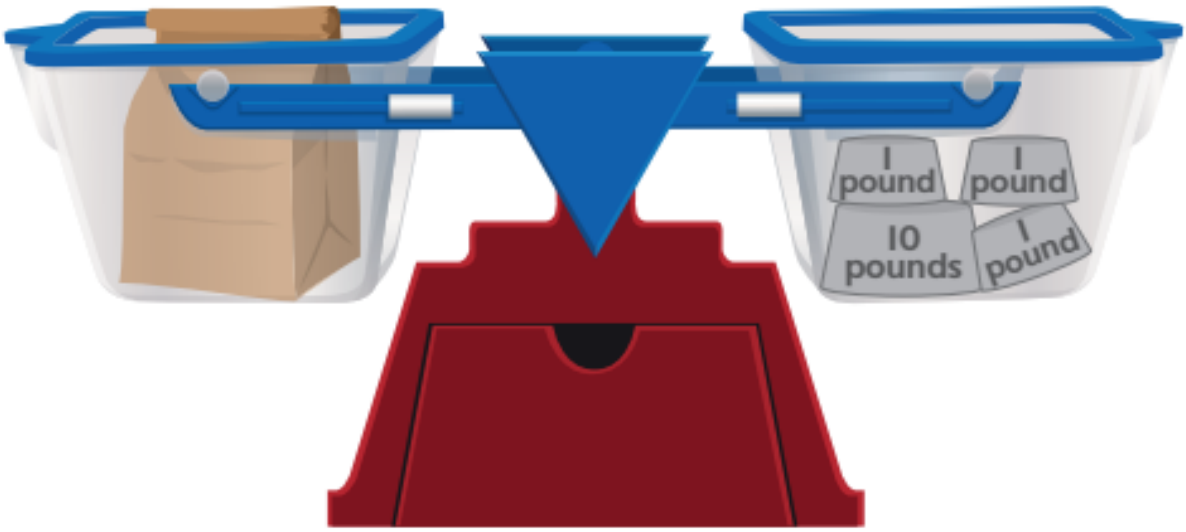
IGNITE!

Name _____

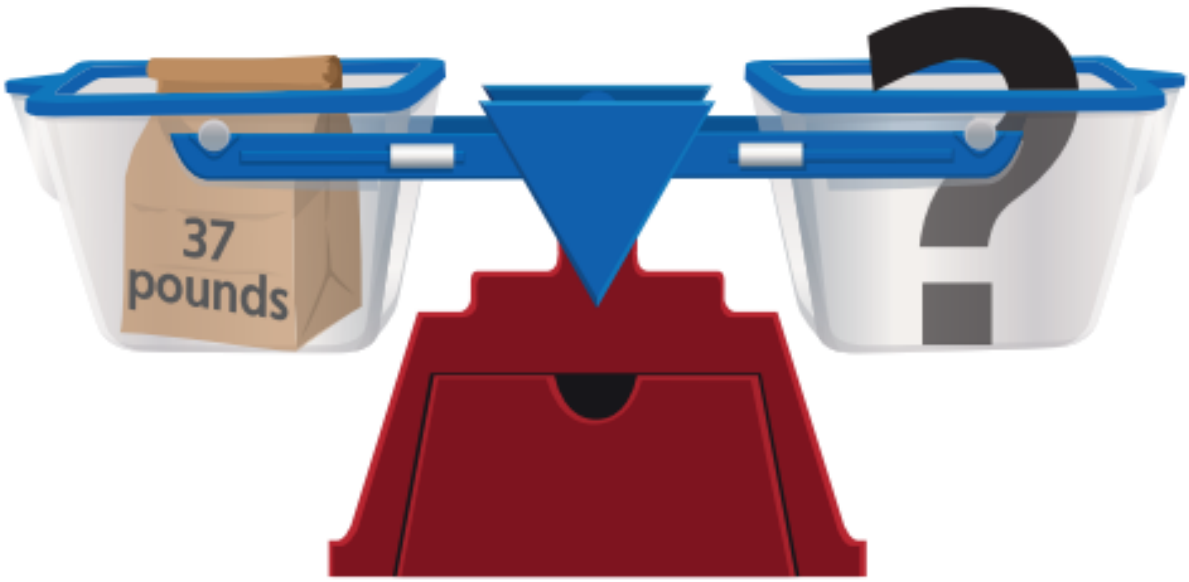
Different Ways to Balance

Use base-ten blocks. Find all ways to balance the scales with ten-pound and one-pound weights.

Scale 1



Scale 2



Understand Hundreds

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

How can you show respect to others?

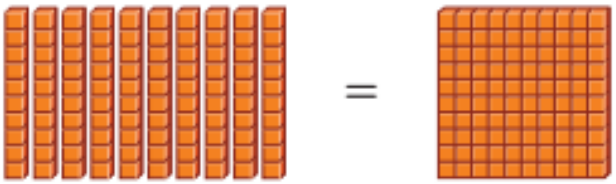
Learn

10 students raise both of their hands.

How many fingers are there?

You can use a tens rod to represent each student's 10 fingers.

10 **tens** are equal to 1 **hundred**.



10 tens = 1 hundred

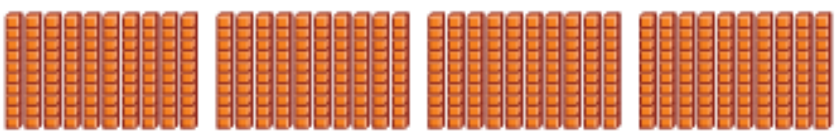
You can group 10 tens to make 100.

Math is... Modeling

Why is a tens rod a good way to represent each student's fingers?

Work Together

What is the value of the base-ten blocks shown?



_____ tens = _____ hundreds = _____

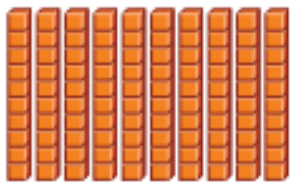
On My Own

Name _____

What is the value of the base-ten blocks?

1. 

_____

2. 

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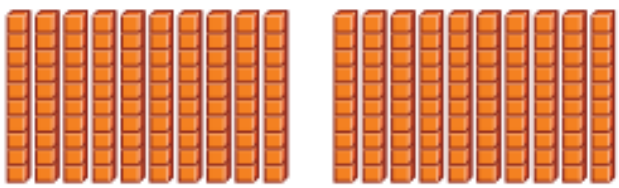
3. 

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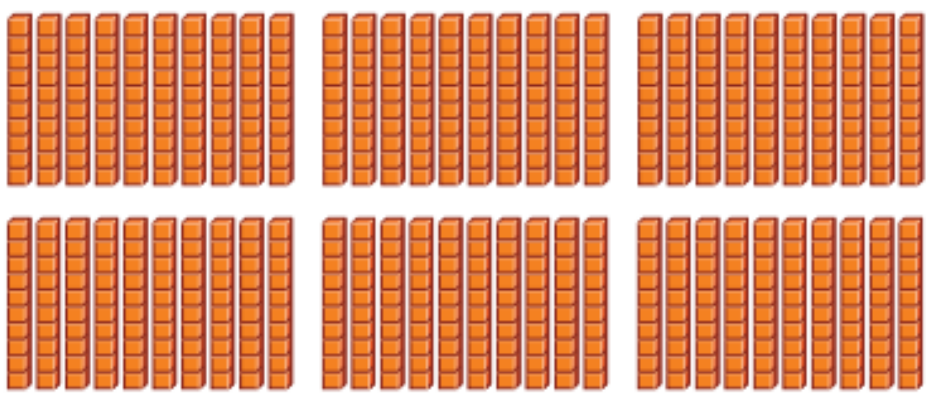
4. 

_____

How can you use tens rods to show the problem? Fill in the answer.

5. Josh does 10 push-ups every day. How many push-ups does Josh do in 10 days?

_____ push-ups

6. **STEM Connection** Sienna is helping her teacher pack first aid kits. Each kit has 10 groups of 10 bandages. She packs 8 kits. How many bandages does Sienna pack?

_____ bandages

7. Dhruvi says there are 100 squares on a chessboard. How can you show a way to count the squares?

8. **Extend Your Thinking** Anya has room for 995 sport cards in her binder. A pack has 10 cards, and a set has 100 cards. How many packs and sets can she put in her binder?

Reflect

Why is it helpful to group 10 tens as 100?

Math is... Mindset

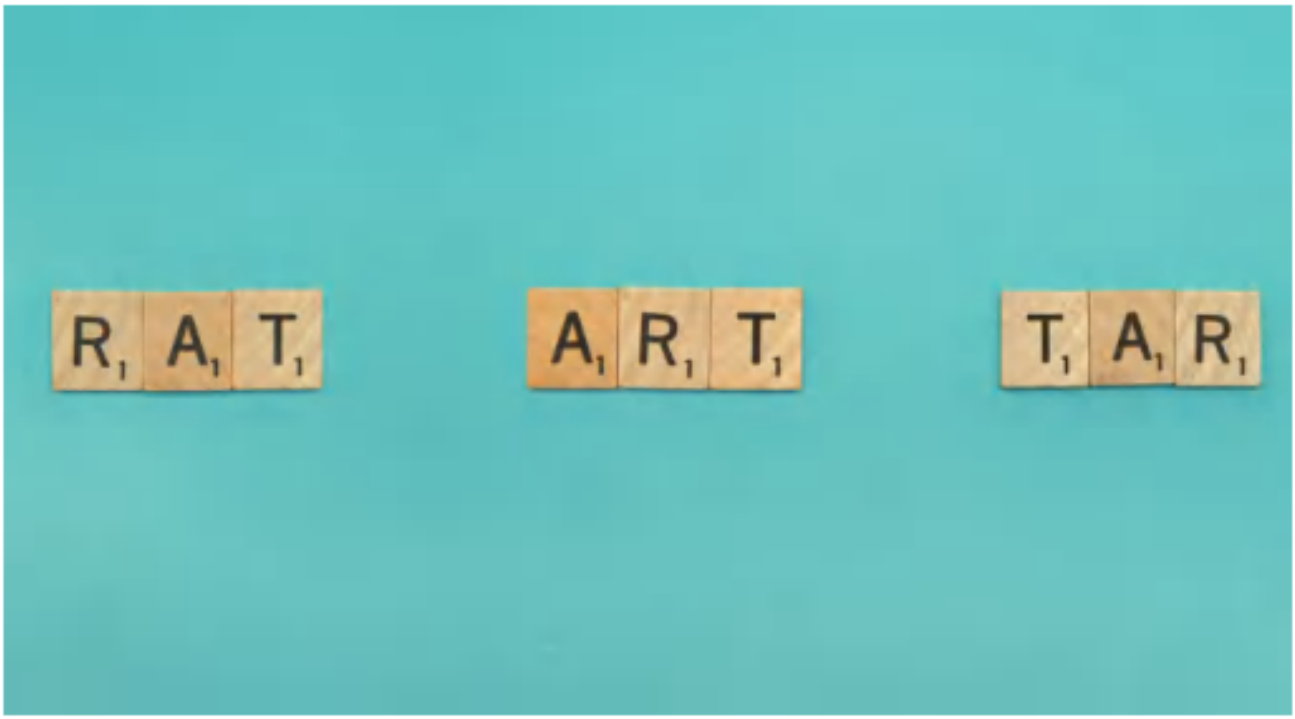
How have you shown respect to others?

Lesson 2-2

Understand 3-Digit Numbers

Be Curious

How are they the same?
How are they different?

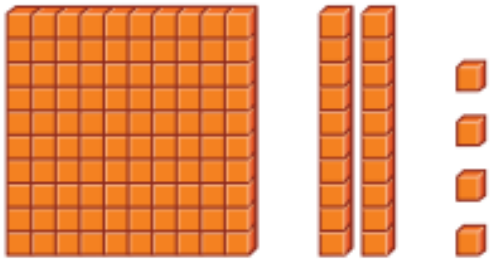


Math is... Mindset

What are your math superpowers?

Learn

What number does this group of base-ten blocks show?



Each **base-ten block** has a different value.

1 flat	2 rods	4 units
100	20	4

A **place-value chart** can help you understand the value of the blocks.

hundreds	tens	ones
1	2	4

The **digits** show the value is 124.

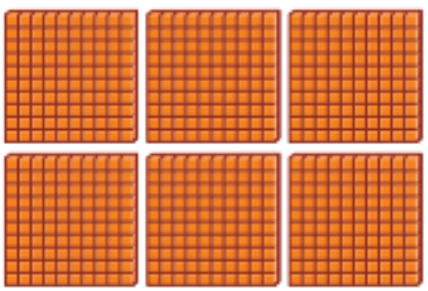
A 3-digit number has hundreds, tens, and ones.

Math is... Connections

What relationship do you notice between the blocks and the place-value chart?

Work Together

What number does this group of base-ten blocks show? Write the number in the place-value chart.

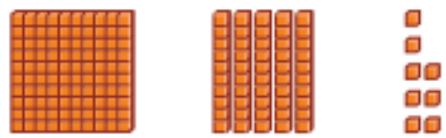


hundreds	tens	ones

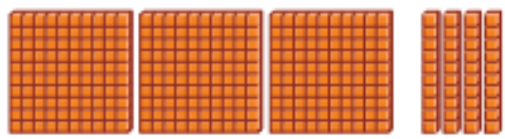
On My Own

Name _____

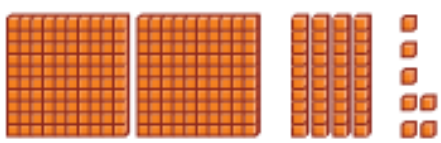
What number does the group of base-ten blocks show? Write the number in the place-value chart.

1. 

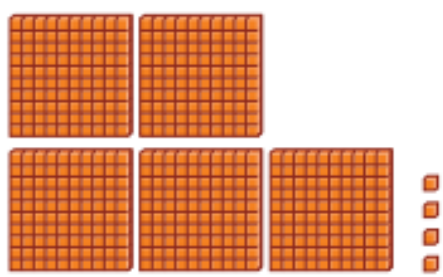
hundreds	tens	ones

2. 

hundreds	tens	ones

3. 

hundreds	tens	ones

4. 

hundreds	tens	ones

What is the value of the 5 in each number?

5. 592: _____

6. 259: _____

What is the value of the digit in the ones place?

7. 187: _____ 8. 316: _____

9. **Error Analysis** Norberto says there are no tens in the number 309. Justine says there is a ten because there is a digit in the tens place. How do you respond to them?

10. **Extend Your Thinking** Destiny set a goal to read 475 pages. Her science book has 400 pages. She has some 1-page poems and some short stories that are 10 pages. How can Destiny reach her goal?

Reflect

How does knowing the value of digits help you understand 3-digit numbers?

Math is... Mindset

How did you use your math superpower today?

Lesson 2-3

Read and Write Numbers to 1,000

Be Curious

What do you notice?
What do you wonder?

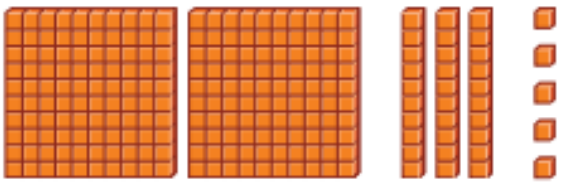
5

Math is... Mindset

What can you do to be an active listener?

Learn

How can you write the value of the base-ten blocks?



You can write the value of the base-ten blocks in different ways.

Use numerals.	**Decompose** by place value.	Use words.
	235	200 + 30 + 5
235	200 + 30 + 5	two hundred thirty-five
standard form	**expanded form**	**word form**

You can read and write 3-digit numbers using numerals, words, and place value.

Math is... Explaining

How can you prove that each number form represents the same number?

Work Together

How can you write 698 in different ways?

On My Own

MATH REPLAY | GO ONLINE

Name _____

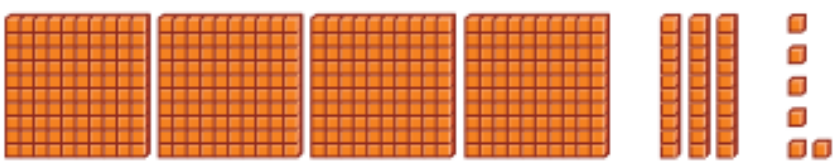
What is an example of the number form? Draw a line to match.

1. seven hundred eleven — expanded form

   700 + 10 + 1 — standard form

   711 — word form

What number do the base-ten blocks show? Write the number in different forms.

2. 

   standard form: _____

   expanded form: _____ + _____ + _____

   word form: _____

How can you write the number in standard form?

3. two hundred ten _____

4. six hundred twenty-seven _____

5. nine hundred eighty-one _____

How can you write the number in expanded form?

6. 843 _____ + _____ + _____

7. 391 _____ + _____ + _____

8. **STEM Connection** Sienna writes the number of calories in her lunch as 398. How can Sienna write this number in word form?

9. **Extend Your Thinking** Hiro collects action figures. He has 999 action figures. A friend gives him one more. How many action figures does Hiro have?

_____ action figures

Reflect

What patterns do you notice when reading and writing 3-digit numbers?

Math is... Mindset

What have you done to be an active listener today?

Decompose 3-Digit Numbers

Be Curious

Which doesn't belong?

3 hundreds, 25 ones

3 hundreds, 2 tens, 25 ones

3 hundreds, 2 tens, 5 ones

2 hundreds, 12 tens, 5 ones

Math is... Mindset

What helps you know when there is a problem?

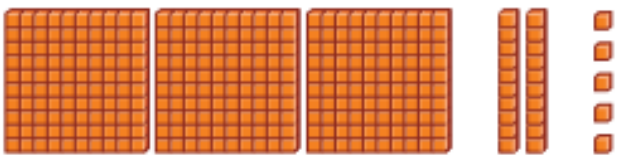
Learn

How can you decompose this number in different ways?

325

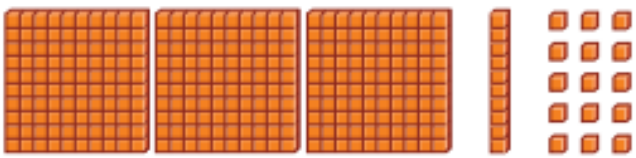
You can decompose by **place value**.

One Way



3 hundreds 2 tens 5 ones

Another Way



3 hundreds 1 ten 15 ones

Math is... Structure

What is different about these representations?

You can decompose a 3-digit number by grouping the hundreds, tens, and ones in different ways.

Work Together

What are two ways to decompose 523?

_____ = 523

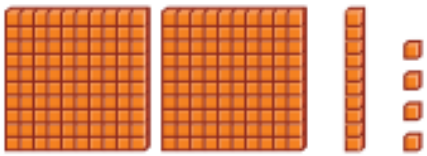
_____ = 523

On My Own

MATH REPLAY GO ONLINE

Name _____

What number does the group of base-ten blocks show?

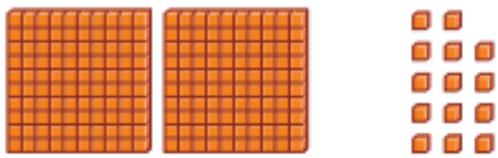
1. 

_____ hundreds

_____ ten

_____ ones

The number is _____.

2. 

_____ hundreds

_____ tens

_____ ones

The number is _____.

How can you decompose the number? Choose all the correct answers.

3. **364**

- **A.** 300 + 64 + 4
- **B.** 300 + 60 + 4
- **C.** 300 + 50 + 14
- **D.** 400 + 60 + 4

4. **521**

- **A.** 400 + 20 + 1
- **B.** 500 + 2 + 1
- **C.** 500 + 10 + 11
- **D.** 500 + 20 + 1

5. Error Analysis Bryn says she can write the number 482 as 3 hundreds, 18 tens, and 2 ones. Felix says he can write the number 482 as 4 hundreds, 6 tens, and 22 ones. How do you respond to them?

How can you decompose each number in two different ways?

6. _____ + _____ + _____ = 648

   _____ + _____ + _____ = 648

7. _____ + _____ + _____ = 930

   _____ + _____ + _____ = 930

8. **Extend Your Thinking** Meg decomposes 142 into 1 hundred, 4 tens, and 2 ones. Myles decomposes 142 into 1 hundred and 42 ones. How can you decompose 142 in a different way?

Reflect

How can you use place value to decompose 3-digit numbers in different ways?

Math is... Mindset

How did you identify if there was a problem?

Unit 2

Building Numbers

CHERYL TOBEY MATH PROBES

Name _____

1. How would you complete showing 324 with base-ten blocks?

324 = 3 hundreds + ? tens + 4 ones

How many tens?

a. 2 **b.** 3

c. 24 **d.** 32

Explain your choice.

2. How would you complete showing 420 with base-ten blocks?

420 = 4 hundreds + ? tens + 10 ones

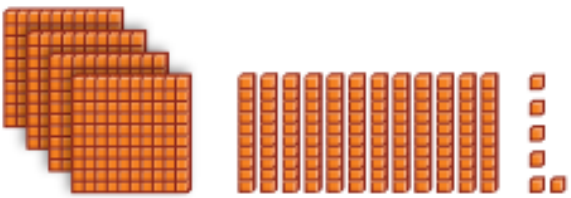
How many tens?

a. 0 **b.** 1

c. 2 **d.** 4

Explain your choice.

3. A number is shown with these base-ten blocks:



? = 4 hundreds + 12 tens + 6 ones

What is the number?

a. 417
b. 426
c. 526
d. 4,126

Explain your choice.

Reflect On Your Learning

Compare 3-Digit Numbers

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

What can you do to work on your own?

Learn

How can you compare the number of beads in the jars?

Compare the hundreds first.

hundreds	tens	ones
3	1	1
2	7	3

300 is **greater than** 200.

311 > 273

If the hundreds have the same value, compare the tens.

hundreds	tens	ones
2	7	3
2	9	5

70 is **less than** 90.

273 < 295

You can use place value to compare 3-digit numbers.

Math is... Explaining

How can you use what you know about comparing 2-digit numbers to help you compare 3-digit numbers?

Work Together

What symbols can you use to show each comparison?

a. 600 ◯ 599 **b.** 86 ◯ 124 **c.** 523 ◯ 523

On My Own

MATH REPLAY | GO ONLINE

Name _____

Which symbol represents the term? Draw a line to match.

1. greater than — <
   less than — =
   equal to — >

2. In what order do you compare the digits in a 3-digit number? Circle the correct answer.
   - **A.** ones first, then tens, and hundreds last
   - **B.** tens first, then ones, and hundreds last
   - **C.** hundreds first, then tens, and ones last
   - **D.** hundreds first, then ones, and tens last

How can you compare the numbers? Use >, <, or =.

3.

hundreds	tens	ones
1	0	3
	9	0

103 ◯ 90

4.

hundreds	tens	ones
3	3	0
3	3	0

330 ◯ 330

How can you compare the numbers? Use >, <, or =.

5. 100 ◯ 99

6. 604 ◯ 489

7. 953 ◯ 981

8. 271 ◯ 278

9. **STEM Connection** Sienna has a carton of 346 blueberries and a carton of 348 raspberries. Does Sienna have a greater number of blueberries or raspberries? Explain how you know.

10. **Error Analysis** Xi says 219 is greater than 437. How do you respond to Xi?

Reflect

How do you use place value to compare 3-digit numbers?

Math is... Mindset

What helped you work on your own?

Unit Review

Name _____

Vocabulary Review

Choose the correct word(s) to complete each sentence.

decompose	expanded form
hundreds	standard form
word form	

1. When you write a number decomposed by place value, it is written in _____. (Lesson 2-3)

2. When you write a number using only words, it is written in _____. (Lesson 2-3)

3. You _____ a number when you break it apart. (Lesson 2-3)

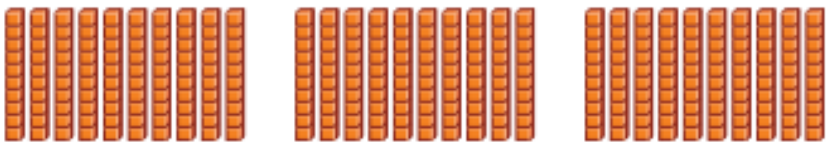
4. When you write a number using only digits, it is written in _____. (Lesson 2-3)

5. In the number 476, 4 is in the _____ place. (Lesson 2-1)

Review

6. What is the value of the base-ten blocks shown?

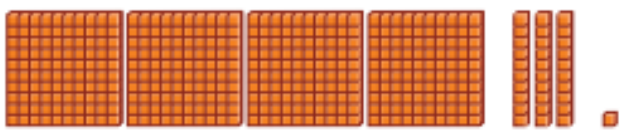
(Lesson 2-1)



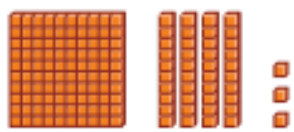
_____ tens = _____ hundreds = _____

7. Which shows 431? Circle the correct answer. (Lesson 2-2)

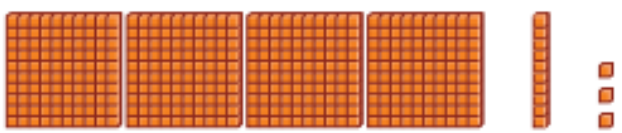
A.



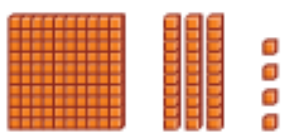
B.



C.



D.



8. Ann is thinking of a number. It has 8 tens, 0 ones, 2 hundreds. Which shows Ann's number? Circle the correct answer. (Lesson 2-2)

A. 28 **B.** 82 **C.** 280 **D.** 802

9. Which shows 392 in expanded form? Circle the correct answer. (Lesson 2-3)

A. 300 + 90 + 2 **B.** 3 + 90 + 200

C. 3 + 9 + 2 **D.** 300 + 9 + 2

MATH REPLAY GO ONLINE

Write each number in standard form. (Lesson 2-3)

10. five hundred eighty-seven _____

11. six hundred nine _____

12. two hundred twelve _____

How can you decompose 853 in different ways? Fill in the missing numbers. (Lesson 2-4)

13. 8 hundreds, 0 tens, and _____ ones

14. 8 hundreds, 2 tens, and _____ ones

15. 8 hundreds, 4 tens, and _____ ones

16. 8 hundreds, 5 tens, and _____ ones

How can you compare the numbers? Complete with >, <, or =. (Lesson 2-5)

17. 549 ◯ 499

18. 617 ◯ 617

19. 360 ◯ 306

20. 445 ◯ 454

21. 842 ◯ 846

22. 719 ◯ 719

23. **Error Analysis** Pablo says that 5 ones, 7 hundreds, and 2 tens is greater than 572. How do you respond to him? Explain your answer. (Lesson 2-5)

Performance Task

Sienna goes to a farmers' market with her dad. They help a farmer sell 75 bananas, 3 crates of 100 apples, and 2 baskets of 10 melons.

Part A: How many pieces of fruit did Sienna and her dad help the farmer sell? Explain your thinking.

Part B: Show 2 other ways to decompose this number.

Reflect

What are different ways you can use place value to understand and compare numbers to 1,000?

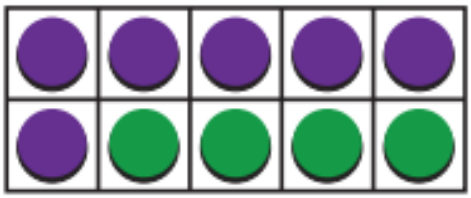
Unit 2

Fluency Practice

Name _____

Fluency Strategy

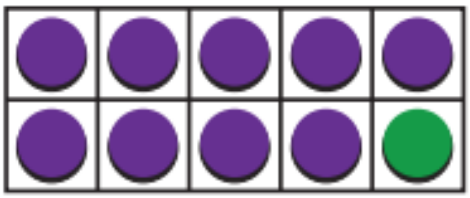
You can use a ten-frame to help compose and decompose 10.



$6 + 4 = 10$ $\quad$ $4 + 6 = 10$

$10 - 6 = 4$ $\quad$ $10 - 4 = 6$

1. Use the counters in the ten-frame to write two addition equations and two subtraction equations.



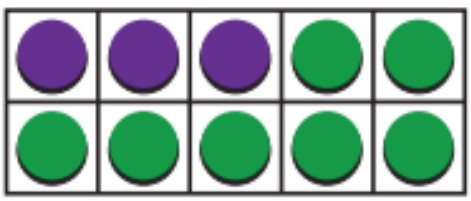
_____ _____

_____ _____

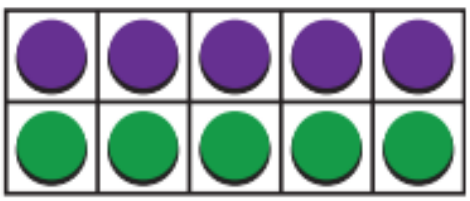
Fluency Flash

What is the sum or difference? Use the counters in the ten-frame to help.

2. $10 - 7 =$ _____



3. $5 + 5 =$ _____



Fluency Check

What is the sum or difference?

4. $10 - 8 =$ _____

5. $2 + 1 =$ _____

6. $8 + 2 =$ _____

7. $10 - 9 =$ _____

8. $6 - 2 =$ _____

9. $6 + 1 =$ _____

10. $8 - 0 =$ _____

11. $10 + 0 =$ _____

12. $4 + 6 =$ _____

13. $10 - 5 =$ _____

Fluency Talk

How does a ten-frame help you decompose 10?

How can you explain to someone else how to add 0 to a number? How can you explain to someone else how to subtract 0 from a number?

Patterns within Numbers

Focus Question

How can I use patterns to count and add numbers?

STEM video | GO ONLINE

IGNITE!

Name _____

Addition Patterns

Listen for directions. What patterns do you see?

+	0	1	2	3	4	5	6	7	8	9
0	0	1	2	3	4	5	6	7	8	9
1	1	2	3	4	5	6	7	8	9	10
2	2	3	4	5	6	7	8	9	10	11
3	3	4	5	6	7	8	9	10	11	12
4	4	5	6	7	8	9	10	11	12	13
5	5	6	7	8	9	10	11	12	13	14
6	6	7	8	9	10	11	12	13	14	15
7	7	8	9	10	11	12	13	14	15	16
8	8	9	10	11	12	13	14	15	16	17
9	9	10	11	12	13	14	15	16	17	18

Counting Patterns

Be Curious

How are they the same?
How are they different?

	142	143	144			147	148	149	
	152	153	154			157	158	159	
161		163	164	165	166	167	168		170
171	172		174	175	176	177		179	180

	942	943	944				948	949	
	952	953				957	958	959	
	962	963			966	967	968	969	
	972	973	974	975	976	977	978	979	

Math is... Mindset

How can you know that you have made good decisions?

Learn

How can you find the missing numbers?

Look for place-value **patterns** to help you count.

101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

The ones digits go up by 1 from left to right in each **row**.

The ones digit changes to 0 and the tens digit goes up by 1.

The ones digit and tens digit change to 0 and the hundreds digit goes up by 1.

The tens digits go up by 1 from top to bottom in each **column**.

Math is... Thinking

What pattern do you notice when counting back from a number ending in 0?

Work Together

What numbers are missing? Fill in the blanks.

497, 498, _____, _____, _____,

502, 503, _____, 505, _____, 507,

508, _____, _____

On My Own

MATH REPLAY | GO ONLINE

Name _____

Which shows counting by 1s? Circle the correct answer.

1. **A.** 263, 262, 264, 265
   B. 442, 443, 445, 444
   C. 650, 651, 652, 653

2. **A.** 898, 899, 900, 901
   B. 526, 527, 529, 528
   C. 700, 711, 712, 713

What numbers are missing? Fill in the blanks.

3.

301	302		304		306	307		309	310
311	312	313		315	316	317	318		
	322		324	325			328		330

4.

671	672	673	674	675	676				680
		683	684		686	687		689	690
		693	694	695		697	698	699	

5. **Error Analysis** Rumi writes these numbers to count by 1s: 137, 138, 139, 1310, 1311. How do you respond to Rumi? Explain.

What numbers are missing? Fill in the blanks.

6. 939, _____, 941, _____

7. 715, 716, _____, _____

8. _____, 598, 599, _____

9. _____, _____, 401, 402

10. **Extend Your Thinking** Gabe writes numbers to count by 1s. He starts at 141 and stops at 149. What numbers does Gabe leave out?

~~141 142 143 145 147 148 149~~

_____ and _____

Reflect

How is counting to 1,000 similar to counting to 100? How is it different?

Math is... Mindset

How have you determined if you have made good decisions?

Lesson 3-2

Patterns When Skip Counting by 5s

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

How can you act with your classmates to build a safe classroom culture?

Learn

How can you find the total number of dots?

You can **skip count** by 5s.

Count every fifth number to skip count by 5s.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

You can find patterns in the numbers you skip count.

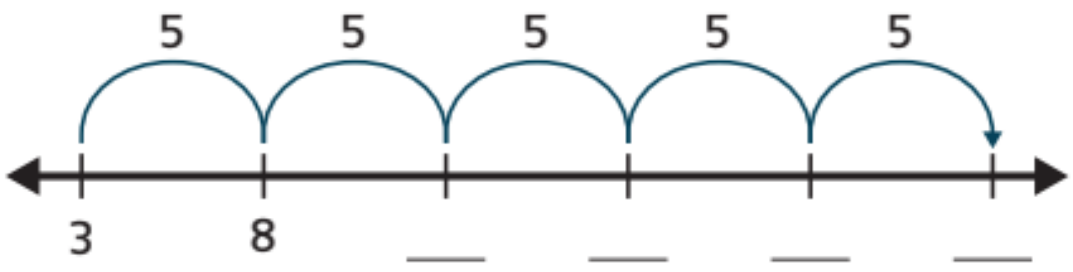
Math is... Precision

Why would you choose to skip count by 5s instead of counting by 1s?

When you start at 0 and skip count by 5s, the numbers you count end with 5 or 0.

Work Together

How can you complete the pattern?



On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you use a number chart to skip count?

1. a. Start at 311. Color each number as you skip count by 5s.

   b. What patterns do you notice?

301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	329	330
331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350
351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380
381	382	383	384	385	386	387	388	389	390
391	392	393	394	395	396	397	398	399	400

How can you skip count by 5s? Fill in the blank.

2. 400, 405, 410, _____

3. 885, 890, 895, _____

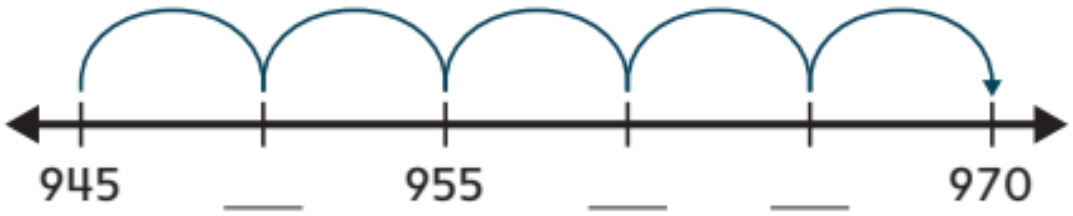
4. 236, 241, 246, _____

5. 119, 124, 129, _____

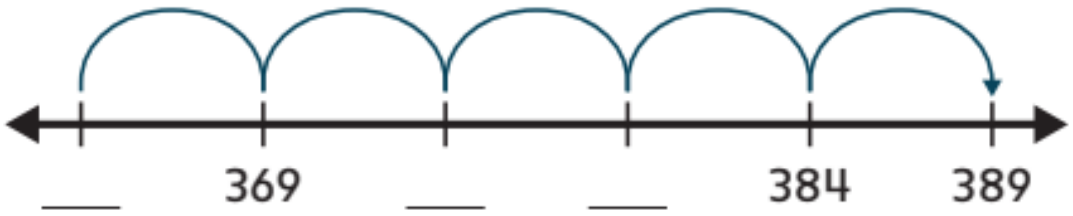
6. **STEM Connection** Marisol has 10 boxes of bandages. Each box has 5 bandages. How can Marisol skip count to find how many bandages she has in all?

How can you skip count by 5s? Fill in the blanks.

7.



8.



9. **Extend Your Thinking** John skip counts *back* by 5s. He starts at 515. What numbers does he count? Fill in the blanks.

515, _____, _____, _____, _____, _____, 485

Reflect

What do you know about skip counting by 5s?

Math is... Mindset

How have you acted with your classmates to build a safe classroom culture?

Lesson 3-3

Patterns When Skip Counting by 10s and 100s

Be Curious

How are they the same?
How are they different?

Math is... Mindset

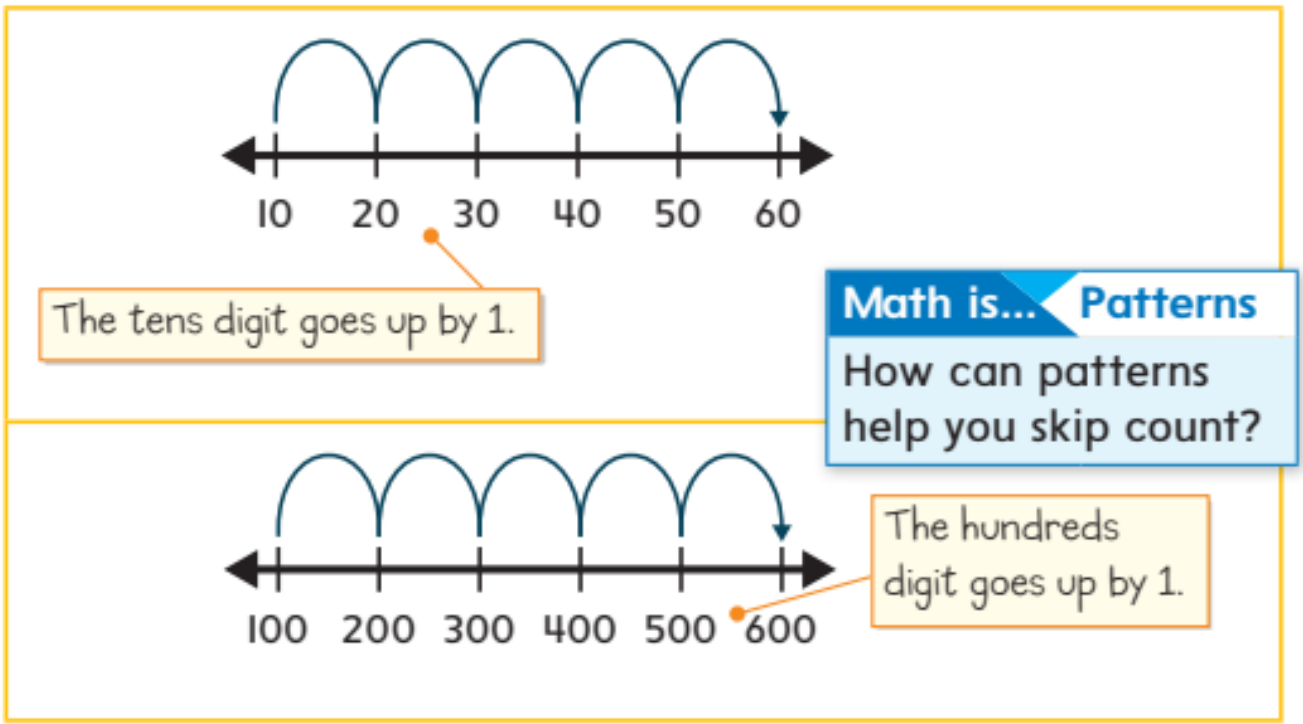
What helps you want to do your best work?

Learn

Felix has 6 sticker sheets with 10 big stickers on each sheet and 6 sticker sheets with 100 small stickers on each sheet.

How can you find how many big and small stickers Felix has?

You can use a number line to skip count.

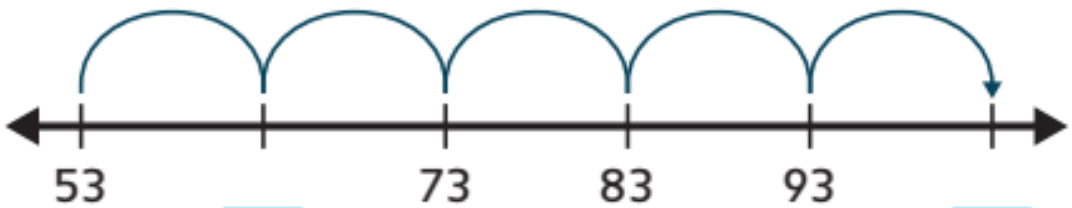


When skip counting by 10s, only the tens digit changes.

When skip counting by 100s, only the hundreds digit changes.

Work Together

How can you complete the pattern? Fill in the numbers.



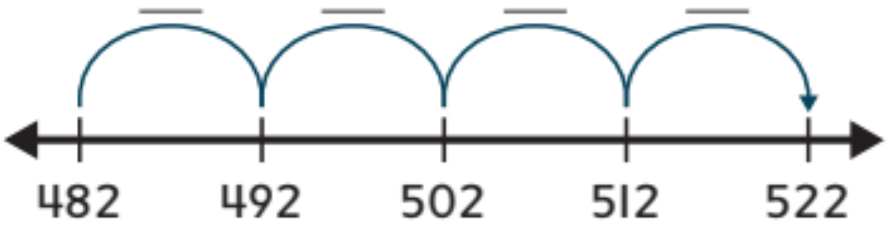
On My Own

MATH REPLAY | GO ONLINE

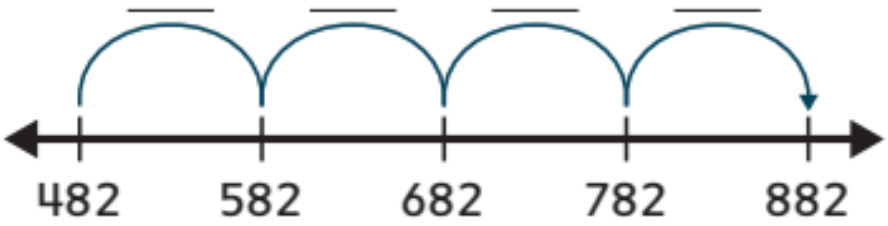
Name _____

What value is shown by each jump? Fill in the blanks.

1.



2.



3. How can you skip count to find the missing numbers? Fill in the blanks.

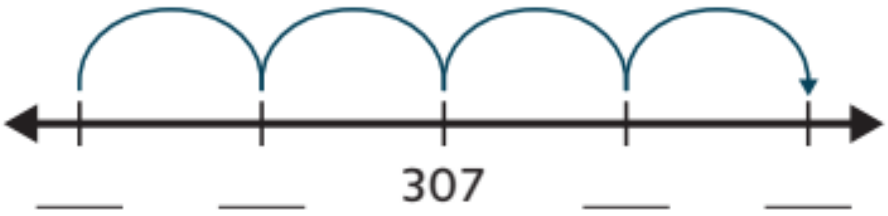
710	720		740	750	760	770	780	790	
810		830	840		860	870	880	890	
	920	930	940	950	960	970	980		

4. **STEM Connection** Marisol hands out first aid magnets at the school assembly. She gives each class 10 magnets. Use skip counting to find how many magnets she hands out to 12 classes.

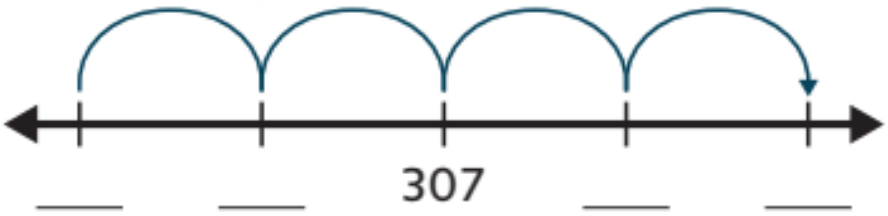
_____ magnets

How can you skip count on a number line? Fill in the blanks.

5. Skip count by 10s.



6. Skip count by 100s.



7. Extend Your Thinking Irwin's father jogs 10 miles every week. How can you use skip counting to find how many miles Irwin's father jogs in 10 weeks?

Reflect

What patterns do you notice when you skip count by 10s and 100s? How are they similar?

Math is... Mindset

What has helped you want to do your best work?

Unit 3

Counting by 1s, 5s, and 10s

CHERYL TOBEY MATH PROBES

Name _____

1. The class is counting by 1s from 786.

They count 787, 788, 789, _____.

Circle the number below that comes next.

What number comes next?	Tell or show how you know which number is correct.
a. 779 **b.** 789 **c.** 790 **d.** 799	

2. The class is skip counting by 5s from 815.
They count 820, 825, 830, _____.

Circle the number below that comes next.

What number comes next?	Tell or show how you know which number is correct.
a. 820 **b.** 835 **c.** 840 **d.** 830	

3. The class is skip counting by 10s from 667.

They count 677, 687, 697, _____.

Circle the number below that comes next.

What number comes next?

a. 687

b. 697

c. 698

d. 707

Tell or show how you know which number is correct.

Reflect On Your Learning

Lesson 3-4

Understand Even and Odd Numbers

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

What helps you work well in a team?

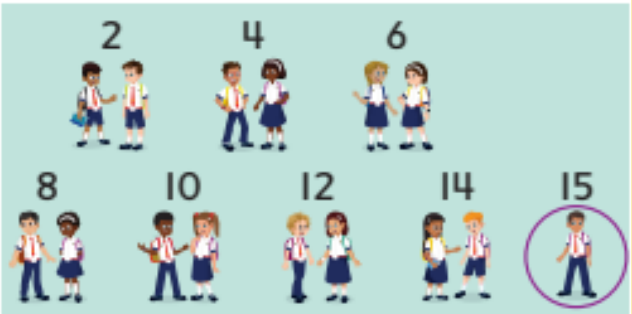
Learn

Two classes of students are going on a field trip. Students will sit with a partner on the bus.

Will each student have a partner?

One class has 14 students. The number of students is **even**. Each student has a partner.

The other class has 15 students. The number of students is **odd**. One student does not have a partner.



You can pair objects or skip count by 2s to determine even and odd numbers.

Math is... Patterns

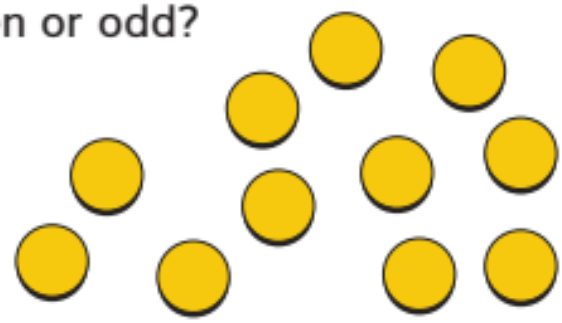
What patterns do you notice?

Work Together

Is the number of counters even or odd?

Explain how you know.

even odd



On My Own

MATH REPLAY | GO ONLINE

Name _____

Is the number even or odd? Draw to show your thinking. Circle the answer.

1. 9

even odd

2. 12

even odd

3. 18

even odd

4. 15

even odd

5. Cleo is washing strawberries. Is the number of strawberries even or odd? Explain how you know.

6. What numbers are even? Shade all the even numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

7. What numbers are odd? Shade all the odd numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30

8. **Extend Your Thinking** Tyler puts 2 flowers in each vase. How can you know if the number of flowers is even or odd without drawing a picture?

Reflect

What patterns can you use to determine even numbers?

Math is... Mindset

How have you worked well in a team?

Addition Patterns

Be Curious

Which doesn't belong?

Math is... Mindset

What can you do to control your actions in class?

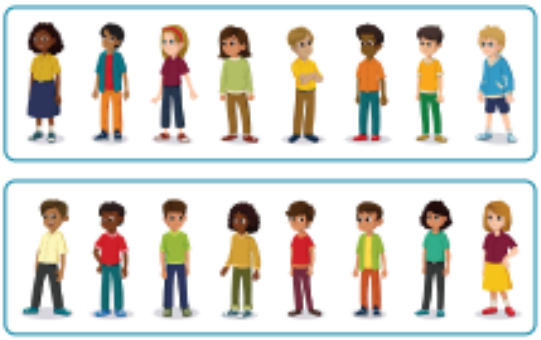
Learn

16 students want to play a game with two teams.

Can the two teams have the same number of players?

Even numbers can be separated into two equal groups.

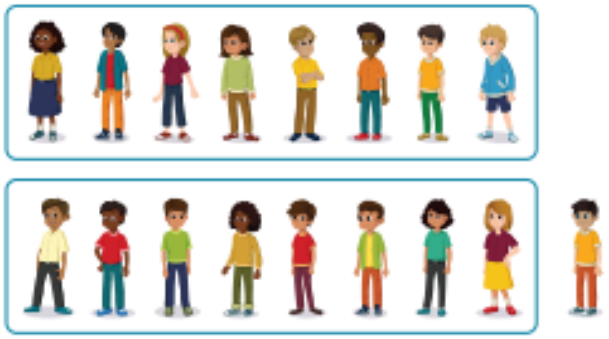
$8 + 8 = 16$



16 is an even number.

Odd numbers *cannot* be separated into two equal groups.

$8 + 9 = 17$



17 is an odd number.

The sum of a doubles fact is always an even number.

Math is... Thinking

How do you know if a sum will be even or odd?

Work Together

Is each sum *even* or *odd*? Circle your answer.

a. $7 + 7 = ?$ even odd

b. $8 + 9 = ?$ even odd

c. $4 + 5 = ?$ even odd

d. $4 + 4 = ?$ even odd

On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you show an even number as the sum of a doubles fact? Fill in the blanks.

1. 10 = _____ + _____

2. 4 = _____ + _____

3. 6 = _____ + _____

4. 14 = _____ + _____

5. Write two equations with even sums.

_____ + _____ = _____

_____ + _____ = _____

6. Write two equations with odd sums.

_____ + _____ = _____

_____ + _____ = _____

7. **STEM Connection** Sienna and her friend will share a bag of 15 oranges. Will Sienna and her friend have the same number of oranges? Explain your thinking.

8. **Extend Your Thinking** The number of runs scored in a baseball game is an even number less than 20 and greater than 15. If the red team scores 8 runs, how many runs does the blue team score? Explain how you know.

Reflect

How can doubles facts help you determine if a number is odd or even?

Math is... Mindset

How have you controlled your actions in class?

Patterns with Arrays

Be Curious

How are they the same?
How are they different?

Math is... Mindset

How can different ideas help you learn better?

Learn

Sophia won some tickets at the arcade.

How can Sophia find how many tickets she has?

You can arrange the tickets in 3 rows of 5 tickets.

Skip count each row by 5s.

There are 15 tickets in the **array**.

You can skip count the amount in each row to find the total number of objects in an array.

Math is... Patterns

Are there other ways to arrange the tickets to find the total?

Work Together

How many pennies are in the array?
Skip count to find the number. Show your work.

_____ pennies

On My Own

MATH REPLAY GO ONLINE

Name _____

How can you skip count to find the number of objects in the array? Fill in the blank.

1. 

_____ smiley faces

2. 

_____ baseballs

3. 

_____ stars

4. 

_____ apples

5. How can you skip count to find the number of counters in the array? Choose the correct answer.

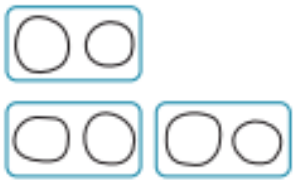
A. 2, 4

B. 4, 8

C. 4, 8, 12

D. 2, 4, 6, 8, 10

6. **Error Analysis** Omar drew the picture shown. Does Omar's picture show repeated addition using an array? Explain.



7. **Extend Your Thinking** Albert has 12 counters. Draw two different arrays he can make using all of the counters.

Reflect

How does organizing objects into arrays help you count?

Math is... Mindset

How have different ideas helped you learn better?

Use Arrays to Add

Be Curious

What math do you see in this problem?

There are some rows of seats in a movie theater. There are the same number of seats in each row.
How many seats could there be?

Math is... Mindset

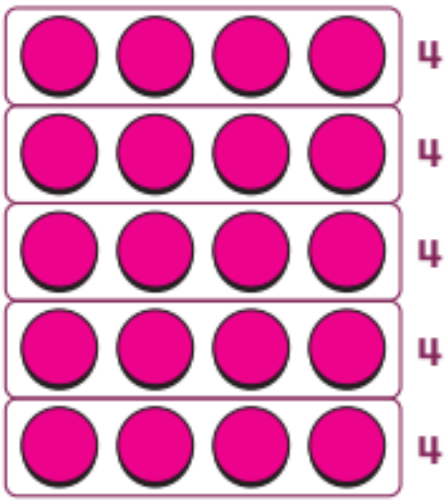
How do you feel about learning math?

Learn

There are 5 rows of 4 seats in a movie theater.

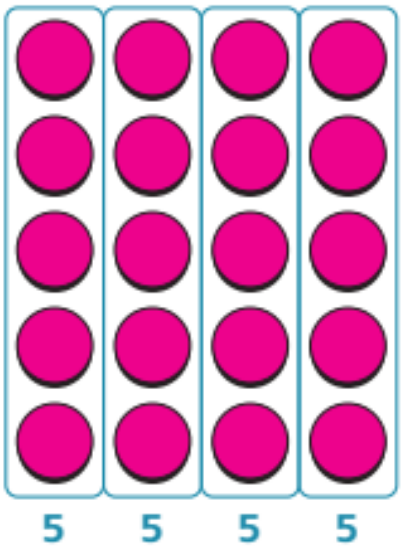
How many seats are in the movie theater?

Add the amount in each row to find the total.



4 + 4 + 4 + 4 + 4 = 20

Add the amount in each column to find the total.



5 + 5 + 5 + 5 = 20

You can make an array to show a problem and use **repeated addition** to solve it.

Math is... Explaining

Why do both equations result in the same total?

Work Together

Mack has 3 shelves with 4 books on each shelf. How many books does Mack have?
Use an array to help you solve.

On My Own

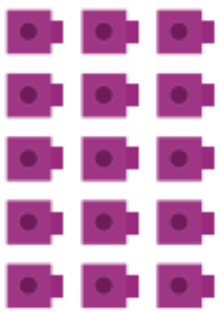
Name _____

What equations show the array? Write two equations.

1. 

___ + ___ + ___ = ___

___ + ___ + ___ + ___ = ___

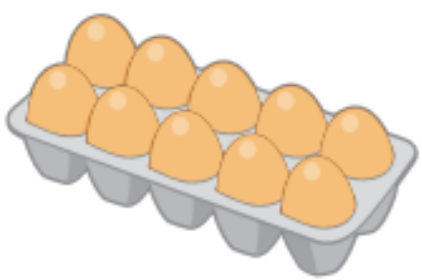
2. 

___ + ___ + ___ + ___ + ___ = ___

___ + ___ + ___ = ___

3. **Error Analysis** Look at the way each student counted the eggs. Both students say there are 10 eggs. How do you respond to them?

Anika: 5, 10 Hernon: 2, 4, 6, 8, 10



Draw an array to match the description. Then write an equation to describe the array.

4. Show 4 rows and 5 columns.

5. Show 2 rows and 4 columns.

6. **Extend Your Thinking** Sam arranges blocks in 5 rows of 4 blocks. Meg arranges blocks in 4 rows of 5 blocks. Sam thinks he has more blocks than Meg. How do you respond to Sam? Explain.

Reflect

How are arrays and repeated addition related?

Math is... Mindset

How have you felt about learning math?

Unit Review

Name _____

Vocabulary Review

Use the vocabulary to complete each sentence.

array	even
odd	pattern
skip count	

1. The number of objects in a group is _____ when you cannot pair all of the objects in the group. (Lesson 3-4)

2. An _____ has a group of objects arranged in equal rows and columns. (Lesson 3-6)

3. The number of objects in a group is _____ when you can pair all of the objects in the group. (Lesson 3-4)

4. You _____ when you count objects in equal groups of two or more. (Lesson 3-2)

5. A _____ is an order that a set of objects or numbers follows over and over. (Lesson 3-1)

Review

6. Is the number *even* or *odd*? Choose the correct answer. (Lesson 3-4)

	Even	Odd
5		
12		
13		
17		
6		
18		

7. How can you skip count by 10s to find the next 3 numbers? Fill in the numbers. (Lesson 3-3)

685, 695, _____, _____, _____

8. How can you skip count by 100s to find the next 3 numbers? Fill in the numbers. (Lesson 3-3)

531, 631, _____, _____, _____

9. Use the number chart to help you solve the problem.

Start on 60 and skip count by 5s.

What are the next 3 numbers? Choose the correct answer. (Lesson 3-2)

A. 61, 62, 63

B. 65, 70, 75

C. 62, 64, 66

D. 70, 80, 90

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

MATH REPLAY | GO ONLINE

10. Jamie is counting from 1 to 1,000. She counts 846, 847, 848.

What are the next 4 numbers? Fill in the numbers. (Lesson 3-1)

____, ____, ____, ____

11. Zoe is thinking of an odd number. The number is between 9 and 12.

What number is Zoe thinking of? Choose the correct answer. (Lesson 3-4)

A. 7 **B.** 11

C. 10 **D.** 13

12. Caleb has 12 sports balls. He has an equal number of baseballs and footballs.

How many footballs does Caleb have? Choose the correct answer. (Lesson 3-5)

A. 6 footballs **B.** 10 footballs

C. 7 footballs **D.** 12 footballs

13. How can you skip count to find the number of cubes in the array? Fill in the total. (Lesson 3-6)

_____ cubes

Performance Task

Marisol needs to place 12 boxes of bandages on a shelf in an ambulance.

How can Marisol arrange the boxes in different arrays?

Part A: Draw 2 different arrays to show how she can arrange the 12 boxes of bandages. Then write an equation for each of your arrays.

Reflect

What patterns do you notice when you count and add numbers?

Unit 3

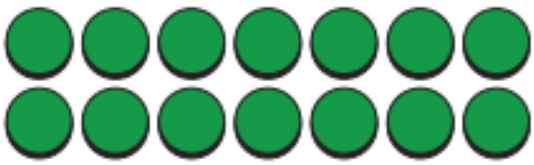
Fluency Practice

Name _____

Fluency Strategy

You can use counters to help add doubles.

$7 + 7 = ?$



Count the counters. There are 14.

So, $7 + 7 = 14$.

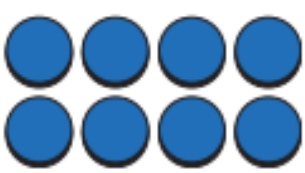
1. Draw counters to help you add $8 + 8$. Then write the sum.

$8 + 8 =$ _____

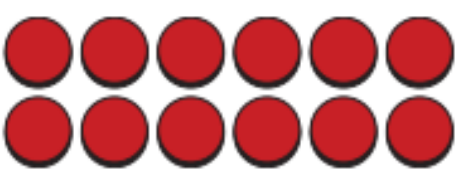
Fluency Flash

What is the sum? Use the counters to find the sum.

2. $4 + 4 =$ _____



3. $6 + 6 =$ _____



Fluency Check

What is the sum?

4. $5 + 5 =$ _____

5. $3 + 7 =$ _____

6. $1 + 1 =$ _____

7. $2 + 2 =$ _____

8. $3 + 3 =$ _____

9. $6 + 0 =$ _____

10. $2 + 8 =$ _____

11. $9 + 9 =$ _____

12. $4 + 4 =$ _____

13. $8 + 1 =$ _____

Fluency Talk

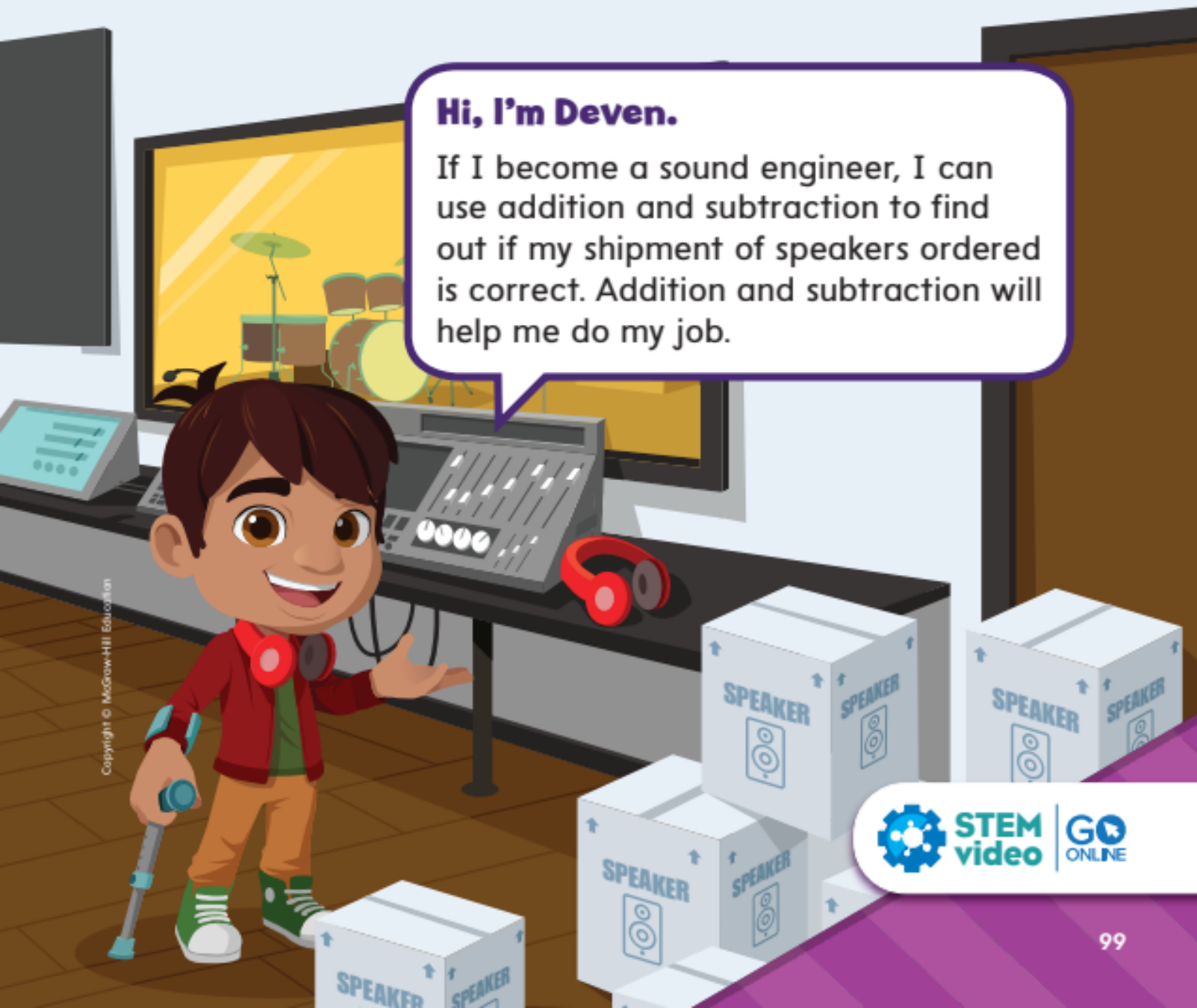
How can you use a doubles fact to find the sum of 6 + 7? Explain.

How would you explain to a friend how to compose 10?

Meanings of Addition and Subtraction

Focus Question

How can I represent and solve addition and subtraction problems?



IGNITE!

Name _____

Up and Down

Rules

The game begins with each player placing a game token on 10.

Player A always moves his or her token UP.

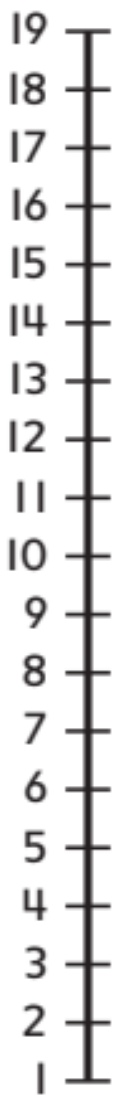
Player B always moves his or her token DOWN.

The players take turns rolling two number cubes marked 1–6.

During a turn, the player who rolls the number cubes chooses one of the numbers rolled and moves his or her token that many spaces. The other player uses the other number rolled to move his or her token.

- If the player is going UP, the player moves his or her token UP that many spaces.
- If the player is going DOWN, the player moves his or her token DOWN that many spaces.

The first player to land exactly on either 19 or 1 wins. A player cannot go past 19 or 1. If the number rolled is too great, the player does not move—and loses the turn.



Represent and Solve Add To Problems

Be Curious

What question could you ask?

Ms. Edwards has some crayons in a box.
She put some crayons in the box.
Now there are more crayons in the box.

Math is... Mindset

How can you help identify a problem in your class or community?

Learn

Ms. Edwards has some crayons in a box. She put 3 more crayons in the box. Now there are 27 crayons in the box.

How many crayons were in the box before?

A **part-part-whole** mat can represent the problem.

Part	Part
?	3
Whole	
27	

An equation can help you find the **unknown** addend.

$? + 3 = 27$

$\mathbf{24} + 3 = 27$

There were **24 crayons** in the box before.

Math is... Quantities

Why does it matter where you place the numbers in the part-part-whole mat?

You can use addition to represent a problem in which a number is added to another number.

Work Together

There were 43 cows standing on the hill. Some more cows joined them. Then there were 48 cows. How many cows joined?

___ _____

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Joann has some grapes. Her grandma gives her 6 more grapes. Now she has 30 grapes. Which equation represents the problem?

   A. $6 + 30 = ?$ **B.** $? - 6 = 30$

   C. $? + 6 = 30$ **D.** $36 - 6 = ?$

Write an equation to represent the problem using ? for the unknown. Then solve.

2. There are 3 trucks in the lot. Some more trucks come in the lot. Now there are 65 trucks in the lot. How many trucks came in the lot?

   a. Equation:

   b. Solve: _____ _____

3. Some people are at the park. 10 more people come to the park. Now there are 22 people at the park. How many people were at the park before?

   a. Equation:

   b. Solve: _____ _____

What equation can represent the problem? Solve and explain how your equation relates to the problem.

4. There are 3 birds in a tree. 14 more birds fly to the tree. How many birds are in the tree now?

5. **STEM Connection** Deven listens to some songs before dinner. He listens to 4 more songs after dinner. Deven listens to 14 songs total. How many songs does Deven listen to before dinner?

6. **Extend Your Thinking**

   a. Write an addition word problem with an unknown start number.

   b. Use an equation to solve your word problem.

Reflect

How do the parts relate to the whole when adding?

Math is... Mindset

What problem in your class or community did you help identify?

Represent and Solve Take From Problems

Be Curious

What could the question be?

Math is... Mindset

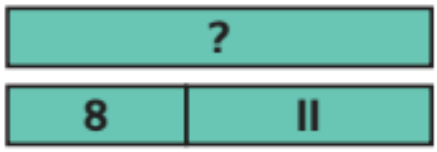
How can you understand thinking that is different from yours?

Learn

Jon brings some juice boxes to share with his class.
His classmates drink 8 of the juice boxes.
There are 11 juice boxes left.

How many juice boxes did Jon bring?

A **bar diagram** can represent the problem.



An equation can help you find the unknown.

$$? - 8 = 11$$

$$19 - 8 = 11$$

Jon brought **19 juice boxes**.

Math is... Quantities

How do you know where the numbers belong in the bar diagram?

You can use subtraction to represent a problem in which a number is taken from another number.

Work Together

Lois has 18 tomatoes to sell. She sells some tomatoes. Now she has 13 tomatoes left. How many tomatoes did Lois sell?

____ _____

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Zak bakes some muffins for a bake sale. He sells 6 and there are 12 left. Which equation represents the problem?

   A. $12 - 6 = ?$ **B.** $? - 6 = 12$

   C. $? + 6 = 12$ **D.** $12 - ? = 6$

2. Ms. Tahir buys 25 pencils to give to her students. She gives away some pencils. She has 3 pencils left. How many pencils did Ms. Tahir give away? Write an equation that represents the problem. Then solve it.

   a. Equation:

   b. Solve: _____ _____

3. **Error Analysis** Yumi is solving this problem.

Some nuts are in a bowl. I ate 9 nuts. There are 31 nuts left. How many nuts were in the bowl before?

   Yumi writes the equation $31 - 9 = ?$ to represent the problem. How do you respond to Yumi?

What equation can represent the problem? Solve and explain how your equation relates to the problem.

4. There are 17 people in the pool. 7 people leave the pool. How many people are still in the pool?

5. Sue has 18 orange slices. She gives some to Juan. Sue has 6 left. How many slices did Sue give to Juan?

6. **Extend Your Thinking**

   a. Write a subtraction word problem with an unknown change number.

   b. Use an equation to solve your word problem.

Reflect

When can you use subtraction to find an unknown?

Math is... Mindset

How have you understood thinking that is different from yours?

Solve Two-Step Add To and Take From Problems

Be Curious

How are they the same?
How are they different?

Jaya has 6 books.
She buys 2 more books.

Tom has 6 books.
He buys 2 more books.
He donates 1 book.

Math is... Mindset

What helps you solve a problem?

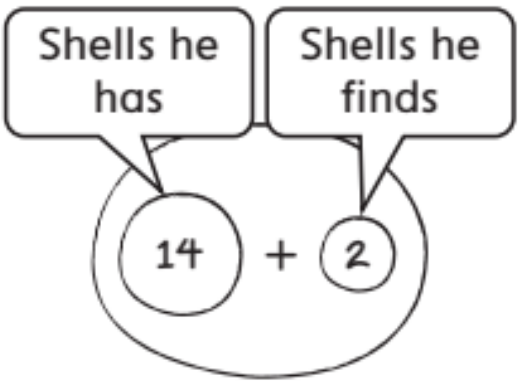
Learn

Luca has 14 seashells. He finds 2 more seashells.
He gives his brother 8 seashells.

How many seashells does Luca have?

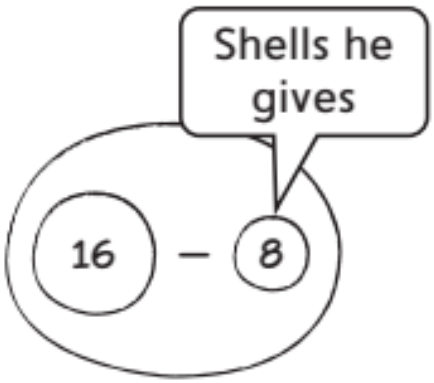
Some problems have more than one question to answer.

How many seashells does Luca have?



$14 + 2 = 16$

How many seashells does he have left?



$16 - 8 = 8$

When problems have more than one question, you answer one question at a time.

Math is... Quantities

How do you know what quantities to add or subtract?

Work Together

Coach Lou has 10 baseballs. He buys 6 more baseballs. His pitcher gives him 3 baseballs. How many baseballs does Coach Lou have now?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Mia has 19 crayons. Her cousin gives her 3 more. She finds 16 more. Which shows the steps to solve the problem?

   A. First, add 19 and 3. Then add 16 to the sum.

   B. First, add 19 and 3. Then subtract 16 from the sum.

   C. First, subtract 3 from 19. Then add 16 to the difference.

   D. First, subtract 3 from 16. Then add 19 to the difference.

Write and solve an equation for each question to answer.

2. Summer has 9 erasers. She gives 3 to Ian. Then she loses 2. How many erasers does Summer have now?

   a. Equation:

   b. Equation:

3. Tal has 6 flowers. His dad gives him 4 more. Then he give 3 flowers to his mother. How many flowers does Tal have now?

   a. Equation:

   b. Equation:

4. Cindy has 3 pears. She buys 4 more. She gives her brother 1 pear. How many pears does Cindy have now? Explain the steps you used to solve the problem.

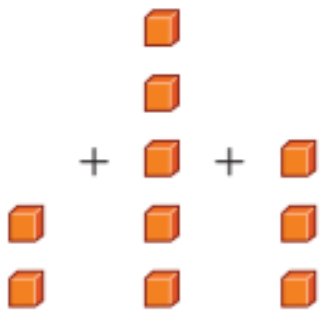
5. **Error Analysis** Georgia is solving this problem.

> Stu has 8 apples. He eats 2 apples. Then he buys 5 apples. How many apples does Stu have now?

Georgia writes the equation $8 - 2 - 5 = ?$ to represent the problem. How do you respond to Georgia?

6. **Extend Your Thinking**

a. Write a word problem that can be represented by the base-ten blocks.



b. Write and solve equations to solve your problem.

Reflect

How can you know that a word problem has more than one question to answer?

Math is... Mindset

What has helped you solve a problem?

Represent and Solve Put Together Problems

Be Curious

Which doesn't belong?

$? + 30 = 40$

$10 = 40 - ?$

$30 - ? = 10$

$10 + ? = 40$

Math is... Mindset

How can you work well with a classmate even when you might disagree?

Learn

Laura read 30 pages in her book yesterday. She read 20 pages before dinner and the rest of the pages after dinner.

How many pages did Laura read after dinner?

A part-part-whole mat can represent the problem.

Part	Part
20	?
Whole	
30	

An equation can help you find the unknown.

$20 + ? = 30$ $30 - 20 = ?$

$20 + \mathbf{10} = 30$ $30 - 20 = \mathbf{10}$

Laura read **10 pages** after dinner.

Math is... Explaining

Why can we use addition or subtraction?

You can use addition or subtraction to represent a problem in which two numbers are put together.

Work Together

Manuel has 23 spools of thread in a basket and 4 spools on the table. How many spools of thread does he have?

On My Own

MATH REPLAY | GO ONLINE

Name _____

Which equations can represent the word problem? Choose all the correct answers.

1. There are 12 pieces of fruit in a basket. 7 are apples. The rest are bananas. How many are bananas?

   A. $7 + ? = 12$ **B.** $? + 7 = 12$

   C. $12 - 7 = ?$ **D.** $12 + 7 = ?$

2. The parking lot has 40 spaces. 30 spaces are filled with cars. The rest are empty. How many are empty?

   A. $40 - 30 = ?$ **B.** $40 + 30 = ?$

   C. $30 + ? = 40$ **D.** $30 + 40 = ?$

Write an addition equation and a subtraction equation to represent the problem using ? for the unknown. Then solve.

3. Leo bakes 18 loaves of bread. 6 of the loaves are rye. The rest are wheat. How many loaves are wheat?

   a. Equation:

   b. Solve: _____ _____

4. There are 14 people on the bus. 3 are children. The rest are adults. How many adults are on the bus?

   a. Equation:

   b. Solve: _____ _____

What equation can represent the problem? Solve and explain how your equation relates to the problem.

5. Molly buys 2 white roses and 10 red roses. How many roses does Molly buy?

6. There are 60 animals at the zoo. 20 do not have fur and the rest do. How many animals have fur?

7. **Extend Your Thinking**

   a. Write a word problem with an unknown addend.

   b. Use an equation to solve your word problem.

Reflect

What can help you make sense of a word problem with an unknown part?

Math is... Mindset

What did you do to work well with a classmate even if you disagreed?

Lesson 4-5

Represent and Solve Take Apart Problems

Be Curious

What could the question be?

Alex has 11 seeds to plant.

Math is... Mindset

What helps you feel relaxed when you are frustrated?

Learn

17 flowers bloomed in Alex's garden. 12 are red and the rest are white.

How many white flowers are in the garden?

A drawing can represent the problem.

An equation can help you find the unknown.

$12 + ? = 17$ $\qquad$ $17 - 12 = ?$

$12 + \mathbf{5} = 17$ $\qquad$ $17 - 12 = \mathbf{5}$

There are **5 white flowers** in the garden.

Math is... Connections

Why can this problem be solved using addition or subtraction?

You can use addition or subtraction to represent a problem in which a total is broken into two groups.

Work Together

Tasha has 15 ice cubes. She puts some in her glass. She puts the rest in her mom's glass. How many ice cubes can she put in each glass?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Joyce plants 18 rose bushes. She plants 10 with red blooms. The rest have yellow blooms. Which equation represents the problem? Choose all that are correct.

   A. $? - 18 = 10$ **B.** $10 + 18 = ?$

   C. $18 - 10 = ?$ **D.** $10 + ? = 18$

Write an addition equation and a subtraction equation to represent the problem using ? for the unknown. Then solve.

2. There are 30 actors in a school play. There are 20 actors from second grade. The rest are from third grade. How many actors are from third grade?

   a. Equation:

   b. Solve: _____ _____

3. Bev buys 14 ribbons. 9 ribbons are pink. The rest are green. How many green ribbons does she buy?

   a. Equation:

   b. Solve: _____ _____

4. There are 12 mugs on a shelf. Eight are blue and the rest are red. How many mugs are red?

5. **Error Analysis** Pablo is solving this problem.

> 19 people come to the party. 7 people are adults. The rest are children. How many are children?

Pablo writes these equations to represent the problem. How do you respond to him?

$7 + ? = 19$ $19 - 7 = ?$

6. **Extend Your Thinking**

a. Write a word problem with an unknown addend.

b. Use an equation to solve your word problem.

Reflect

How is solving a subtraction word problem similar to solving an addition word problem?

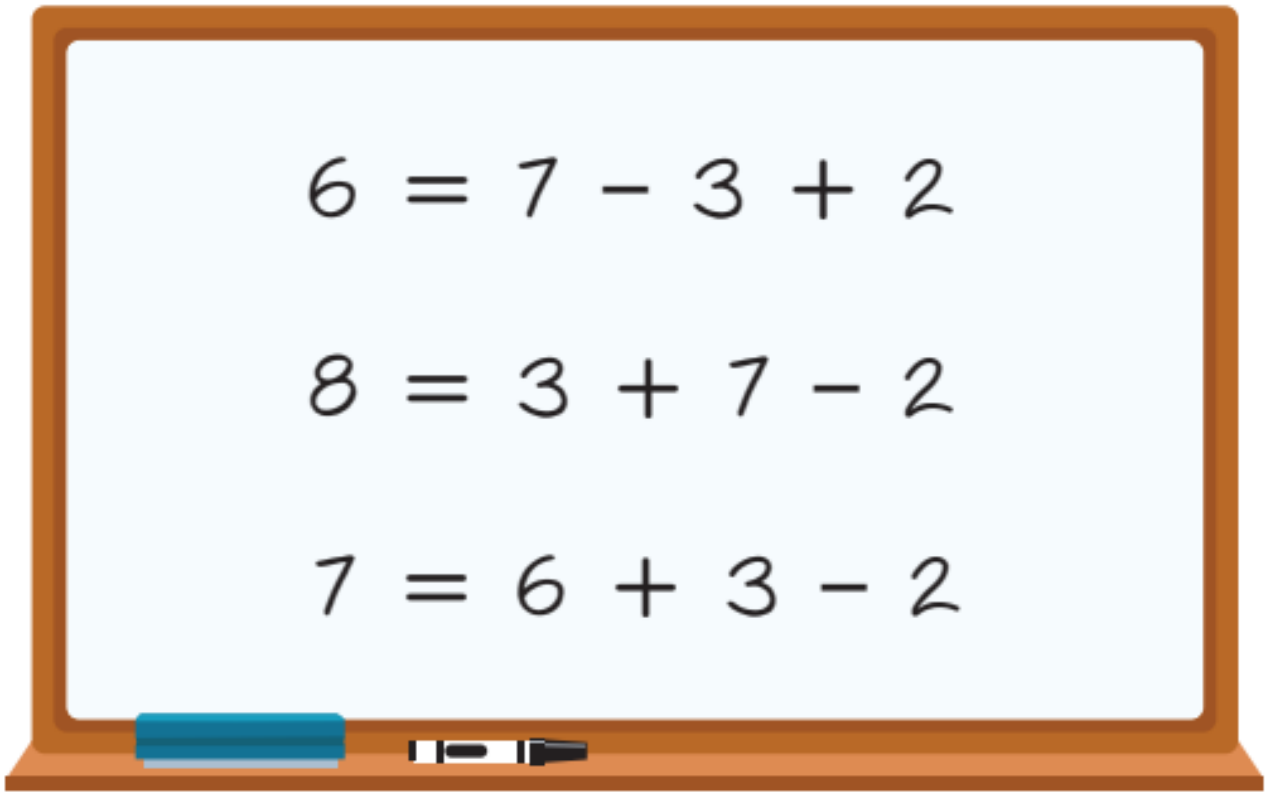
Math is... Mindset

What has helped you feel relaxed when you are frustrated?

Solve Two-Step Put Together and Take Apart Problems

Be Curious

How are they the same?
How are they different?



Math is... Mindset

How confident do you feel about math?

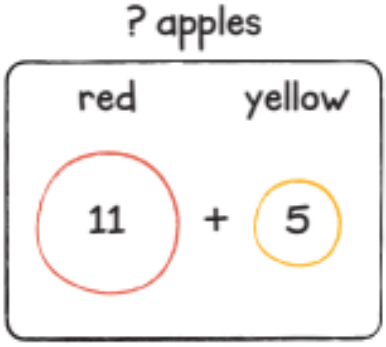
Learn

There are 23 apples in a basket. Eleven of the apples are red and 5 are yellow. The rest are green.

How many apples are green?

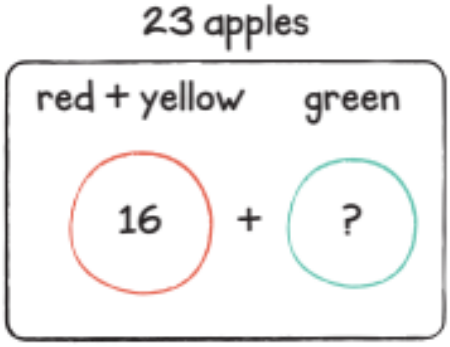
Some problems have more than one question to answer.

How many apples are red or yellow?



$11 + 5 = \mathbf{16}$

How many apples are green?



$23 - 16 = \mathbf{7}$

There are **7 green apples.**

Problems with more than one question need more than one equation to solve.

Math is... Planning

Why is it necessary to solve this problem in two steps?

Work Together

Kyra had 12 bracelets. She bought 2 more bracelets. She gave her friend 5 bracelets. How many bracelets does Kyra have now?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Gianna's family brings 9 towels to a beach. 4 towels have stripes. 2 towels have polka dots. The rest of the towels have flowers. Which equation answers the question "How many towels have stripes or polka dots?"

   A. $9 + 4 = ?$ **B.** $9 - 4 = ?$

   C. $4 - 2 = ?$ **D.** $4 + 2 = ?$

Write and solve an equation to answer each question.

2. Tim has 6 stuffed bears. His cousin plays with 1 of his bears, he plays with 2 of his bears, and his sister plays with the rest. How many stuffed bears does Tim's sister play with?

   a. How many bears do Tim and his cousin play with?

   b. How many bears does his sister play with?

3. Patty has 7 bottles of bubbles. She buys 3 more. She gives 6 bottles of bubbles to her brother. How many bottles of bubbles does Patty have now?

   a. How many bottles of bubbles did Patty have before giving some to her brother?

   b. How many bottles of bubbles does Patty have after giving some to her brother?

What equation can represent the first step? Explain your thinking.

4. Justin put 28 flowers in a vase. 9 are daisies and 7 are lilies. The rest are daffodils. How many are daffodils?

5. Pari has 15 fish in her tank. She gets 3 new fish for her birthday. She buys 2 new fish. How many fish are in Pari's tank now?

6. **Extend Your Thinking**

   a. Write a two-step addition word problem with an unknown addend.

   b. Solve your word problem.

Reflect

How can drawing a picture help you make sense of a two-step problem?

Math is... Mindset

What has helped you feel confident about math?

Represent and Solve Compare Problems

Be Curious

Is this always true?

○ A word problem with **fewer** must be solved by subtracting.

Math is... Mindset

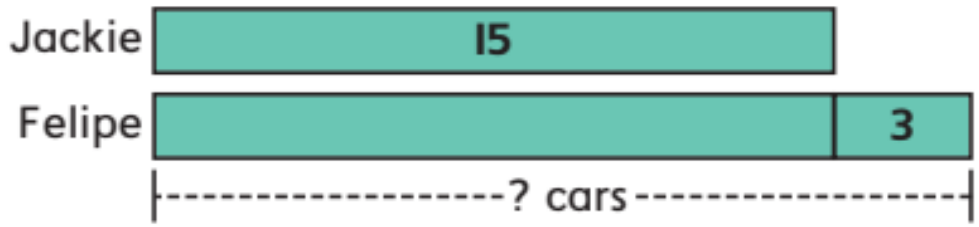
What do you need to be ready to learn?

Learn

Jackie has 3 fewer cars than Felipe. Jackie has 15 cars.

How many cars does Felipe have?

A bar diagram can represent the problem.



An equation can help you find the unknown.

$15 + 3 = ?$

$15 + 3 = \mathbf{18}$

Felipe has **18 cars**.

Math is... Choosing Tools

How can a bar diagram help you make sense of the problem?

You can use addition to represent and solve a compare problem.

Work Together

Barry buys 14 muffins. Kiana buys 19 muffins. How many fewer muffins does Barry buy than Kiana?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Jayden has 4 fewer stickers than Edward. Jayden has 11 stickers. Which equation represents the problem?

   A. $? + 4 = 11$ **B.** $11 + 4 = ?$

   C. $11 - ? = 4$ **D.** $11 - 4 = ?$

Write an equation to represent the problem using ? for the unknown. Then solve.

2. Mia scores 3 fewer points than Carly in the basketball game. Mia scores 12 points. How many points does Carly score?

   a. Equation:

   b. Solve: _____ _____

3. Rosa has 13 dolls in her collection. Jake has 9 dolls in his. How many fewer dolls does Jake have than Rosa?

   a. Equation:

   b. Solve: _____ _____

4. There are 11 plates on the table. There are 16 plates on the shelf. How many fewer plates are on the table? Explain your thinking.

5. **STEM Connection** Sienna is making a healthy snack. She has 5 fewer fruits than vegetables. She as 4 fruits. How many vegetables does Sienna have?

6. **Extend Your Thinking**

   a. Write a word problem that compares two numbers using the word *fewer*.

   b. Use an equation to solve your word problem.

Reflect

Should a word problem with the word *fewer* always be solved with subtraction? Explain.

Math is... Mindset

What has helped you be ready to learn?

Lesson 4-8

Represent and Solve More Compare Problems

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

What behaviors show that you respect your classmates?

Learn

Cam has 5 more animals than Sandy. Cam has 9 animals.

How many animals does Sandy have?

A bar diagram can represent the problem.

An addition equation can help you solve the problem.

$? + 5 = 9$

$4 + 5 = 9$

Sandy has **4 animals**.

A subtraction equation can help you solve the problem.

$9 - 5 = ?$

$9 - 5 = 4$

Math is... Choosing Tools

Why can a bar diagram be represented by two different equations?

You can use addition or subtraction to represent a compare problem.

Work Together

There are 7 fewer turtles than fish in the pond. There are 19 fish in the pond. How many turtles are in the pond?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Nicole buys 7 fewer bananas than Paulo. Paulo buys 18 bananas. Which equation represents the problem? Choose all the correct answers.

   A. $7 + 18 = ?$ **B.** $? + 7 = 18$

   C. $? - 7 = 18$ **D.** $18 - ? = 7$

Write an addition equation and a subtraction equation to represent the problem using ? for the unknown. Then solve.

2. Ron paints 2 more pictures than Michelle. Ron paints 8 pictures. How many pictures does Michelle paint?

   a. Equations:

   b. Solve: _____ _____

3. Hannah makes 5 fewer cards than Gabriel. Gabriel makes 15 cards. How many cards does Hannah make?

   a. Equations:

   b. Solve: _____ _____

What equation can represent the problem? Solve and explain how your equation relates to the problem.

4. Marcus scores 2 fewer goals than Trinity. Trinity scores 5 goals. How many goals does Marcus score?

5. **STEM Connection** Deven recorded 3 more songs on Friday than on Saturday. Deven recorded 4 songs on Friday. How many songs does Deven record on Saturday?

6. **Extend Your Thinking**

   a. Write a word problem that compares two numbers using the word *more*.

   b. Use an equation to solve your word problem.

Reflect

Should a word problem with the word *more* always be solved with addition? Explain.

Math is... Mindset

How did you show that you respect your classmates?

Unit 4

Addition and Subtraction Equations

Name _____

1. Micah has 50 tickets to sell. His friend gives him some more tickets. He now has 64 tickets to sell. How many tickets does his friend give him?

   Solve the problem.

Circle the correct equation.

a. $50 + 64 = ?$

b. $? - 50 = 64$

c. $50 + ? = 64$

d. $? - 64 = 50$

Explain your choice.

2. Mr. B's and Mrs. Yu's classes had a contest. Mr. B's class read 90 books. Mrs. Yu's class read 60 books. How many more books did Mr. B's class read?

   Solve the problem.

Circle the correct equation.

a. $90 + 60 = ?$

b. $90 - 60 = ?$

c. $? - 60 = 90$

d. $60 + 90 = ?$

Explain your choice.

3. 30 fish are in a big tank. Some are red and the rest are blue. There are 10 blue fish in the tank. How many red fish are in the tank?

Solve the problem.

Circle the correct equation.

a. $? - 10 = 30$

b. $? + 10 = 30$

c. $30 + 10 = ?$

d. $? - 30 = 10$

Explain your choice.

Reflect On Your Learning

Lesson 4-9

Solve Two-Step Problems with Comparison

Be Curious

What math do you see?

Jorge has more blue erasers than red.
He has some red erasers.

Math is... Mindset

What do you want to accomplish today?

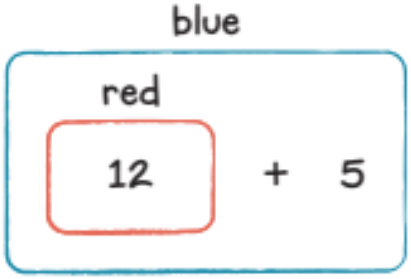
Learn

Jorge has 5 more blue erasers than red. He has 12 red erasers.

How many erasers does Jorge have?

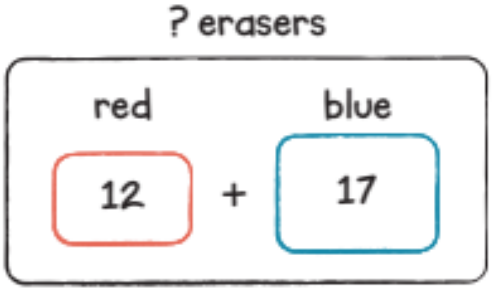
Think about the questions to answer to solve the problem.

How many blue erasers does Jorge have?



$12 + 5 = 17$

How many red and blue erasers does Jorge have?



$12 + 17 = 29$

Jorge has **29 erasers**.

Some comparison problems have more than one question to answer.

Math is... Planning

Why is it necessary to solve this problem in two steps?

Work Together

Ashley has 13 magazines. Her brother has 10 more magazines than Ashley. How many magazines do Ashley and her brother have?

On My Own

Name _____

1. Hilary has 4 more blue pens than purple. She has 3 purple pens. Which shows the steps to find how many pens Hilary has?
   - **A.** Add 3 and 4.
   - **B.** Add 3 and 4. Then add 3 to the sum.
   - **C.** Subtract 3 from 4. Then add 3 to the difference.
   - **D.** Subtract 3 from 4. Then add 4 to the difference.

Write equations to represent the steps of the problem. Then solve.

2. Iman has 3 more yellow tulips than pink tulips. She has 6 pink tulips. How many tulips does Iman have?
   - **a.** Step 1:
   - **b.** Step 2:
   - **c.** Solve: _____ _____

3. Kala buys 2 fewer T-shirts than Lyle. Lyle buys 5 T-shirts. How many T-shirts do they buy in all?
   - **a.** Step 1:
   - **b.** Step 2:
   - **c.** Solve: _____ _____

What equations can represent the steps to solve the problem? Solve.

4. Eve makes 6 more cakes than pies. She makes 5 pies. How many desserts does Eve make in all?

5. Chi has 4 fewer small stamps than large stamps. He has 14 large stamps. How many stamps does Chi have?

6. **Extend Your Thinking**

   a. Write a two-step word problem using the word *more*.

   b. Use an equation to solve your word problem.

Reflect

How do the words *more* or *fewer* change the way you think about a two-step problem?

Math is... Mindset

Were you able to accomplish what you set out to do?

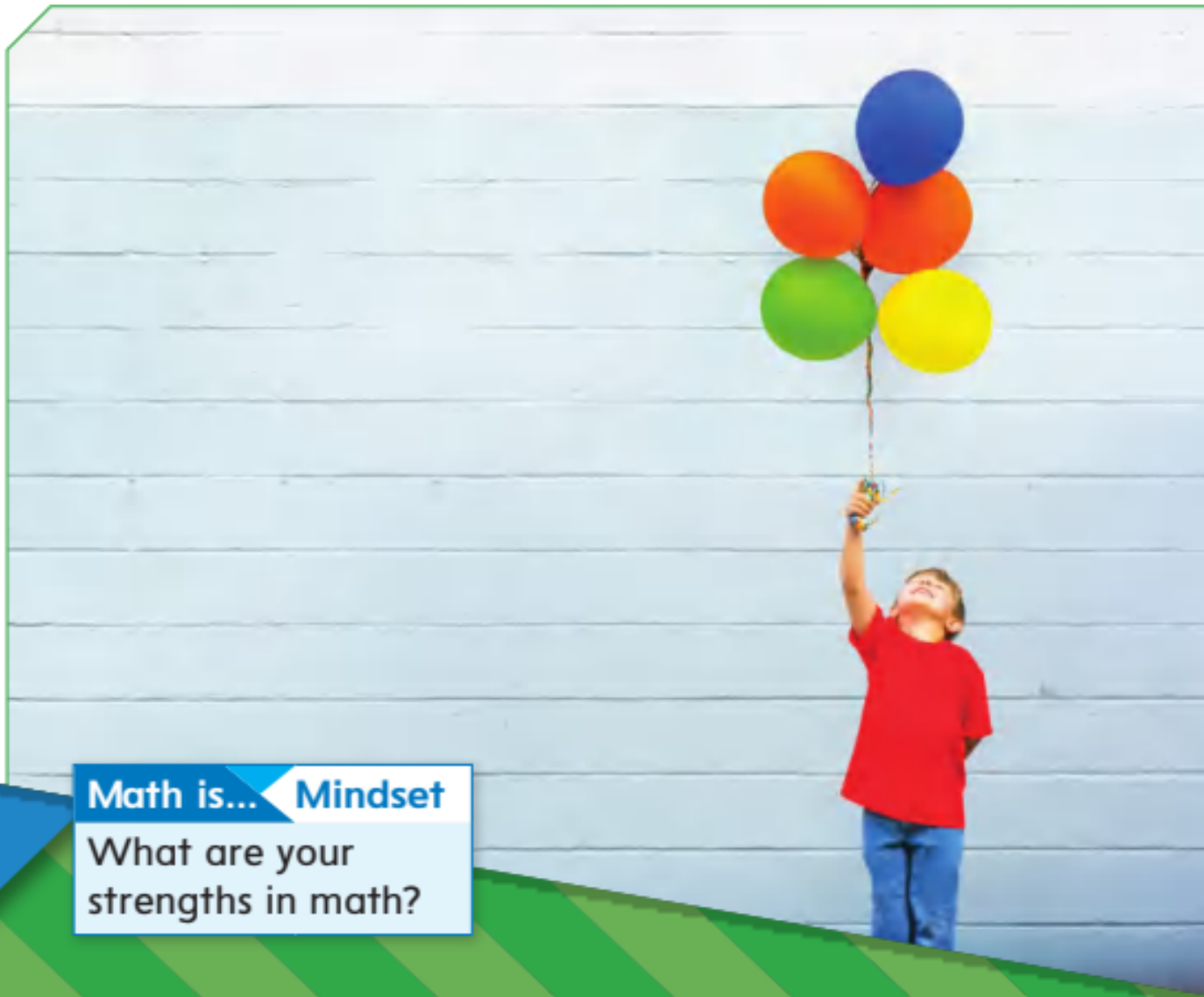
Lesson 4-10

Solve Two-Step Problems Using Addition and Subtraction

Be Curious

What math do you see?

Paul has some balloons. He gets some more balloons. He gives some to his sister.



Math is... Mindset

What are your strengths in math?

Learn

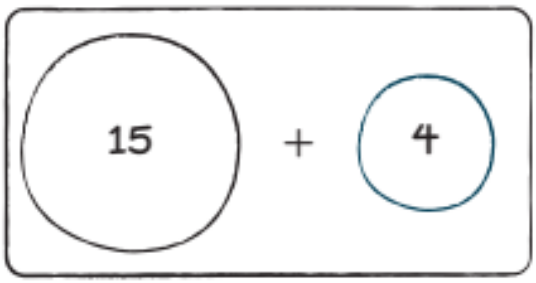
Paul has 15 balloons. He gets 4 more balloons.
He gives 9 to his sister.

How many balloons does Paul have now?

Think about the questions to answer to solve the problem.

How many balloons does Paul have?

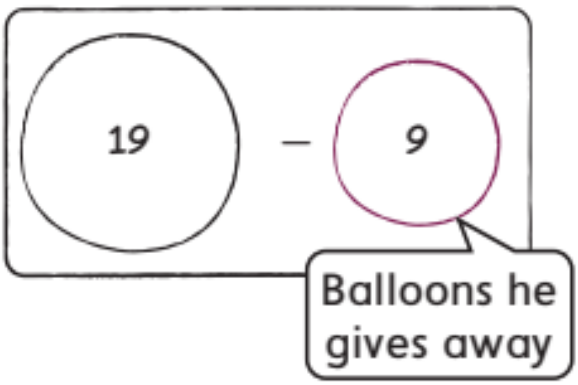
Paul's balloons before



$15 + 4 = \mathbf{19}$

How many balloons does Paul have now?

Paul's balloons after



$19 - 9 = \mathbf{10}$

Paul has **10 balloons**.

A problem with more than one step can include addition, subtraction, or both.

Math is... Modeling

Why is a drawing a helpful way to represent the problem?

Work Together

Tina has 9 pencils. She gives 3 away. She buys 4 more.
How many pencils does Tina have?

____ _____

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Marlene has 3 rings. Her friend gives her 2 rings. She buys 4 more rings. Which equation shows the first question to answer?

   A. $3 - 2 = ?$ **B.** $3 - 4 = ?$

   C. $3 + 2 = ?$ **D.** $3 + ? = 4$

Write equations to represent the steps of the problem. Then solve.

2. There are 8 butterflies in the garden. 2 more butterflies fly into the garden. Then 5 butterflies fly away. How many butterflies are in the garden?

   a. Step 1:

   b. Step 2:

   c. Solve: _____ _____

3. Ms. Li buys 9 books. She gives 2 to her son and 3 to her friend. How many books does Ms. Li have?

   a. Step 1:

   b. Step 2:

   c. Solve: _____ _____

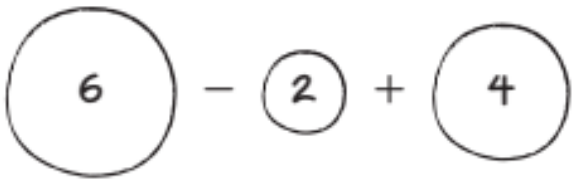
Solve the problem.

4. John makes 7 bags of snacks. He makes 5 more bags and gives 4 bags away. How many bags does John have?

5. Bella makes 8 dog treats. She gives 5 treats to her grandma's dog. She makes 6 more treats. How many dog treats does Bella have?

6. **Extend Your Thinking**

   a. Write a word problem that can be represented by the drawing.



   b. Use an equation to solve your word problem.

Reflect

How do you know when to add or subtract in a two-step problem?

Math is... Mindset

What strengths did you use today?

Unit Review

Name _____

Vocabulary Review

Use the vocabulary to complete the sentence.

addend	subtraction
addition	unknown
compare	

1. When you know one amount is greater than or less than another amount, you can _____ the numbers of the objects. (Lesson 4-7)

2. You can use _____ when you take away, take apart, separate, or find the difference. (Lesson 4-2)

3. The _____ in an equation is the solution. (Lesson 4-1)

4. One of two numbers added together to find a sum, or total, is a(n) _____. (Lesson 4-1)

5. You can use _____ when you join or put together sets to find a sum, or total. (Lesson 4-1)

Review

6. Amy has some buttons. She loses 9 buttons. Now she has 3 buttons. How many buttons did she have to begin with? (Lesson 4-2)

7. Raj has 36 stickers. He gives 12 stickers to his brother. He gives 7 stickers to his sister. Which equation represents the problem? Choose the correct answer. (Lesson 4-10)

A. $36 - 12 - 7 = ?$

B. $36 - 12 + 7 = ?$

C. $36 + 12 - 7 = ?$

D. $36 + 12 + 7 = ?$

8. Jackson has 25 toy cars. He has 17 red cars. The rest are blue cars. How many blue cars does Jackson have? (Lesson 4-5)

9. Nico reads two books. The first book he reads is 50 pages long. The two books have 94 pages in all. How many pages are in the second book Nico reads? (Lesson 4-4)

10. Owen has 6 fewer baseballs than Mark. Mark has 14 baseballs. Which represents the number of baseballs Owen has? Choose all the correct answers. (Lesson 4-7)

A. $14 + 6 = ?$

B. $6 + ? = 14$

C. $14 - 6 = ?$

D. $14 - ? = 6$

11. Some people were at the zoo. 30 more people go to the zoo. Now there are 82 people at the zoo. How many people were at the zoo before? (Lesson 4-1)

12. It took Tony 36 minutes to read a book. He read the book for 13 minutes on Monday. He finished the book on Tuesday. How many minutes did he read the book on Tuesday? Choose the correct answer. (Lesson 4-5)

A. 15 minutes

B. 23 minutes

C. 29 minutes

D. 49 minutes

13. The metal ladder is 15 feet long. The metal ladder is 7 feet longer than the wooden ladder. How long is the wooden ladder? (Lesson 4-8)

14. There are 5 more apples than oranges in the bowl. There are 4 oranges in the bowl. How many apples and oranges are in the bowl? Choose the correct answer. (Lesson 4-9)

A. 1 apple

B. 9 apples and oranges

C. 13 apples and oranges

D. 16 apples and oranges

15. Kayla has 13 stuffed animals. She gets 6 more stuffed animals. She gives away 4 stuffed animals. How many stuffed animals does Kayla have now? (Lesson 4-6)

Performance Task

There are 14 speakers in a shipment. Some are large speakers and the rest are small speakers.

Part A: How many large speakers and how many small speakers could be in the shipment? Show two different ways.

Part	Part
Whole	

Part	Part
Whole	

Part B: Suppose there are 8 large speakers in the shipment. Write two different equations to find the number of small speakers.

Part C: Suppose there are 11 small speakers in the shipment. How many large speakers are in the shipment?

Reflect

Describe different ways you can solve addition and subtraction word problems. Which way do you prefer? Explain why.

Unit 4

Fluency Practice

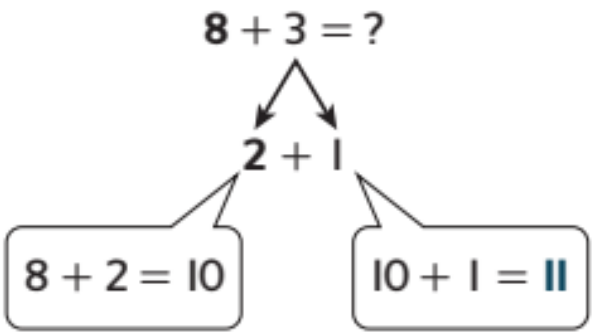
Name _____

Fluency Strategy

You can make a 10 to find a sum.

$8 + 3 = ?$

Think: What adds to **8** to make a 10?



So, $8 + 3 = 11$.

1. How can you make a 10 to find $7 + 6$? Explain.

Fluency Flash

What is the sum? Make a 10 to add.

2. $9 + 4 =$ ___

3. $7 + 5 =$ ___

Fluency Check

What is the sum?

4. $7 + 9 =$ _____

5. $8 + 2 =$ _____

6. $1 + 9 =$ _____

7. $9 + 6 =$ _____

8. $8 + 8 =$ _____

9. $4 + 6 =$ _____

10. $9 + 9 =$ _____

11. $7 + 7 =$ _____

12. $8 + 5 =$ _____

13. $9 + 3 =$ _____

Fluency Talk

How can you make a 10 with either addend to find 8 + 7? Explain.

How would you explain to a friend how to add doubles? Write an example of adding using doubles.

Strategies to Fluently Add within 100

Focus Question

What strategies can I use to add 2-digit numbers?

STEM video | GO ONLINE

IGNITE!

Name _____

Corner Sums in Squares

Listen for directions. What patterns do you see?

Number Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Strategies to Add Fluently within 20

Be Curious

Which doesn't belong?

$6+4$	$9+6$
$9+5$	$3+9$

Math is... Mindset

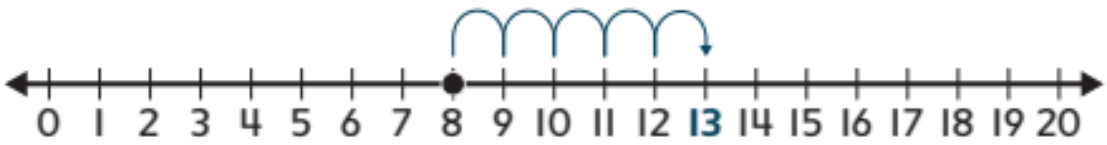
What do you do to build a good relationship with a classmate?

Learn

How can you find the total number of snack bars using mental math?

You can use strategies you know to find 8 + 5 using mental math.

One Way Count on.



Another Way Decompose one addend to make a 10.

$8 + 5 = ?$

$2 + 3$

$8 + 2 = 10$

$10 + 3 = 13$

Math is... Connections

What does 13 represent?

Counting on and making a 10 are two strategies to fluently add.

Work Together

How can you find the sum using a mental math strategy?

On My Own

Name _____

How can you decompose the second addend to make a 10? Circle the correct answer.

1. $7 + 6 = ?$

$3 + 3$ $\quad$ $4 + 2$

2. $5 + 9 = ?$

$8 + 1$ $\quad$ $5 + 4$

3. $9 + 8 = ?$

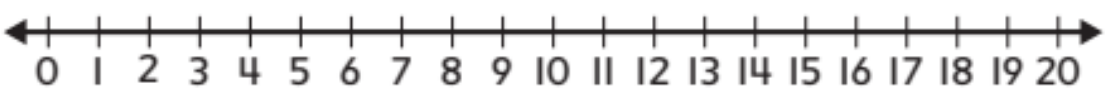
$4 + 4$ $\quad$ $1 + 7$

4. $7 + 4 = ?$

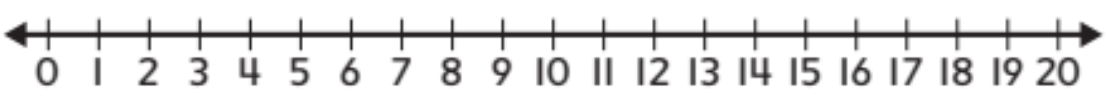
$3 + 1$ $\quad$ $2 + 2$

What is the sum? Use the number line to solve.

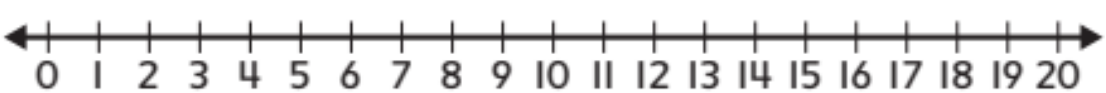
5. $8 + 4 =$ _____



6. $9 + 5 =$ _____



7. $7 + 8 =$ _____



8. Ranna has 9 tennis balls. Theo has 6 tennis balls. How many tennis balls do they have in all?

9. **STEM Connection** Sienna makes trail mix. She uses 7 boxes of granola. She also uses 5 boxes of raisins. How many boxes does Sienna use in all?

10. **Extend Your Thinking** Write three ways to decompose 6 into a pair of addends. How would you decompose 6 to make a 10 to find the sum of 8 + 6? Explain.

Reflect

Why might you decide to use counting on instead of making a 10?

Math is... Mindset

What did you do to build a good relationship with a classmate?

Lesson 5-2

More Strategies to Add Fluently within 20

Be Curious

What do you see?

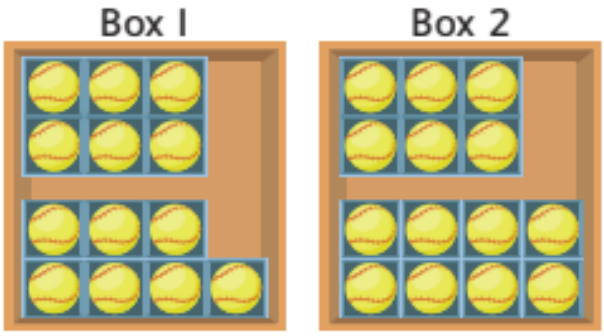
Math is... Mindset

What do you do well in math? In reading?

Learn

How can you find the number of softballs in each box?

You can use doubles facts.



6 + 6 is a doubles fact. 6 + 6 = 12 **6** + 7 is a doubles + 1 fact. **6** + 6 + 1 = 13 **6** + 7 = 13 Box 1 has 13 softballs.	6 + 6 is a doubles fact. 6 + 6 = 12 **6** + 8 is a doubles + 2 fact. **6** + 6 + 2 = 14 **6** + 8 = 14 Box 2 has 14 softballs.

Doubles facts can help you find the sums of near doubles facts to fluently add.

Math is... Explaining

Could you decompose 6 to make a double? Why or why not?

Work Together

How can you use doubles to find the sum?

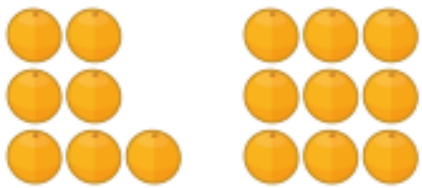
7 + 5 = ?

On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you use doubles to solve? Circle the doubles fact. Then complete the equation.

1. 

_____ + _____ = _____

2. 

_____ + _____ = _____

3. 

_____ + _____ = _____

4. 

_____ + _____ = _____

How can you decompose the second addend to make a double with the first addend? Circle the correct answer.

5. 8 + 9 = ?

4 + 5 8 + 1

6. 2 + 4 = ?

2 + 2 3 + 1

7. 3 + 4 = ?

2 + 2 3 + 1

8. 4 + 6 = ?

4 + 2 3 + 3

9. **STEM Connection** Erik created video games and placed them in a stack of 5 and a stack of 7. How could Erik decompose 7 to use a doubles fact to find the total number of video games he created? Explain your thinking.

10. **Extend Your Thinking** Write an addition word problem that includes the numbers 8 and 9. Then show how you can solve using a doubles fact.

Reflect

Why does it help to use a doubles fact to solve a near doubles fact?

Math is... Mindset

How did you use your strengths in reading during math?

Lesson 5-3

Represent Addition with 2-Digit Numbers

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

What helps you understand how others are feeling?

Learn

Lamar has 46 baseball cards.
Sarah has 23 baseball cards.

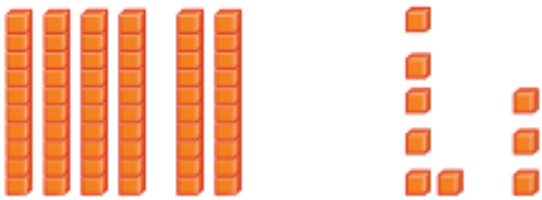
How many baseball cards do they have together?

You can use base-ten blocks to show the problem.

Lamar's cards **Sarah's cards**

46 + **23**

Group the tens and the ones.



40 + 20 = 60 **6 + 3 = 9**

60 + 9 = 69

Lamar and Sarah have 69 baseball cards.

Base-ten blocks can help you add 2-digit numbers.

Math is... Modeling

How can you use base-ten shorthand to show the problem?

Work Together

Matilda had 38 stamps. She found 45 more stamps. How many stamps does Matilda have? Use base-ten shorthand to show your thinking.

On My Own

Name _____

What is the sum? Use base-ten shorthand to show your thinking.

1. $56 + 39 =$ _____

2. $27 + 57 =$ _____

What is the sum? Use base-ten blocks to help you.

3. $73 + 13 = ?$

4. $29 + 21 = ?$

5. $25 + 55 = ?$

6. $46 + 33 = ?$

What is the sum? Show your thinking.

7. $31 + 13 =$ _____

8. $42 + 19 =$ _____

9. **Error Analysis** Jonathan wrote $43 + 29 = 62$. How would you help Jonathan find the correct answer?

10. **Extend Your Thinking** How can you use base-ten blocks to help you add $13 + 5 + 21$?

Reflect

How do base-ten blocks help you add 2-digit numbers?

Math is... Mindset

What helped you understand how others are feeling?

Use Properties to Add

Be Curious

Is it always true?

$3 + 5$
$5 + 3$

$20 + 40$
$40 + 20$

$16 + 48$
$48 + 16$

Math is... Mindset

What helps you stay focused on your work?

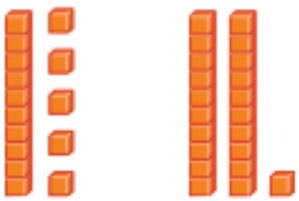
Learn

Leah and Rosh have 15 large paper clips and 21 small paper clips.

How many paper clips do they have?

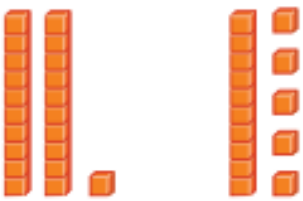
Leah and Rosh use base-ten blocks and equations to show their thinking.

Leah



$15 + 21 = 36$

Rosh



$21 + 15 = 36$

Addends can be added in any order and the sum is the same.

Math is... Explaining

Why is the sum the same for both equations?

Work Together

Nick has 40 bottles. He buys 23 more bottles.

What two equations can you write to find how many bottles Nick has now?

On My Own

MATH REPLAY | GO ONLINE

Name _____

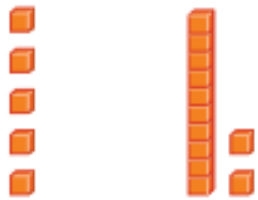
How can you use the base-ten blocks to complete the equations? Fill in the numbers.

1.

13 + 6 = ____

6 + ____ = ____

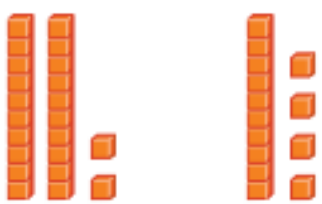
2.



____ + 12 = 17

____ + 5 = ____

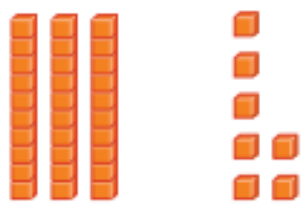
3.



22 + ____ = 36

14 + ____ = ____

4.



____ + 7 = 37

____ + 30 = ____

What is the sum?

5. 17 + 9 = ____

9 + 17 = ____

6. 13 + 8 = ____

8 + 13 = ____

7. 37 + 40 = ____

40 + 37 = ____

8. 19 + 15 = ____

15 + 19 = ____

9. **Error Analysis** Mae says the sum of 23 + 30 is 53. Dan says 30 + 23 has a different sum. How do you respond to Dan?

10. **Extend Your Thinking** Kai has some crayons. Write two equations to find how many crayons Kai has in all. Explain why both equations show the total number of crayons.

Reflect

What can you say is true about the order of addends in an addition problem?

Math is... Mindset

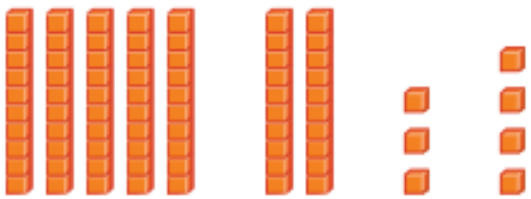
What helped you stay focused on your work?

Lesson 5-5

Decompose Two Addends to Add

Be Curious

How are they the same?
How are they different?

53 + 24	
	50 + 20 + 3 + 4

Math is... Mindset

What helps you make good decisions about your behavior?

Learn

Erin has 51 shells in her collection. She adds 28 more shells.

How many shells are in her collection now?

One way to add is to decompose both addends.

One Way Decompose by place value.

51 + 28

50 + 1 20 + 8

50 + 20 = 70 1 + 8 = 9

70 + 9 = 79

Another Way Decompose by friendly numbers.

51 + 28

50 + 1 25 + 3

50 + 25 = 75 1 + 3 = 4

Numbers that are easy to add are **friendly numbers**.

75 + 4 = 79

Decomposing both addends to find partial sums is one way to add 2-digit numbers.

Math is... Explaining

Why can decomposing both addends be a helpful addition strategy?

Work Together

How can you decompose both addends to add 47 + 25? What is the sum?

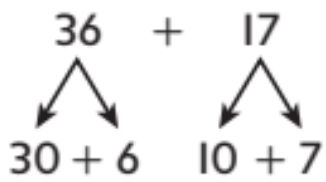
On My Own

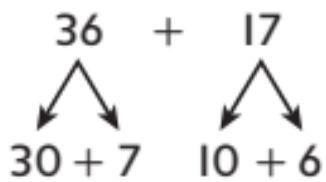
MATH REPLAY | GO ONLINE

Name _____

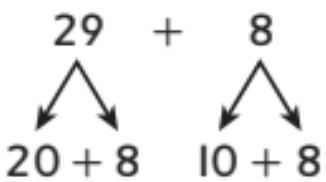
Which shows decomposing both addends by place value? Circle the correct answer.

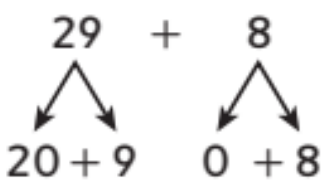
1.





2.

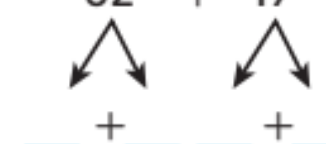




How can you decompose both addends by place value?

3. 73 + 31 = ?

4. 62 + 17 = ?



5. How can you use friendly numbers to decompose both addends? Decompose both addends and find the sum.

48 + 29 = ?

__ + __ __ + __

tens: ____ + ____ = ____

ones: ____ + ____ = ____

partial sum: ____ + ____ = ____

How can you decompose the addends to find the sum?

6. 49 + 36 = ___

___ + ___ ___ + ___

7. 25 + 28 = ___

___ + ___ ___ + ___

8. Error Analysis Ava adds 35 + 9 by decomposing by place value. She writes 35 as 30 + 5 and 9 as 90 + 0. Ava thinks the sum is 125. How do you respond to her? Explain.

9. Extend Your Thinking How do you know that 24 + 13 is the same as 20 + 4 + 10 + 3, 30 + 7, and 37?

Reflect

How does decomposing help you add 2-digit numbers?

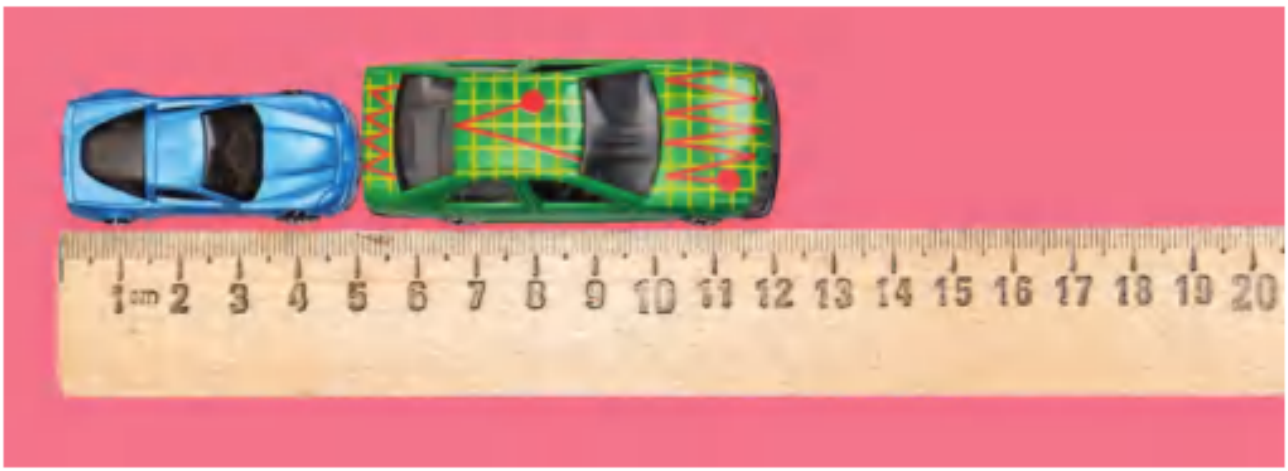
Math is... Mindset

How have you made good decisions about your behavior?

Use a Number Line to Add

Be Curious

Tell me everything you can.



Math is... Mindset

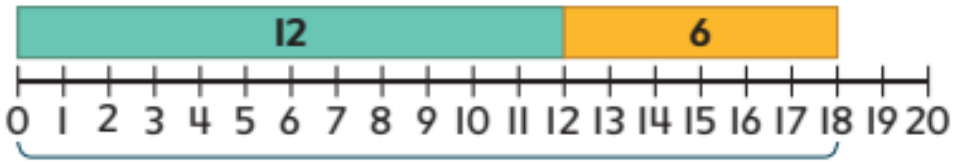
What helps you be ready to learn?

Learn

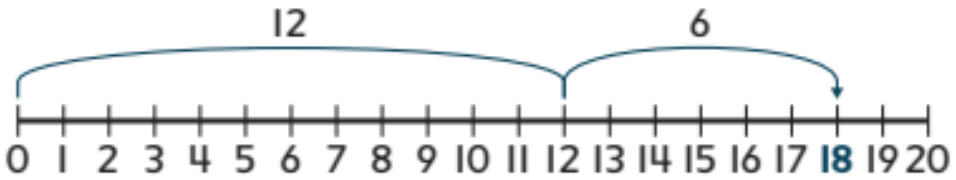
Arya runs for 12 minutes. Then she runs for 6 more minutes.
How many minutes does Arya run?

A **number line** can help you add two addends.

▶ **One Way** Use bars to show the addends.



▶ **Another Way** Use jumps to show the addends.



Arya runs for 18 minutes.

Math is... Explaining

Does it matter which addend you start with on the number line? Explain why or why not.

Work Together

How can you use a number line to add 48 + 26?
Show the addition on the number line.

On My Own

Name _____

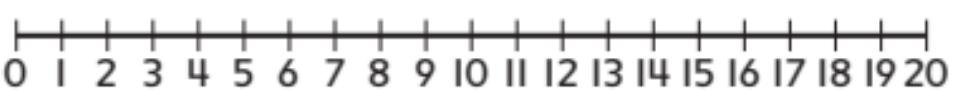
What equation matches the number line?

1. 33 + ____ = ____

2. ____ + 37 = ____

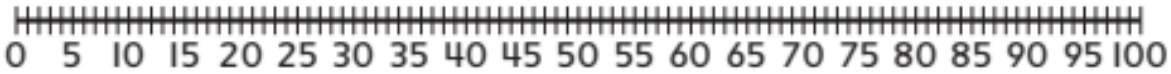
What is the sum? The number line can help you.

3. 7 + 12 = ____

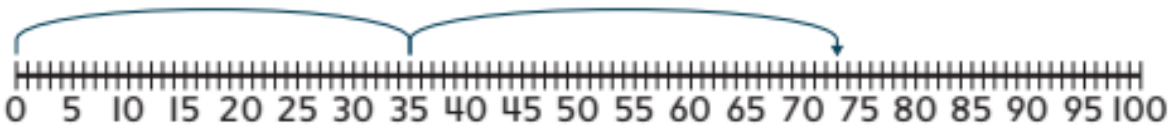


4. 18 + 74 = ____

5. **STEM Connection** Deven buys 25 speakers and 18 headphones for a concert. How many items does he buy in all? Use the number line to help you find the sum.



6. **Extend Your Thinking** What addition equation does the number line show? Write a word problem to match.



Reflect

When adding on a number line, how is using bars similar to using jumps? How is it different?

Math is... Mindset

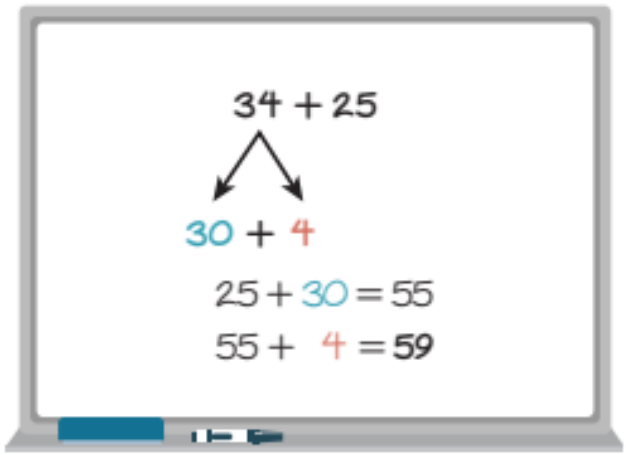
What helped you be ready to learn today?

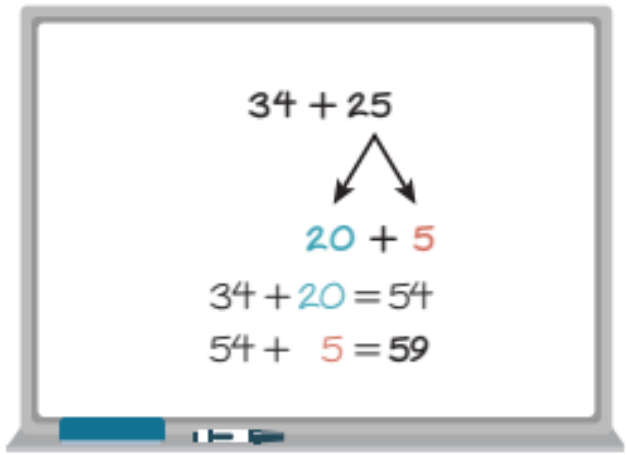
Lesson 5-7

Decompose One Addend to Add

Be Curious

How are they the same?
How are they different?





Math is... Mindset

How do your strengths help you learn?

Learn

How can you find the sum by decomposing only one addend?

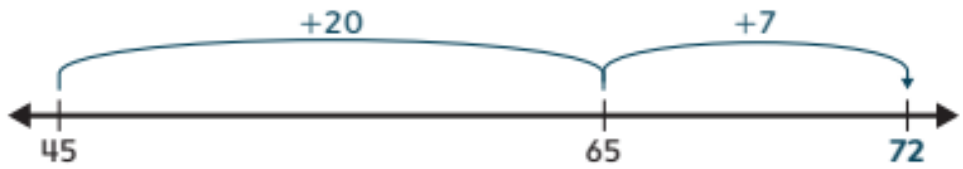
$45 + 27 = ?$

You can decompose an addend in different ways.

One Way

$45 + 27 = ?$

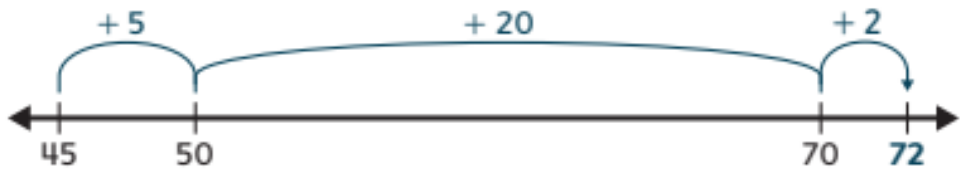
$20 + 7$



Another Way

$45 + 27 = ?$

$5 + 20 + 2$



Decomposing one addend can help you add 2-digit numbers.

Math is... Generalizations

How are the two ways similar?
How are they different?

Work Together

How can you decompose one addend to add 29 + 42? Use the number line.

On My Own

MATH REPLAY | GO ONLINE

Name _____

Which shows one way to decompose one of the addends? Circle the answer.

1. $43 + 39 = ?$

   $30 + 9$ $\quad$ $1 + 5 + 20$

2. $37 + 47 = ?$

   $30 + 7$ $\quad$ $40 + 4$

3. $35 + 28 = ?$

   $30 + 8$ $\quad$ $20 + 8$

4. $55 + 69 = ?$

   $60 + 9$ $\quad$ $5 + 4 + 50$

How can you find the sum by decomposing one addend? Fill in the numbers.

5. $57 + \mathbf{19} = ?$

   $19 = 10 +$ _____

   _____ $+ 10 + 9 =$ _____

6. $\mathbf{23} + 76 = ?$

   $23 = 20 +$ _____

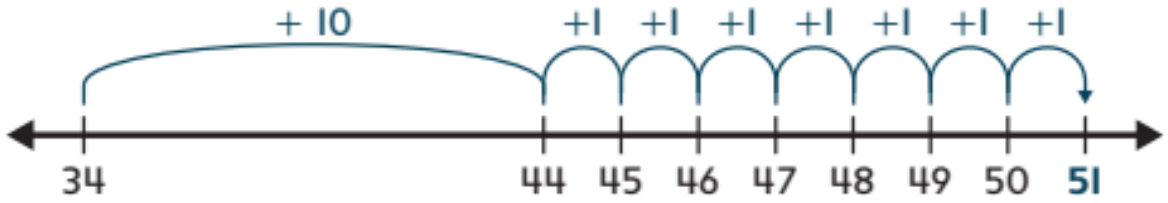
   $76 +$ _____ $+ 3 =$ _____

What is the sum? Use the number line to help you.

7. $41 + 28 =$ _____

8. $36 + 58 =$ _____

9. **Error Analysis** Alan uses a number line to find the sum of 34 + 19. Did he find the correct sum? Explain.



10. **Extend Your Thinking** How can you decompose one addend in two different ways to find the sum?

$38 + 26 =$ _____

Reflect

Why is decomposing one addend an efficient strategy to add 2-digit numbers?

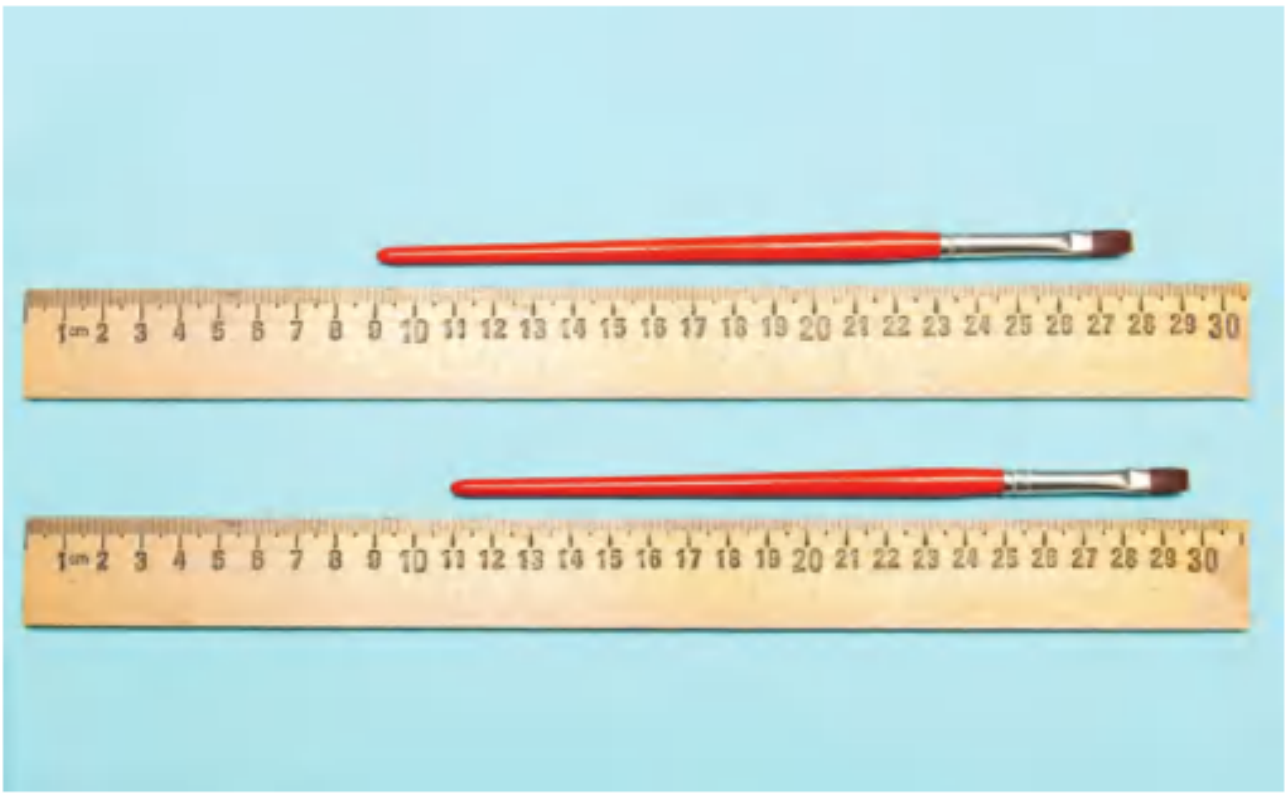
Math is... Mindset

How did your strengths help you learn today?

Adjust Addends to Add

Be Curious

How are they the same?
How are they different?



Math is... Mindset

How do you show that you value your classmates' ideas?

Learn

How can you find the sum? $27 + 38 = ?$

You can **adjust** addends to make them easier to add.

One Way

$27 + 38 = ?$

$+3$ -3

$30 + 35 = 65$

Another Way

$27 + 38 = ?$

-2 $+2$

$25 + 40 = 65$

Math is... Explaining

Why are numbers with 0 and 5 in the ones place friendly numbers?

When adjusting addends, you adjust the addends using the opposite operation.

Work Together

How many ways can you adjust the addends to find the sum?

$49 + 17 =$ ____

On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you adjust the addends to make them friendlier to add? Circle all the correct ways.

1. $38 + 17 = ?$

$40 + 19$ $35 + 20$ $40 + 15$ $35 + 17$

How were the addends adjusted? Fill in the numbers and the sum.

2. $19 + 28 = \_\_\_$

$+$ $-$

$20 + 27 = \_\_\_$

3. $48 + 36 = \_\_\_$

$+$ $-$

$50 + 34 = \_\_\_$

How can you adjust the addends? Then find the sum.

4. $25 + 57 = \_\_\_$

$\_\_\_ + \_\_\_ = \_\_\_$

5. $64 + 29 = \_\_\_$

$\_\_\_ + \_\_\_ = \_\_\_$

6. How can you adjust the addends to find the sum?

$37 + 45 =$ ____

7. **Error Analysis** Gina wants to find the sum of $49 + 29$. She says she can adjust the addends by 3 to make them easier to add. Is there a better way for Gina to adjust the addends? Explain.

8. **Extend Your Thinking** Adjust the addends in the equation for friendlier addition. Explain why it is easier to add the friendly numbers than the original numbers.

$$59 + 16 = ?$$

Reflect

Explain how you would adjust two addends for friendlier addition.

Math is... Mindset

How did you show that you value your classmates' ideas?

Unit 5

Addition Strategies

Name _____

Determine if the strategy shown is a correct way to do this addition:

27 + 56

Do not actually perform the calculations.

1. 30 + 53

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

2. 20 + 50 + 7 + 6

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

Determine if the strategy shown is a correct way to do this addition:

$$27 + 56$$

Do not actually perform the calculations.

3. $30 + 60 - 3 + 4$

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

4. $20 + 50 + 6$

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

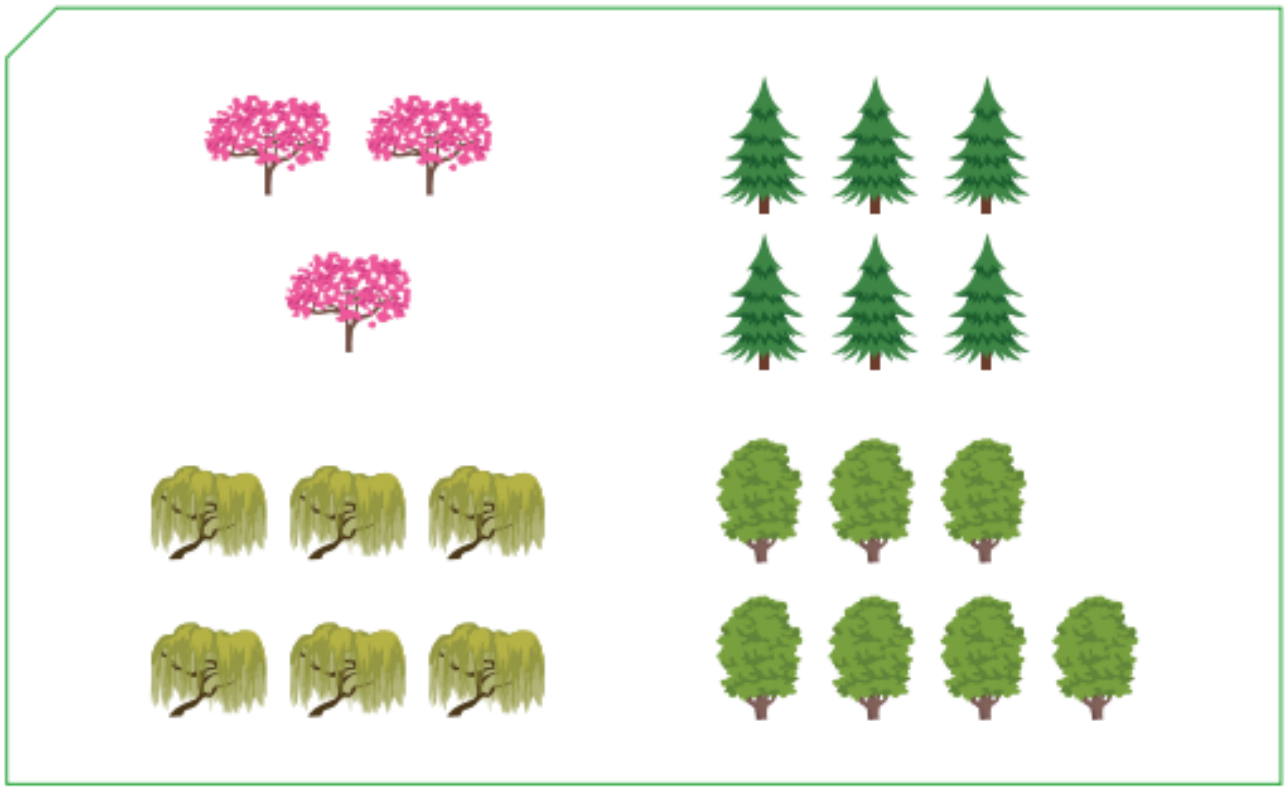
Reflect On Your Learning

Lesson 5-9

Add More Than Two Numbers

Be Curious

What do you notice?
What do you wonder?



Math is... Mindset

What are some ways you can contribute to your group today?

Learn

How can you find the number of jumps that Jane, Jamal, and Jess made?

You can use strategies you know to add three numbers.

First, find the number of jumps for Jane and Jamal.

$$37 + 25 = ?$$

$$30 + 7 + 20 + 5 = ?$$
$$30 + 20 + 7 + 5 = ?$$
$$50 + 12 = 62$$

Then add Jess's jumps.

$62 + 18 = ?$

-2 $+2$

$60 + 20 = 80$

Math is... Thinking

Which addends make sense to add first? Why?

Jane, Jamal, and Jess made 80 jumps.

To add more than two 2-digit addends you add two addends at a time.

Work Together

Add 14 + 19 + 21 + 35. What strategies can you use to find the sum?

On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you change the order of the addends to help you add? Complete the equation.

1. $38 + 17 + 12 = ?$

   ____ + ____ + ____ = ____

2. $44 + 19 + 6 = ?$

   ____ + ____ + ____ = ____

What is the sum? Use any addition strategy to solve.

3. $51 + 29 + 14 =$ ____

4. $37 + 24 + 11 =$ ____

5. $20 + 33 + 25 + 12 =$ ____

6. $35 + 16 + 28 + 13 =$ ____

7. **STEM Connection** Marisol has these medical items in a cabinet. How many medical items does Marisol have?

24 15 12 22

8. **Extend Your Thinking** A forest volunteer plants different types of trees. She plants 26 oak trees, 42 elm trees, 15 maple trees, and 16 pine trees. How many trees did the volunteer plant in all? Write an equation and solve the problem.

Reflect

How can you add more than two numbers?

Math is... Mindset

How did you contribute to your group today?

Lesson 5-10

Solve One- and Two-Step Problems Using Addition

Be Curious

What could the question be?

Keisha has some flowers.

Dale has some flowers.

Bonita has some flowers.

Math is... Mindset

How can you understand a problem situation?

Learn

Keisha has 24 flowers. Dale gives her 15 flowers. Bonita gives her 12 flowers.

How many flowers does Keisha have now?

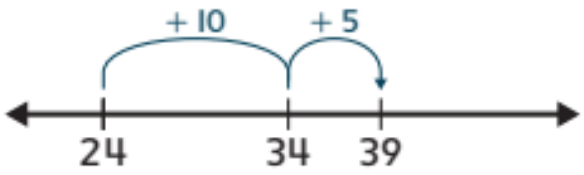
Some problems have more than one question to answer.

How many flowers does Keisha have with Dale's flowers?

$24 + 15 = ?$

$10 + 5$

Decompose one addend.



How many flowers does Keisha have with Bonita's flowers?

$39 + 12 = ?$

+1 −1

Adjust the addends.

$40 + 11 = 51$

Keisha has 51 flowers.

You can use different addition strategies to solve one- and two-step word problems.

Math is... Explaining

How do you decide which strategy to use?

Work Together

Louis earns stickers for doing chores. Louis had 26 stickers. He earns 13 stickers on Monday and 18 stickers on Wednesday. How many stickers does Louis have now?

On My Own

MATH REPLAY | GO ONLINE

Name _____

1. Mathew has 18 marbles. Jacinta gives him 17 marbles. Emilia gives him 25 marbles. How many marbles does Mathew have now?

   a. Represent the problem using base-ten shorthand.

   b. Complete the equation. _____ + _____ + _____ = ?

   c. Choose a strategy to solve the problem. Explain how you used the strategy.

   d. Mathew has _____ marbles now.

2. Carlos has 17 green blocks and 44 blue blocks. He gets 25 red blocks. How many blocks does Carlos have?

3. Marta has 19 strawberries and 32 blueberries in a bowl. She adds 28 raspberries. How many berries does Marta have in the bowl?

4. **STEM Connection** Erik tests 16 video games on Monday, 18 on Tuesday, and 23 on Wednesday. What is the total number of video games Erik tests?

5. **Extend Your Thinking** Jamal has 15 movies. Jamal's sister has 18 more movies than he has. How many movies do they have altogether?

Reflect

How are two-step problems similar to one-step problems? How are they different?

Math is... Mindset

How have you understood a problem situation?

Unit Review

Name _____

Vocabulary Review

Use the vocabulary to complete each sentence.

adjusting	friendly numbers
number line	partial sums
regroup	

1. When you decompose numbers by place value, and add their parts, you use _____. (Lesson 5-5)

2. Numbers that are easy to add are called _____. (Lesson 5-3)

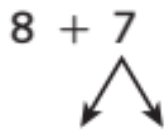
3. When you make a problem easier to solve by taking some from one addend and giving to another addend, you are _____. (Lesson 5-8)

4. You can _____ 10 ones as 1 ten. (Lesson 5-3)

5. A _____ is a line with number labels. (Lesson 5-6)

Review

6. How can you decompose the second addend to make a 10? Complete the equations. (Lesson 5-1)



$8 + 7 = 8 + \_\_ + 5$

$8 + 7 = 10 + \_\_$

$8 + 7 = \_\_$

7. At the farmers market, Mariah sells 37 jars of honey on Friday and 46 jars of honey on Saturday. How many jars of honey does she sell? Circle the correct answer. (Lesson 5-10)

A. 7 jars of honey

B. 83 jars of honey

C. 73 jars of honey

D. 81 jars of honey

8a. Darius sees 28 ducks and 47 geese. How can you adjust the numbers to find how many ducks and geese Darius sees? Choose all the correct answers. (Lesson 5-8)

A. 20 ducks + 30 geese

B. 25 ducks + 50 geese

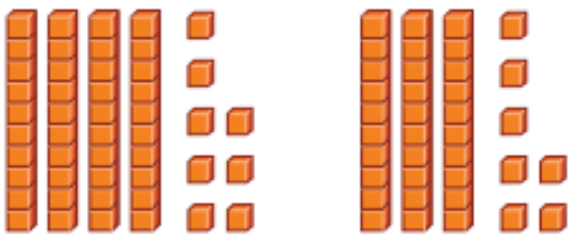
C. 30 ducks + 50 geese

D. 30 ducks + 45 geese

b. Darius sees _____ ducks and geese in all.

MATH REPLAY GO ONLINE

9. Which correctly shows decomposing both addends to find 48 + 37? Circle the correct answer. (Lesson 5-5)



A. 4 + 80 + 3 + 70

B. 40 + 80 + 30 + 70

C. 4 + 8 + 3 + 7

D. 40 + 8 + 30 + 7

10. How can you decompose one addend to add 63 + 19? Complete the equations. (Lesson 5-7)

Add tens.

63 + _____ = _____

Add ones.

_____ + 9 = _____

11. Hannah has 12 baseball trading cards and 31 basketball trading cards. She gets 14 football trading cards from Brad. How many trading cards does Hannah have now? Circle the correct answer. (Lesson 5-10)

A. 46 trading cards

B. 53 trading cards

C. 57 trading cards

D. 87 trading cards

Performance Task

A video game designer was testing a game. The designer got 39 points in Level 1 and 55 points in Level 2.

Part A: How can you use base-ten shorthand to represent the problem? Show your work.

Part B: How can you find the sum on an open number line? Show your work.

Part C: How can you find the sum by decomposing one addend? Show your work. Then write your equations.

Reflect

Why are there different strategies for adding 2-digit numbers?

Unit 5

Fluency Practice

Name _____

Fluency Strategy

You can use the make a 10 strategy to find a difference.
15 − 8 = ?

Think: What can you add to 8 to make 10?

15 − 8 = ?
+2 +2
17 − 10 = 7

So, 15 − 8 = 7.

1. How can you make a 10 to find 12 − 9? Explain.

Fluency Flash

How can you make a 10 to subtract?
Write the difference.

2. 14 − 8 = ___
+2 +2
16 − 10 = ___

3. 17 − 9 = ___
+1 +1
18 − 10 = ___

Fluency Check

What is the sum or difference?

4. $7 + 7 =$ _____

5. $8 + 5 =$ _____

6. $17 - 8 =$ _____

7. $6 + 6 =$ _____

8. $16 - 8 =$ _____

9. $18 - 9 =$ _____

10. $4 + 4 =$ _____

11. $9 + 4 =$ _____

12. $15 - 9 =$ _____

13. $8 + 7 =$ _____

Fluency Talk

How can you make a 10 to subtract $16 - 9$? Explain.

What is the same about making a 10 to add and making a 10 to subtract? What is different? Explain.

Strategies to Fluently Subtract within 100

Focus Question

What strategies can I use to subtract 2-digit numbers?

STEM video | GO ONLINE

IGNITE!

Name _____

Same Difference

Find the missing numbers. What patterns do you notice?

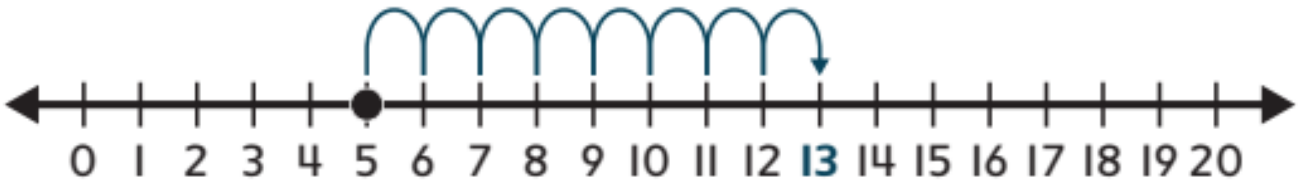
	Jaden's Age		Cala's Age		Difference
A. This year:	12	−	9	=	3
B. 1 year from now:	13	−		=	
C. 2 years from now:		−	11	=	
D. 3 years from now:		−		=	
E. 4 years from now:		−		=	
F. 5 years from now:		−		=	

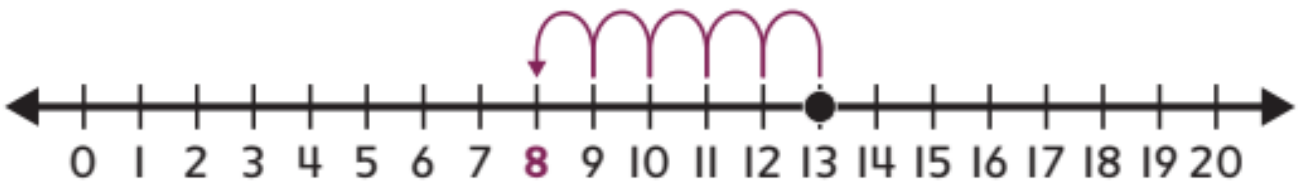
	Kyle's Age		Sue's Age		Difference
G. This year:	15	−	7	=	
H. 1 year from now:	16	−		=	
I. 2 years from now:		−		=	
J. 3 years from now:		−		=	

Strategies to Subtract Fluently within 20

Be Curious

Is it always true?





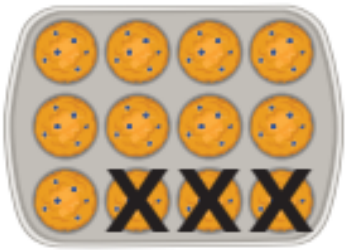
Math is... Mindset

What helps you understand your partner's ideas?

Learn

Sung-Li eats 3 muffins.

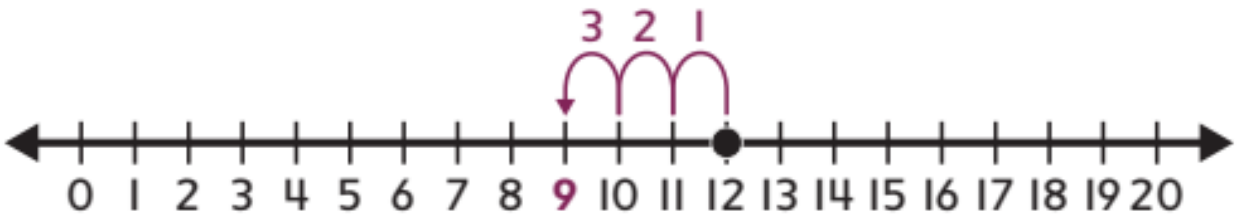
How many muffins are left?



You can use mental strategies to find the difference.

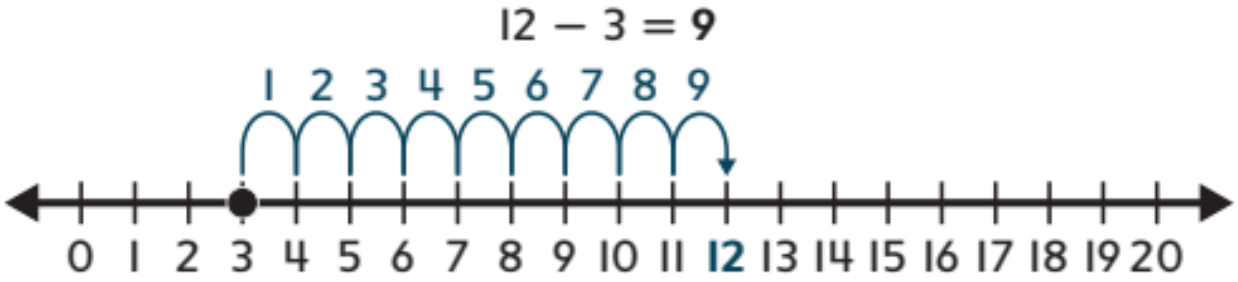
Count back to subtract.

$12 - 3 = 9$



Count on to subtract.

$12 - 3 = 9$



You can count on or count back to fluently subtract.

Math is... Connections

What does the number of jumps represent?

Work Together

How can you count on or count back to solve using mental math? Explain.

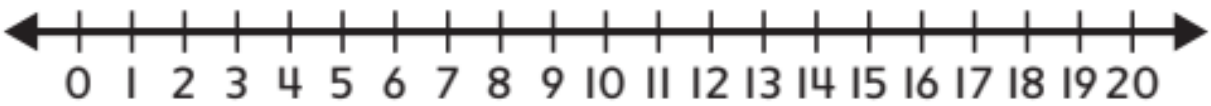
$17 - 8 =$ ____

On My Own

Name _____

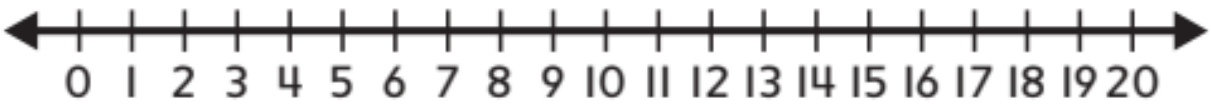
How can you count on to subtract? Fill in the difference.

1.



15 − 6 = ____

2.



12 − 7 = ____

How can you count back to subtract? Fill in the difference.

3.

14 − 8 = ____

4.

16 − 7 = ____

What is the difference?

5. $14 - 6 =$ ____

6. $11 - 5 =$ ____

7. **STEM Connection** Marisol has 13 bandages in her first aid kit. She uses 5 of the bandages. How many bandages does Marisol have left?

8. **Extend Your Thinking** Kylie has some erasers. She gives 4 of them to her sister. Now Kylie has 7 erasers. How many erasers does Kylie start with? Explain how you solved the problem.

____ $- 4 = 7$

Kylie started with ____ erasers.

Reflect

What strategy do you use to subtract? Why?

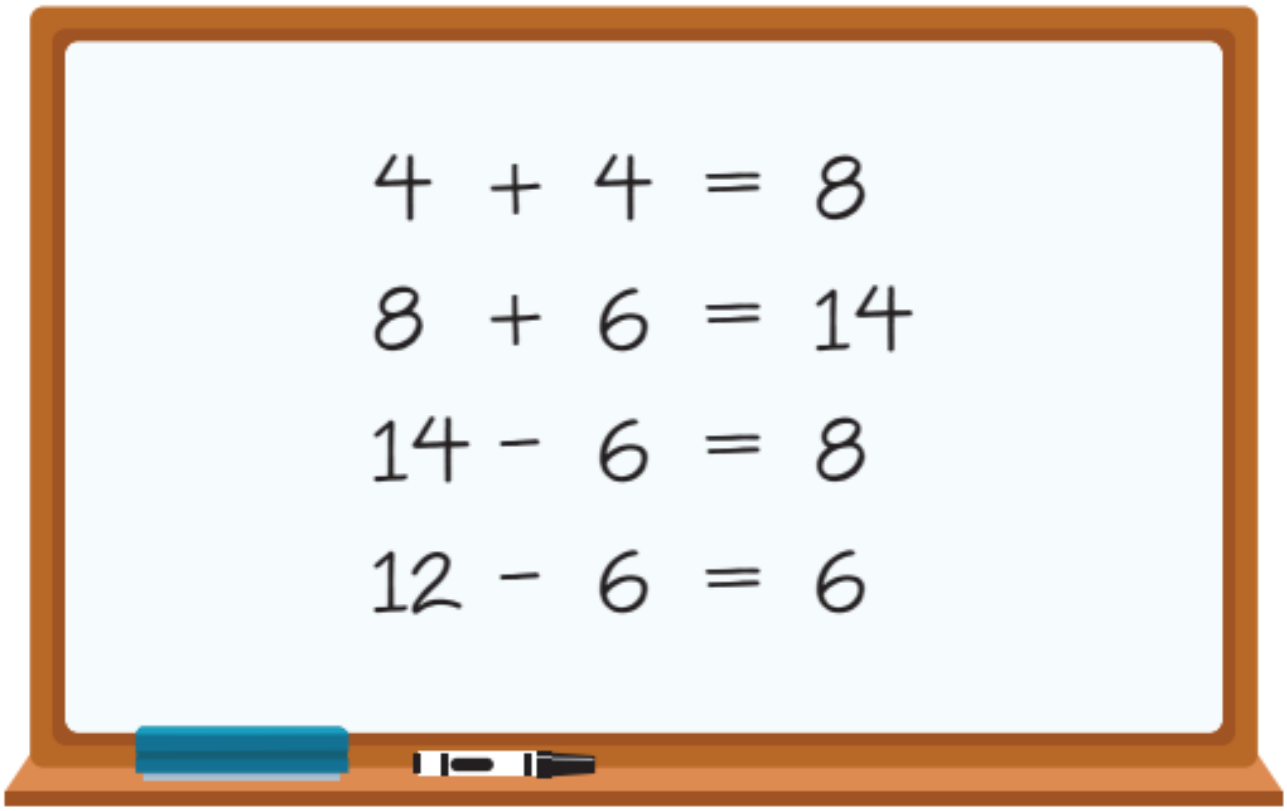
Math is... Mindset

What helped you understand your partner's ideas?

More Strategies to Subtract Fluently within 20

Be Curious

How are they the same?
How are they different?



Math is... Mindset

How do you share your ideas clearly?

Learn

Bryce has 15 new messages. He reads 6 of them.

How many new messages does Bryce have left to read?

You can use mental strategies to subtract.

One Way Decompose to make a 10.

$15 - 6 = ?$

$5 + 1$

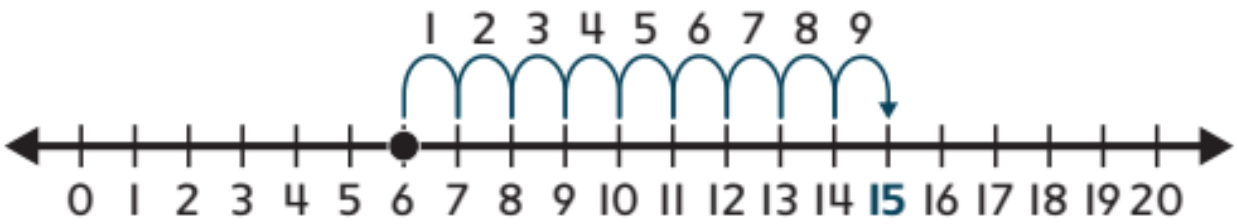
$15 - 5 = 10$

$10 - 1 = 9$

$15 - 6 = \mathbf{9}$

Another Way Use addition to subtract.

$6 + ? = 15$



$15 - 6 = \mathbf{9}$

You can make a 10 or use addition to fluently subtract.

Math is... Quantities

What does 9 represent?

Work Together

Charlotte has 13 text messages. She reads 9 of them. How many text messages does she have left to read?

Explain the strategy you used.

On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you make a 10 to subtract?

1. $16 - 7 = ?$

$\_\_ + \_\_$

$16 - 7 = ?$

$16 - \_\_\_\_ = 10$

$10 - \_\_\_\_ = 9$

$16 - 7 = \_\_\_\_$

2. $14 - 8 = ?$

$\_\_ + \_\_$

$14 - 8 = ?$

$14 - \_\_\_\_ = 10$

$10 - \_\_\_\_ = 6$

$14 - 8 = \_\_\_\_$

How can you rewrite the equation as an addition equation? Find the difference.

3. $15 - 8 = ?$

$\_\_\_\_ + ? = 15$

$15 - 8 = \_\_\_\_$

4. $12 - 9 = ?$

$\_\_\_\_ + ? = 12$

$12 - 9 = \_\_\_\_$

5. Cho knows she can make a 10 to help her subtract 13 − 7. How can she decompose 7?

   She will decompose 7 into ____ and ____.

   13 − 7 = ____

6. Jack has to do 17 math problems for homework. He finishes 8 problems. How many problems does he have left to finish? Explain your strategy.

7. **Extend Your Thinking** Can you make a 10 to solve 18 − 5? Why or why not?

Reflect

Why might you decide to make a 10 instead of using addition to subtract within 20?

Math is... Mindset

How did you share your ideas clearly?

Lesson 6-3

Represent Subtraction with 2-Digit Numbers

Be Curious

What do you notice?
What do you wonder?

Math is... Mindset

What helps you feel calm when you are angry?

Learn

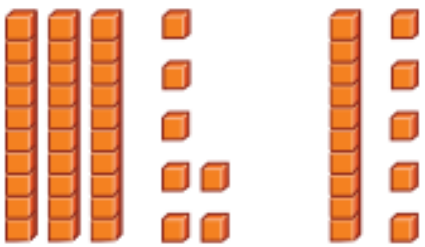
The deli owner makes 37 sandwiches.

The deli owner sells 15 sandwiches at lunch.

How many sandwiches are left?

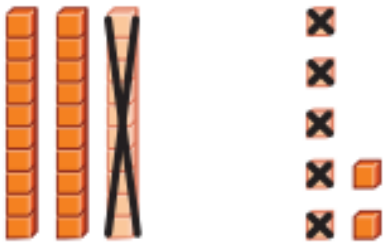
You can use base-ten blocks to show and solve the problem.

Sandwiches made | Sandwiches sold



37 − 15

Subtract the tens and the ones.



$30 - 10 = 20$ $7 - 5 = 2$

$20 + 2 = 22$

There are 22 sandwiches left.

You can use base-ten blocks to represent and solve 2-digit subtraction equations.

Math is... Modeling

How is representing subtraction different than representing addition?

Work Together

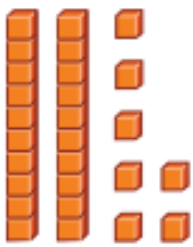
There are 55 napkins in a stack. A family uses 31 of them. How many napkins are left in the stack? Use base-ten blocks.

On My Own

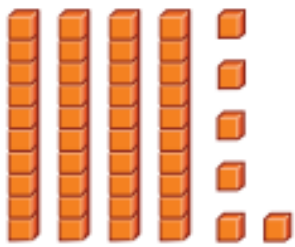
Name _____

What is the difference? Use the base-ten blocks.

1. $27 - 13 =$ ____



2. ____ $= 46 - 22$



What is the difference? Use base-ten shorthand.

3. $39 - 24 =$ ____

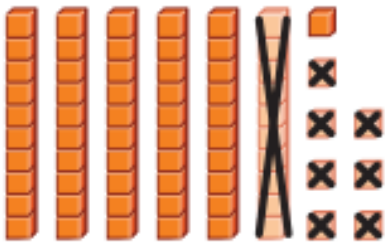
4. ____ $= 53 - 32$

5. ____ $= 28 - 12$

6. $26 - 20 =$ ____

7. There are 54 oranges in a crate. Some people eat 23 of them. How many oranges are in the crate now?

8. **Error Analysis** Tess wants to solve 68 − 27. She crosses out these blocks. How can you help Tess fix her drawing to find the difference?



68 − 27 = ____

9. **Extend Your Thinking** Write a word problem that involves subtracting 2-digit numbers. Then solve the problem.

Reflect

What tools can you use to help you subtract 2-digit numbers?

Math is... Mindset

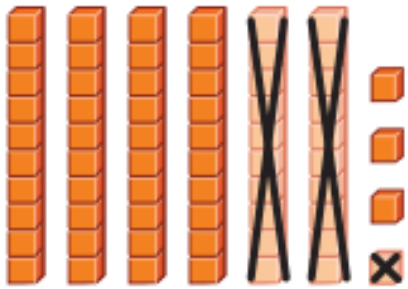
What helped you feel calm when you were angry?

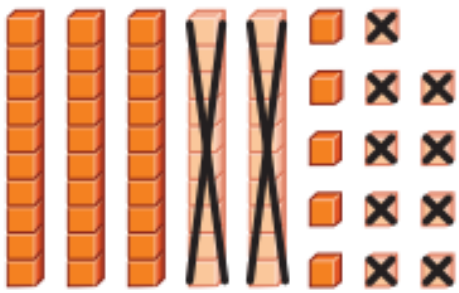
Lesson 6-4

Represent 2-Digit Subtraction with Regrouping

Be Curious

How are they the same?
How are they different?





Math is... Mindset

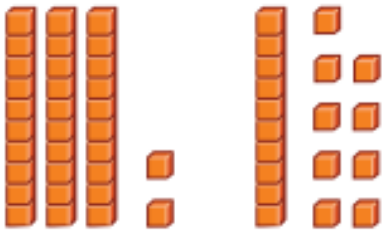
What are your math superpowers?

Learn

Brian's haircut takes 32 minutes.
Ben's haircut takes 19 minutes.

How many more minutes does Brian's haircut take than Ben's haircut?

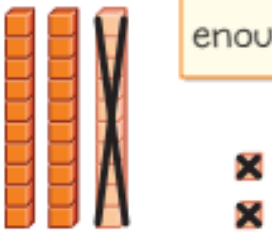
Brian's haircut Ben's haircut



32 − 19

Subtract the tens and ones.

There aren't enough ones.

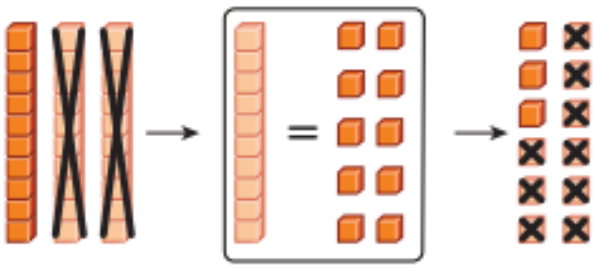


Math is... Structure

How do we regroup in addition?

Subtract the tens and ones.

Regroup 1 ten to 10 ones.



32 − 19 = **13**

Brian's haircut takes 13 more minutes.

Sometimes you have to regroup 1 ten to 10 ones to subtract.

Work Together

The barber has a box of 43 combs. He takes 26 combs out of the box. How many combs are still in the box?

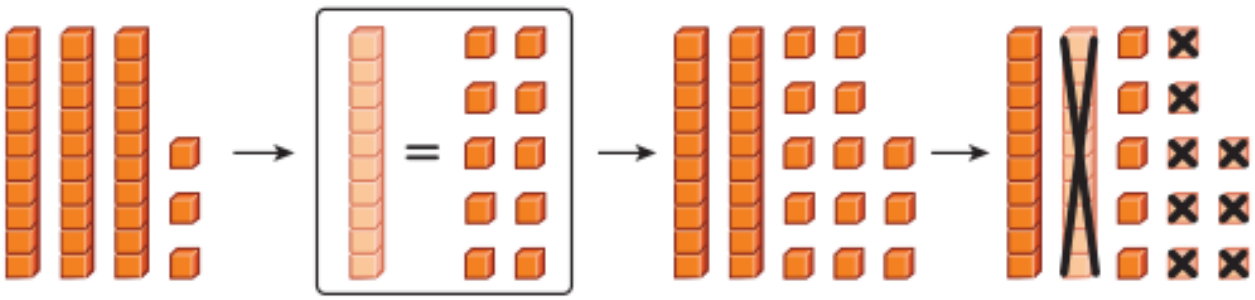
On My Own

MATH REPLAY | GO ONLINE

Name _____

How can you use the base-ten blocks to complete the equation?

1. 33 − ____ = ____



Is regrouping needed to subtract? Circle *yes* or *no*.

2. 89 − 67

yes no

3. 46 − 16

yes no

4. 71 − 34

yes no

5. 68 − 29

yes no

What is the difference? Use base-ten shorthand.

6. 43 − 16 = ____

7. 36 − 19 = ____

8. Jackson has 76 stickers. Ty has 48 stickers. How many more stickers does Jackson have than Ty?

9. **STEM Connection** Emily is working on 2 different model planes. One plane has 80 seats, and the other plane has 65 seats. What is the difference in the number of seats on the planes?

10. **Extend Your Thinking** Raul has 52 books. He read 28 books. Explain how you will find how many books he has left to read.

Reflect

When do you need to regroup when subtracting?

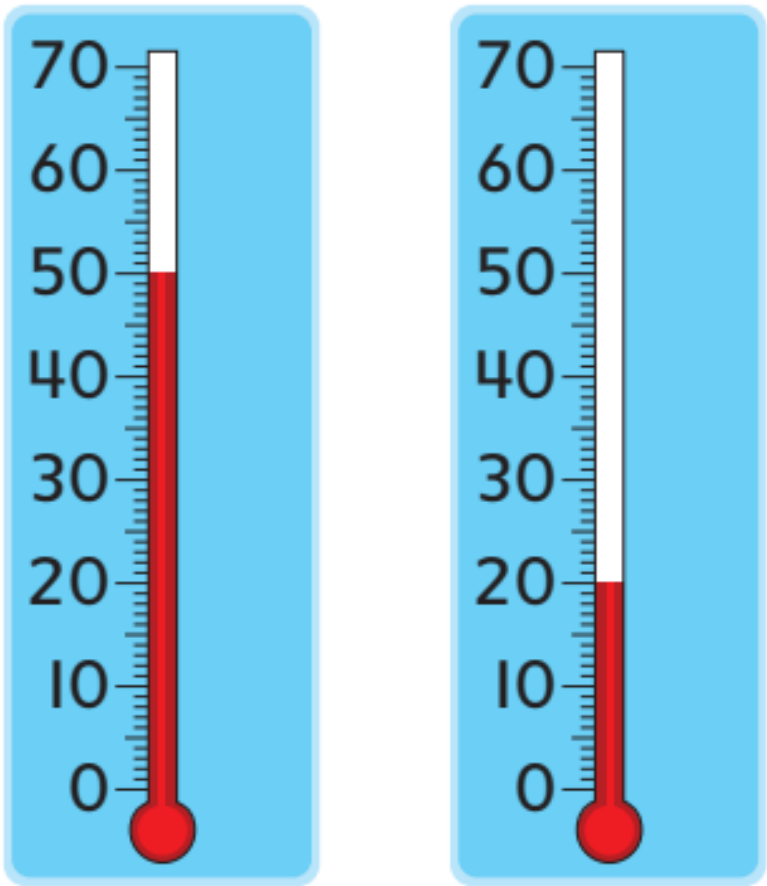
Math is... Mindset

How did you use your math superpowers today?

Use a Number Line to Subtract

Be Curious

What do you notice?



Math is... Mindset

What feelings do you have about learning math?

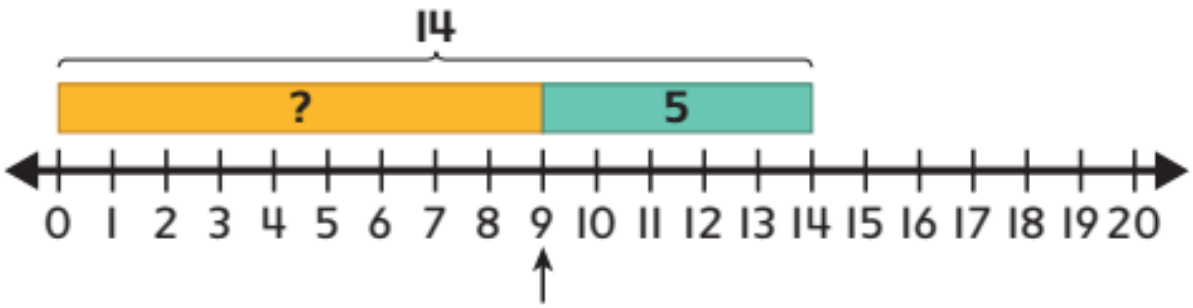
Learn

There are 14 cars in the parking lot. Then, 5 cars drive away.

How many cars are still in the parking lot?

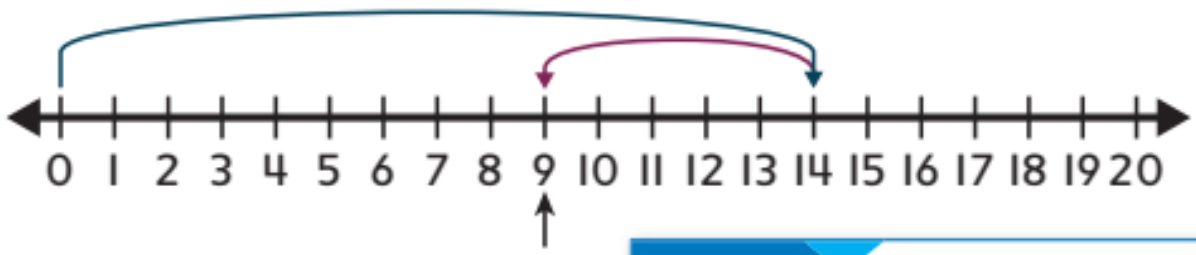
One Way Use bars on a number line.

$14 - 5 = 9$



Another Way Make jumps on a number line.

$14 - 5 = 9$



You can use a number line to subtract.

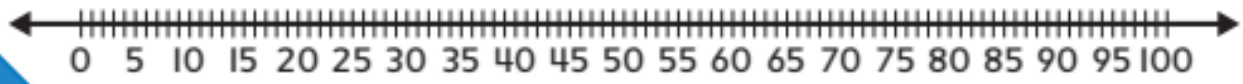
Math is... Explaining

How is subtracting on a number line different from adding on a number line?

Work Together

How can you use a number line to subtract? Draw bars or jumps to show the subtraction. Fill in the difference.

$96 - 50 =$ ____

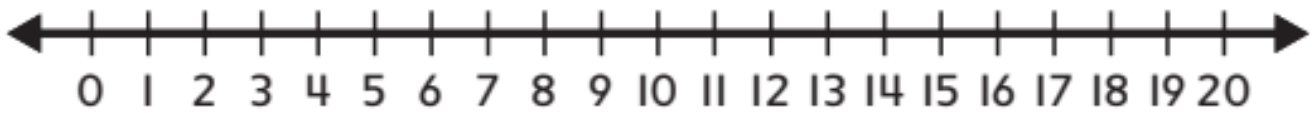


On My Own

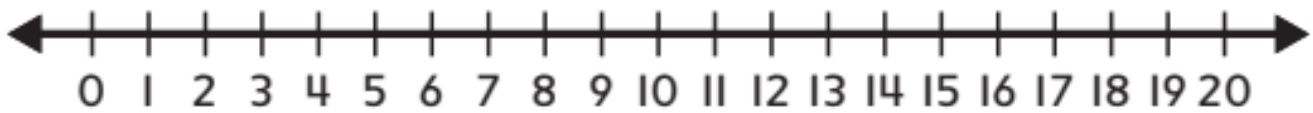
Name _____

How can you use a number line to subtract?
Fill in the difference.

1. $12 - 9 = \_\_\_\_$

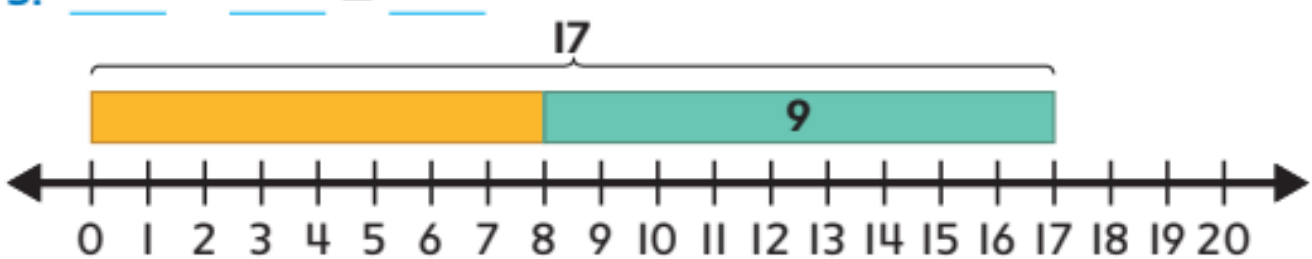


2. $14 - 8 = \_\_\_\_$

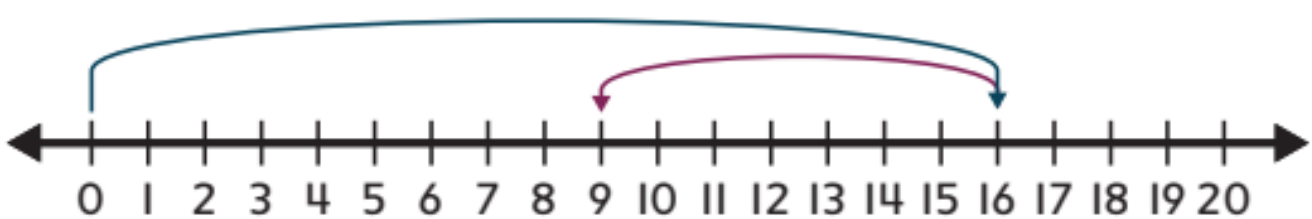


What equation can you write to match the subtraction shown on the number line?

3. ____ − ____ = ____



4. ____ − ____ = ____

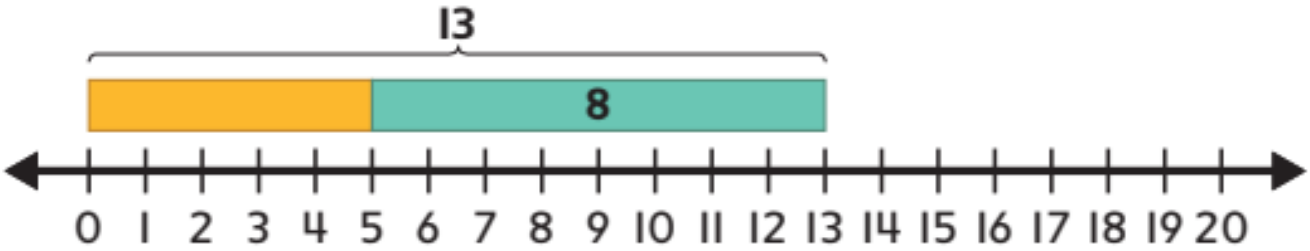


What is the difference?

5. $75 - 43 =$ ____

6. $67 - 49 =$ ____

7. **Error Analysis** Sandra uses a number line to subtract 8 from 13. Is her work correct? Explain why, or why not.



8. **Extend Your Thinking** Beau spends 23 dollars. He has 54 dollars left. How much money did Beau have to begin with? Complete the equation and explain how you can use a number line to subtract.

____ $- 23 = 54$

Reflect

How does a number line help you subtract?

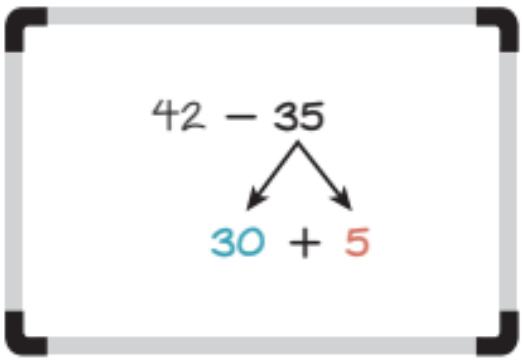
Math is... Mindset

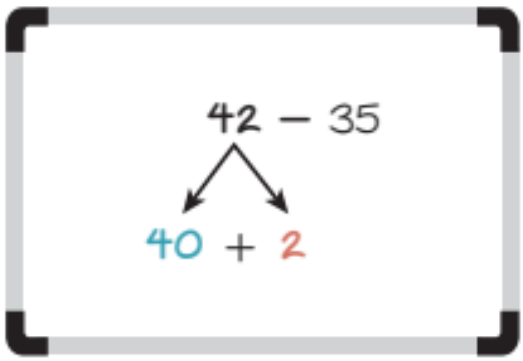
How did you feel about learning math today?

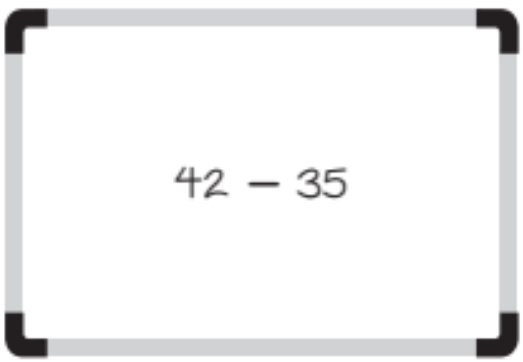
Decompose Numbers to Subtract

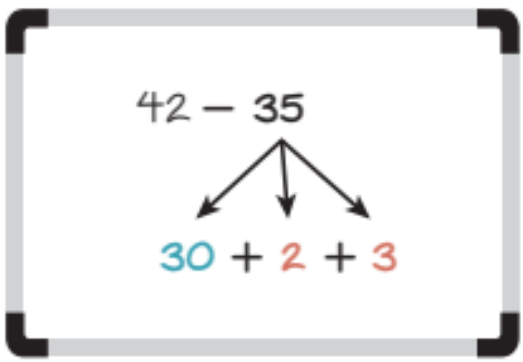
Be Curious

Which Doesn't Belong?









Math is... Mindset

What are some ways you connect with your classmates?

Learn

Barry has 55 apps on his phone. He deletes 26 apps.

How many apps are on Barry's phone now?

You can decompose one number to subtract.

Decompose 26 by place value.

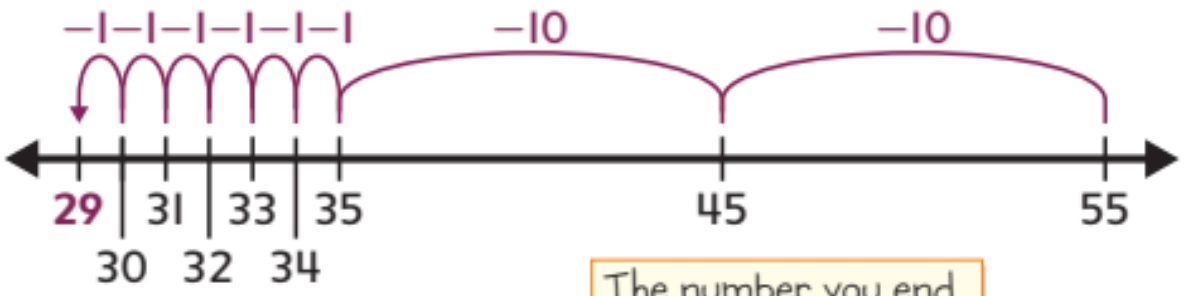
$55 - 26$

$20 + 6$

Math is... Quantities

How else can you decompose the number?

Use an open number line to count back by tens and ones.



The number you end on is the difference.

So, $55 - 26 = 29$.

You can decompose a number by place value to help you solve a 2-digit subtraction equation.

Work Together

How can you decompose a number to find the difference? Show the subtraction on the number line.

$61 - 47 =$ ____

____ + ____

On My Own

Name _____

How can you decompose by place value to find the difference? Show the subtraction on the number line.

1. $34 - 18 = \_\_$

$\_\_ + \_\_$

2. $82 - 23 = \_\_$

$\_\_ + \_\_$

Are the numbers decomposed by place value? Circle Yes or No.

3. $84 - 67 = ?$

$60 + 7$

Yes No

4. $57 - 19 = ?$

$1 + 9$

Yes No

5. Brad buys 62 flower bulbs. He plants 35 of them. How many flower bulbs are left?
How can you decompose by place value to solve the problem?

6. How can you decompose by place value to subtract? Find the difference.

$50 - 13 = ?$

$50 - 10 - \_\_\_\_ = ?$

$50 - 10 = \_\_\_\_$

$40 - 3 = \_\_\_\_$

7. **Error Analysis** Jimmy thinks he can subtract $71 - 24$ by decomposing 24 into 20 and 4. Do you agree or disagree with Jimmy? Explain.

8. **Extend Your Thinking** Write step-by-step instructions explaining how to decompose a number to find the difference. Find the difference.

$43 - 26 = \_\_\_\_$

Reflect

How can decomposing a 2-digit number help you subtract?

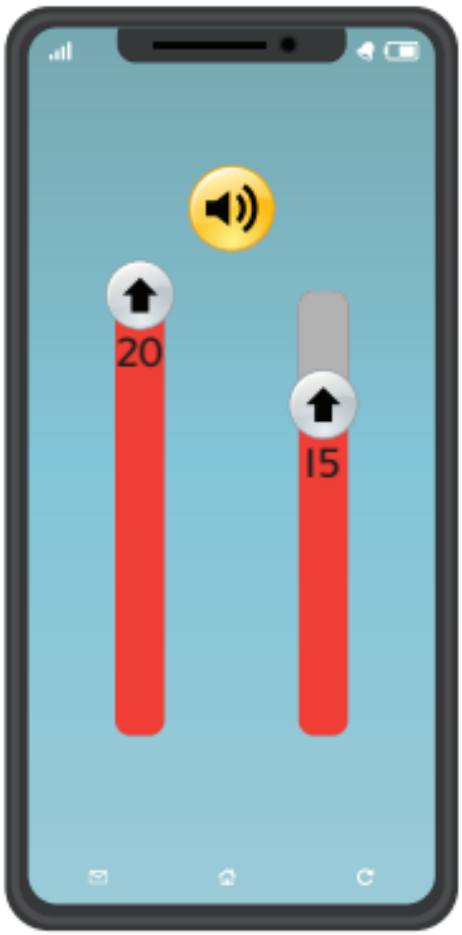
Math is... Mindset

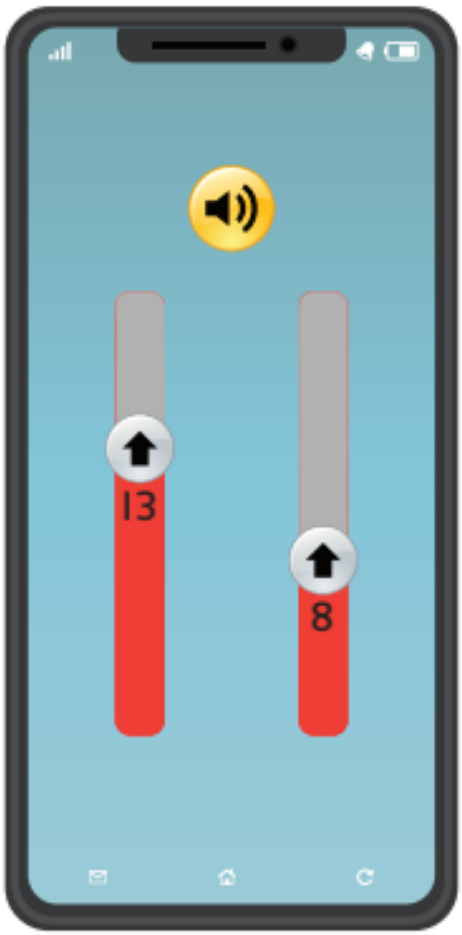
How did you connect with your classmates today?

Adjust Numbers to Subtract

Be Curious

How are they the same?
How are they different?





Math is... Mindset

Why is it useful to consider different possible solutions to a problem?

Learn

Kofi listens to music. The volume is at 42. He turns the volume down to 17.

How can you find the difference in the volume?

One strategy to subtract is to adjust the numbers.

One Way Subtract 2 from each number.

$42 - 17 = ?$

-2 -2

$40 - 15 = 25$

The difference in the volume is 25.

Another Way Add 3 to both numbers.

$42 - 17 = ?$

$+3$ $+3$

$45 - 20 = 25$

The difference in the volume is 25.

When you adjust numbers to subtract, you add the same amount to, or subtract the same amount from, both numbers.

Math is... Explaining

Why must the same operation be used to adjust both numbers?

Work Together

How can you adjust the numbers to find the difference? Find the difference.

$39 - 16 =$ ____

On My Own

MATH REPLAY | GO ONLINE

Name _____

How are the numbers adjusted for friendlier subtraction? Write the numbers in the boxes. Then find the difference.

1. $68 - 39 = \_\_$

$\square + \quad \square +$

$69 - 40 = \_\_$

2. $37 - 12 = \_\_$

$\square - \quad \square -$

$35 - 10 = \_\_$

How can you adjust the numbers for friendlier subtraction? Complete the equations.

3. $74 - 27 = \_\_$

$\square \quad \square$

$\_\_ - \_\_ = \_\_$

4. $43 - 18 = \_\_$

$\square \quad \square$

$\_\_ - \_\_ = \_\_$

5. Cassie has 67 beads in her bead collection. She uses 22 beads to make a bracelet. How many beads does she have left in her collection?

6. Which shows one way to adjust the numbers to subtract?

$71 - 36$

A. $70 - 37$

B. $75 - 40$

C. $71 - 40$

D. $75 - 30$

7. **Error Analysis** Beth uses the adjusting strategy to solve $89 - 71$. She writes $90 - 70$. Is Beth adjusting the numbers correctly? Explain why or why not.

8. **Extend Your Thinking** What is the difference between adjusting numbers to subtract and adjusting numbers to add?

Reflect

Why is adjusting numbers a helpful strategy for subtraction?

Math is... Mindset

How has it been useful to consider different possible solutions to a problem?

Unit 6

Subtraction Strategies

Name _____

Determine if the strategy shown is a correct approach to do this subtraction:

45 – 17

Do not actually perform the calculations.

1. 45 – 10 – 7

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

2. 48 – 20

Does the strategy work? Circle Yes or No.

Yes No

Explain why you chose Yes or No.

3. $50 - 12$

Does the strategy work?
Circle Yes or No.

Yes No

Explain why you chose Yes or No.

4. $45 - 20 + 3$

Does the strategy work?
Circle Yes or No.

Yes No

Explain why you chose Yes or No.

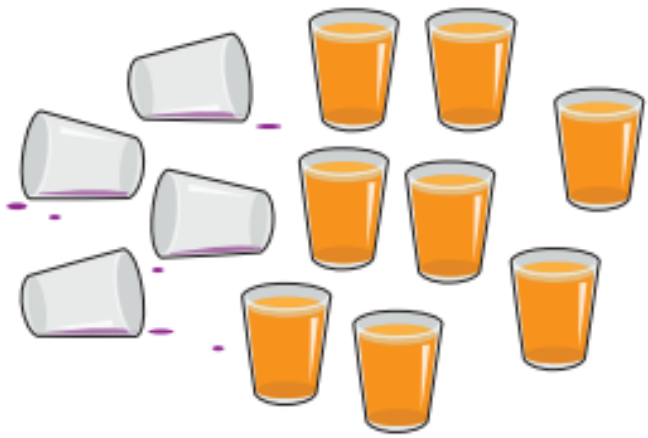
Reflect On Your Learning

Lesson 6-8

Relate Addition to Subtraction

Be Curious

How are they the same?
How are they different?



Math is... Mindset

What helps you want to do your best work?

Learn

Belle's father pours 43 cups of juice for Belle's soccer team. The team members drink 26 cups of juice.

How many cups of juice are left?

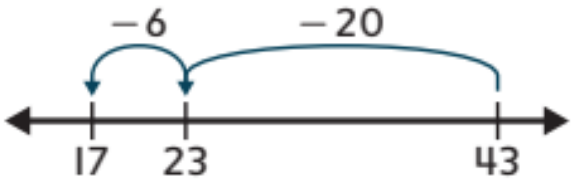
Whole	
43	
Part	Part
26	?

You can solve subtraction equations by using addition.

One Way

Write and solve a subtraction equation.

$43 - 26 = ?$

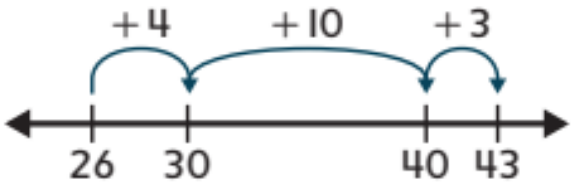


$43 - 26 = 17$

Another Way

Write and solve an addition equation.

$26 + ? = 43$



$26 + 17 = 43$

You can solve a subtraction equation by writing and solving a related addition equation.

Math is... Connections

How does the subtraction equation relate to the addition equation?

Work Together

What addition equation can you use to find the difference? Fill in the equations.

$85 - 52 =$ ____ ____ + ____ = ____

On My Own

MATH REPLAY | GO ONLINE

Name _____

What equations match the Part-Part-Whole mat?

1.

Whole	
54	
Part	Part
?	27

$54 - \_\_\_\_ = ?$

$? + 27 = \_\_\_\_$

2.

Whole	
72	
Part	Part
49	?

$\_\_\_\_ - 49 = ?$

$\_\_\_\_ + ? = \_\_\_\_$

Which related addition equation can you use to find the difference? Circle the correct answer.

3. $64 - 38 = ?$

A. $38 + 64 = ?$

B. $38 + ? = 64$

C. $? - 64 = 38$

D. $64 + 38 = ?$

4. $81 - 26 = ?$

A. $? + 26 = 81$

B. $? - 81 = 26$

C. $26 + 81 = ?$

D. $81 + ? = 26$

5. Akayla has 55 toy cars. She gives 18 of them away. How many toy cars does she have left? Write the equations and solve the problem.

____ − ____ = ?

____ + ? = ____

Akayla has ____ toy cars left.

6. **STEM Connection** Deven has 83 songs on his playlist. He deletes 59 songs. How many songs does he have left on his playlist?

7. **Extend Your Thinking** Explain why you can make two different addition equations from 42 − 19 = ?. Is this always true?

Reflect

How can you use addition to solve subtraction equations?

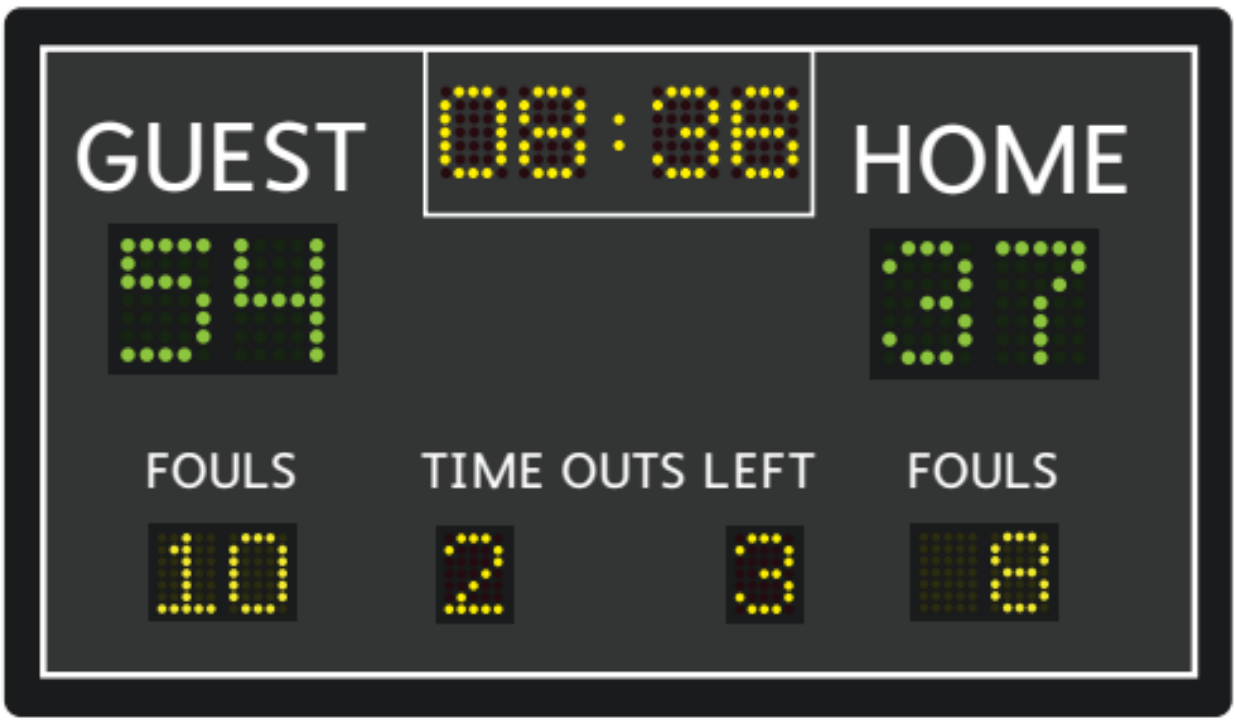
Math is... Mindset

What has helped you want to do your best work?

Solve One-Step Problems Using Subtraction

Be Curious

What do you notice?
What do you wonder?



Math is... Mindset

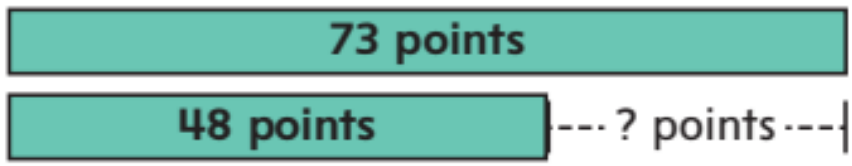
What about math makes you feel most confident?

Learn

Tunish's basketball team scored 73 points in a game. They scored 48 points in the first half.

How many points did they score in the second half?

First, make sense of the problem and represent it with an equation.



$$73 - 48 = ?$$

Then, use a subtraction strategy to solve it.

$$73 - 48 = 25$$

$$\begin{array}{cc} +2 & +2 \\ \downarrow & \downarrow \\ 75 & - \ 50 \ = \ 25 \end{array}$$

You can adjust the numbers for friendlier subtraction.

You can use subtraction strategies to solve one-step word problems.

Math is... Planning

What other strategies can help you subtract 2-digit numbers?

Work Together

Min's team scores 36 points. Lan's team scores 22 points. How many more points does Min's team score than Lan's team? Write an equation to represent the word problem. Then solve.

On My Own

Name _____

How can you represent and solve word problems? Fill in the equation and use any strategy to solve.

1. The box has 36 cartons of milk. Maya puts 12 of the cartons on the shelf. How many cartons of milk are left in the box?

   ____ − ____ = ____

2. Tonya has 15 stamps. She uses 8 of the stamps. How many stamps does she have left?

   ____ − ____ = ____

3. Nicholi has 61 unread messages. He reads 28 messages. How many messages does he still need to read?

   ____ − ____ = ____

4. Which equation represents the problem? Circle the correct answer.

Jackie has 34 text messages on her cell phone. She deletes 16 of the text messages. How many text messages are on Jackie's phone now?

A. $16 - 34 = ?$ B. $34 + 16 = ?$

C. $34 - 16 = ?$ D. $16 - ? = 34$

5. **STEM Connection** Riley designs a truck with a gas tank that holds 36 gallons. A driver drives the truck and now the tank has 21 gallons left in it. How many gallons of gas did the driver use?

6. **Extend Your Thinking** Write a one-step subtraction word problem with 2-digit numbers. Use any strategy to solve it.

Reflect

What strategies can you use to solve a subtraction word problem?

Math is... Mindset

What about math has made you feel most confident?

Lesson 6-10

Solve Two-Step Problems Using Subtraction

Be Curious

What is the question?

Maura has some pennies. She gives some to her brother. Then she gives some to her friend.

Math is... Mindset

How do different ideas help you learn better?

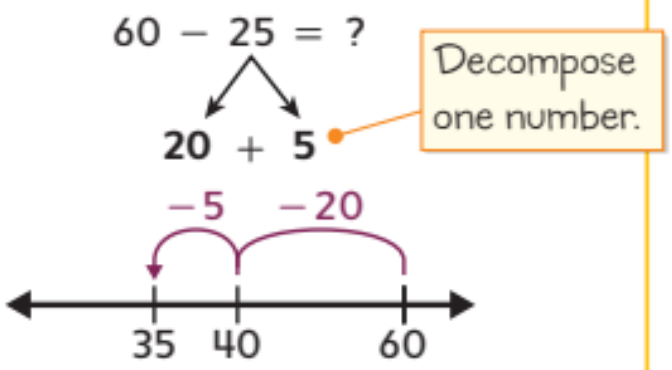
Learn

Maura has 60 pennies. On Sunday, she gives 25 pennies to her brother. On Tuesday, she gives 16 pennies to her friend.

How many pennies does Maura have left?

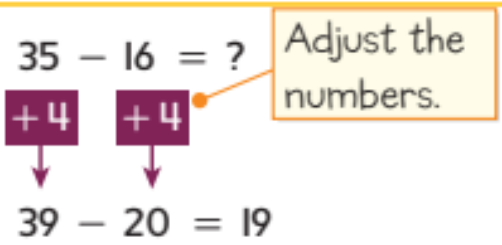
Some problems have more than one question to answer.

How many pennies does Maura have on Sunday?



Maura has 35 pennies on Sunday.

How many pennies does Maura have on Tuesday?



Maura has 19 pennies on Tuesday.

You can use subtraction strategies to solve two-step word problems.

Math is... Explaining

How is solving a two-step problem different from solving a one-step problem?

Work Together

Manny has 43 magnets. He has 21 magnets from Orlando. He has 8 magnets from Chicago. The rest of the magnets are from New York. How many magnets are from New York?

On My Own

Name _____

How can you solve the word problem? Use any strategy to solve.

1. Edwin has 36 T-shirts. 15 of his T-shirts are white, 7 are blue, and the rest are green. How many green T-shirts does Edwin have?

2. Sahir has 45 cards. He gives 16 cards to Rami and 22 cards to Becca. How many cards does he have left?

3. Sophia exercises for 50 minutes. She spends 15 minutes running and 12 minutes walking. The rest of the time she spends jogging. How many minutes does she jog?

What is the difference? Complete the equations.

4. $65 - 12 =$ _____

   _____ $- 20 =$ _____

5. $87 - 57 =$ _____

   _____ $- 10 =$ _____

6. $73 - 24 =$ _____

   _____ $- 6 =$ _____

7. **Extend Your Thinking** There are 72 students in the second grade. Mrs. Chen's class has 25 students. Ms. Murphy's class has 24 students. The rest of the second graders are in Mr. Johnson's class. How many students are in Mr. Johnson's class?

   Explain how to solve the word problem.

Reflect

How can you make sure your answer to a two-step word problem is correct?

Math is... Mindset

How have different ideas helped you learn better?

Unit Review

Name _____

Vocabulary Review

Use the vocabulary to complete the sentence.

adjust	count back
decompose	difference
place value	regroup

1. The _____ is the answer to a subtraction problem. (Lesson 6-3)

2. When you _____ numbers in an equation, you look for friendly numbers. (Lesson 6-7)

3. You can _____ I ten into 10 ones to help you subtract. (Lesson 6-4)

4. One way to subtract using a number line is to _____. (Lesson 6-1)

5. When you _____ numbers, you break them into different parts. (Lesson 6-2)

6. The _____ of a digit tells you whether the digit represents a number of tens or ones in a number. (Lesson 6-6)

Review

7. How can you make a 10 to subtract? Fill in the numbers. (Lesson 6-2)

$14 - 6 = ?$

$\_\_ + \_\_$

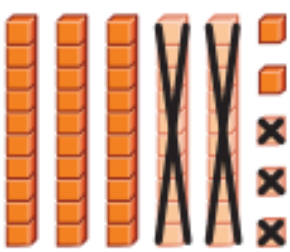
$14 - 6 = ?$

$14 - \_\_ = 10$

$10 - \_\_ = 8$

$14 - 6 = \_\_$

8. Which subtraction equation do the base-ten blocks show? (Lesson 6-3)



A. $32 - 23 = ?$

B. $52 - 23 = ?$

C. $55 - 23 = ?$

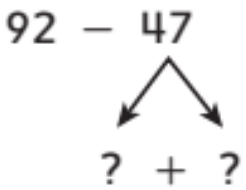
D. $55 - 32 = ?$

9. How can you use the number line to subtract? Fill in the difference. (Lesson 6-5)

$75 - 38 = \_\_\_\_\_$

MATH REPLAY | GO ONLINE

10. Milly decomposes 47 to subtract 92 − 47. Which shows one way to decompose 47? (Lesson 6-6)



A. 4 and 7

B. 40 and 7

C. 50 and 3

D. 70 and 4

11. Elden uses friendly numbers to subtract 72 − 37. Which equation could he write? (Lesson 6-7)

A. 70 − 35 = ?

B. 70 − 37 = ?

C. 70 − 39 = ?

D. 74 − 34 = ?

12. Pablo sells 51 pumpkins at the farmers' market. Joe sells 38 pumpkins. How many more pumpkins does Pablo sell than Joe? (Lesson 6-9)

_____

13. There are 72 people waiting in line to ride the roller coaster. When the ride stops, 16 people get on the roller coaster. Then 24 people exit the line. How many people are waiting in line now? (Lesson 6-10)

A. 32 people

B. 64 people

C. 80 people

D. 112 people

Performance Task

Emily has 67 days to develop a part for an airplane. She has already worked 29 days.

Part A: How many days does she have left to develop the airplane part? Show your work.

Part B: On Day 32 Emily will test what she has completed so far. How many more days until Emily tests what she has completed so far? Show your work.

Part C: Emily orders materials every 24 days. How many times will she order materials in 67 days? Show your work.

Reflect

What are some different strategies for subtracting 2-digit numbers? Which strategy do you think is the most helpful?

Unit 6

Fluency Practice

Name _____

Fluency Strategy

You can use a doubles fact to help you find a sum.

$6 + 7 = ?$

Think: I know $6 + 6 = 12$.

7 is 1 more than 6.

The sum of $6 + 7$ is 1 more than the sum of $6 + 6$.

So, $6 + 7 = \mathbf{13}$.

1. What doubles fact helps you find the sum of $8 + 9$? Find the sum. Explain how you found the sum.

Fluency Flash

How can you use a doubles fact to add? Write the numbers.

2. $5 + 6 = ?$

   Doubles fact: $5 +$ _____ $=$ _____

   6 is 1 more than _____.

   The sum of $5 + 6$ is 1 more than the sum of _____ + _____.

   So, $5 + 6 =$ _____.

Fluency Check

What is the sum or difference?

3. $15 - 8 =$ _____

4. $9 + 5 =$ _____

5. $13 - 9 =$ _____

6. $6 + 5 =$ _____

7. $7 + 8 =$ _____

8. $17 - 8 =$ _____

9. $4 + 5 =$ _____

10. $7 + 9 =$ _____

11. $16 - 9 =$ _____

12. $14 - 8 =$ _____

13. $8 + 3 =$ _____

14. $9 + 8 =$ _____

Fluency Talk

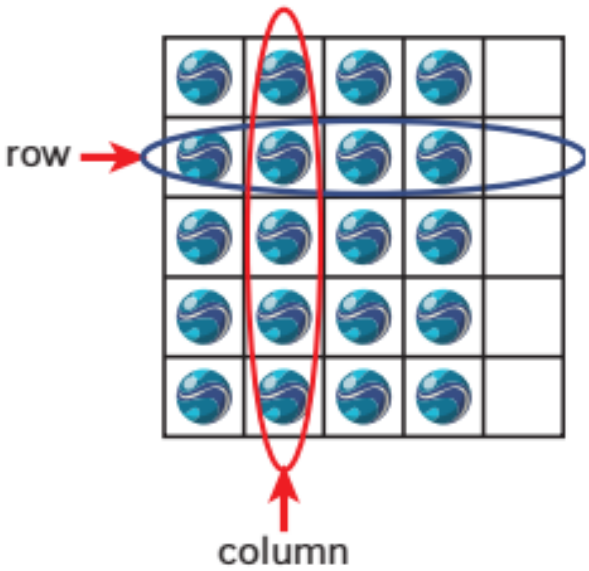
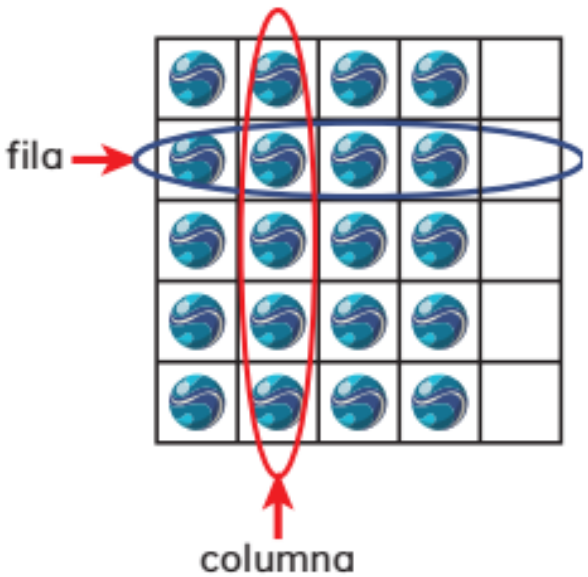
How can you use a doubles fact to add 6 + 8? Explain.

How can you make a 10 to subtract 15 − 9? Explain.

Glossary/Glosario

Aa

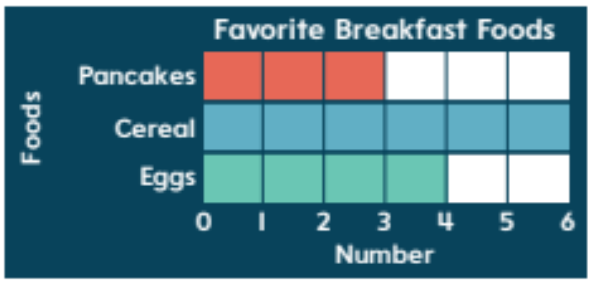
English	Spanish/Español
a.m. The hours from midnight until noon.	a.m. Las horas que van desde la medianoche hasta el mediodía.
add (adding, addition) To join together sets to find the total or sum.  4 + 3 = 7	sumar (adición) Unir conjuntos para hallar el total o la suma.  4 + 3 = 7
addend Any numbers or quantities being added together. 2 + 3 2 is an addend and 3 is an addend	sumando Cualquieres números o cantidades que se suman. 2 + 3 2 es un sumando y 3 es un sumando

English	Spanish/Español
adjusting For addition, take some from one number and give to another number to make the problem easier to solve. For subtraction, take the same amount from both numbers or give the same amount to both numbers to make the problem easier to solve.	**ajuste** Tomar de un número y dárselo a otro número para que el problema sea más fácil de resolver.
afternoon The part of the day between noon and sunset.	**tarde** Parte del día entre el mediodía y la puesta del sol.
array Objects displayed in rows and columns. 	**arreglo** Objetos presentados en filas y columnas. 

English | Spanish/Español

Bb

bar graph A graph that uses bars to show data.



gráfica de barros Gráfica que usa barras para ilustrar datos.

Cc

cent

1 cent 1 ¢

centavo

1 centavo 1 ¢

cent sign (¢) The sign used to show cents.

1 ¢ 5 ¢

centavo (¢) El signo que se usa para mostrar centavos.

1 ¢ 5 ¢

centimeter A metric unit for measuring length.

centímetro Unidad métrica para medir la longitud.

English	Spanish/Español
circle A closed, round figure. 	**círculo** Figura redonda y cerrarda. 
column A column goes up and down on a number chart.	**columna** Una columna sube y baja en una tabla numérica.
compare To look at objects, shapes, or numbers and see how they are alike or different.	**comparar** Observar objetos, formas o números para saber en qué se parecen y en qué se diferencian.
count back On a number line, start at the greater number and count back.  $5 - 3 = 2$ count back 3	**contar hacia atrás** En una fila de números, comienza en el número 5 y cuenta 3 hacia atrás.  $5 - 3 = 2$ cuenta 3 hacia atrás

English	Spanish/Español
count on Start at a number on a number line and count up to another number.  $4 + 2 = 6$ count on 2	**contar hacia adelante** Comenzar en un número en una recta numérica y contar hasta el siguiente número.  $4 + 2 = 6$ cuenta 2 hacia adelante

Dd

English	Spanish/Español
data Numbers or symbols collected to show information.	**datos** Números o símbolos que se reúnen para mostrar información.

Name	Number of Pets
Mary	3
James	1
Alonzo	4

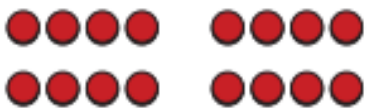
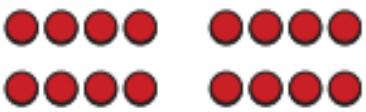
Nombre	Número de mascotas
Mary	3
James	1
Alonzo	4

decompose To break a number into different parts.	**descomponer** Separar un numero de diferentes partes.
difference The answer to a subtraction problem. $3 - 1 = 2$ The difference is 2.	**diferencia** Respuesta a un proble ma de resta. $3 - 1 = 2$ La diferencia es 2.

English	Spanish/Español
digit A symbol used to write numbers. The ten digits are: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9	**dígito** Símbolo usado para escribir números. Los diez dígitos son: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
digital clock A clock that uses only numbers to show time. 	**reloj digital** Reloj que sólo utiliza números para mostrar la hora. 
dime dime = 10¢ or 10 cents   head tail	**dime** moneda de 10¢ = 10¢ o 10 centavos   cara cruz
dollar One dollar = 100¢ or 100 cents. Also written as $1 or $1.00.   front back	**dólar** Un dólar = 100¢ o 100 centavos. También se escribe como $1 o $1.00.   frente revés
dollar sign ($) The sign used to show dollars. one dollar = $1 or $1.00	**signo de dólar ($)** Símbolo que se usa para mostrar dólares. un dólar = $1 o $1.00

English	Spanish/Español
doubles Two addends that are the same number. $6 + 6 = 12$	**dobles** Dos sumandos que son el mismo número. $6 + 6 = 12$

Ee

equal groups Each group has the same number of objects.  There are two equal groups of counters.	**grupos iguales** Cada grupo tiene el mismo número de objetos.  Hay dos grupos iguales de fichas.
equal shares Each share is the same size. Example: This sandwich is cut into 2 equal shares. 	**partes iguales** Cada una de las partes tiene el mismo tamaño. Ejemplo: Este pastelillo está cortado en 2 partes iguales. 

English	Spanish/Español
equal to (=)  $6 = 6$ 6 is equal to or the same as 6	**equal a (=)**  $6 = 6$ 6 es igual o lo mismo que 6
estimate To find a number close to an exact amount. 107 is close to 100.	**estimado** Hallar un número cercano a la cantidad exacta. 107 es cercano a 100.
even number Any number with 0, 2, 4, 6, or 8 in the ones place.	**número par** Los números que terminan en 0, 2, 4, 6, 8.
expanded form The representation of a number as a sum that shows the value of each digit. 536 is written as $500 + 30 + 6$.	**forma desarrollada** Representación de un número como una suma que muestra el valor de cada dígito. 536 se escribe como $500 + 30 + 6$.

Ff

foot A unit to measure length. The plural is feet.  12 inches = 1 foot	**pie** Una unidad para medir longitud.  12 pulgadas = 1 pie
fourths Four equal parts of a whole. Each part is a fourth, or a quarter of the whole.	**cuartos** Cuatro partes iguales de un todo. Cada parte es un cuarto, o la cuarta parte del todo.

English	Spanish/Español
Gg	
greater than (>)  $7 > 2$ 7 is greater than 2.	mayor que (>)  $7 > 2$ 7 es mayor que 2.
Hh	
halves Two equal parts of a whole. Each part is a half of the whole.	mitades Dos partes iguales de un todo. Cada parte es la mitad de un todo.
hexagon A 2-dimensional shape that has 6 sides. 	hexágono Una figura bidimensional con 6 lados. 
hour A unit of time. I hour = 60 minutes  	hora Unidad de tiempo. I hora = 60 minutos  

English	Spanish/Español
hour hand The hand on a clock that tells the hour. It is the shorter hand. 	**manecilla horaria** Manecilla del reloj que indica la hora. Es la manecilla más corta. 
hundreds The numbers 100–999. Example: In the number 234, 2 is in the hundreds place. 	**centenas** Los números 100-999. Ejemplo: En el número 234, el 2 está en el lugar de las centenas. 

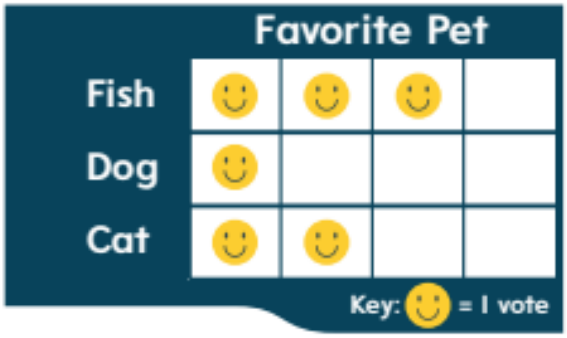
Ii

inch A customary unit for measuring length. The plural is inches.  12 inches = 1 foot	**pulgada** Unidad habitual para medir longitud.  12 pulgadas = 1 pie

English	Spanish/Español

Kk

key Tells what or how many each symbol stands for.



clave Nos dice qué o cuánto representa cada símbolo.

Ll

length How long or how far away something is.

longitud La mayor de las dos dimensiones principales que tienen las cosas o figuras planas.

less than (<)

$4 < 7$

4 is less than 7.

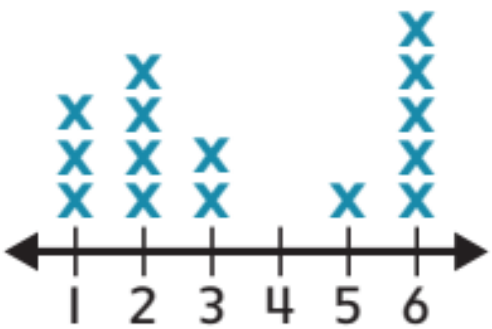
menor que (<)

$4 < 7$

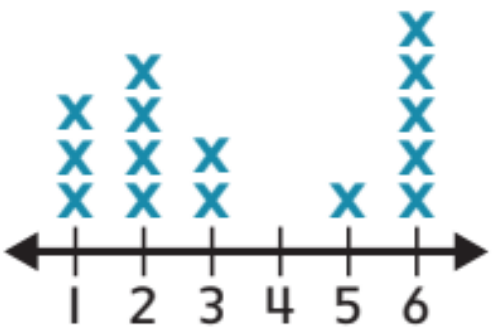
4 es menor que 7.

English	Spanish/Español
line plot A graph that uses columns of Xs above a number line to show frequency of data.	**diagrama de puntos** Gráfico que usa columnas de X sobre una recta numérica para mostrar la frecuencia de los datos.

Grade in School

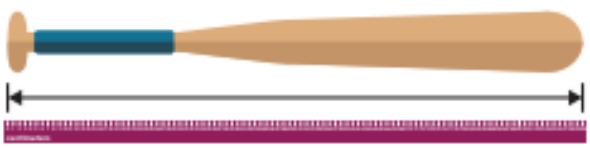


Grado en la escuela



Mm

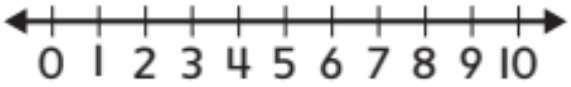
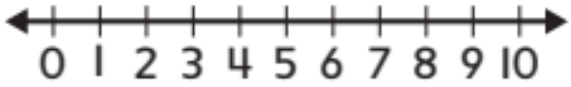
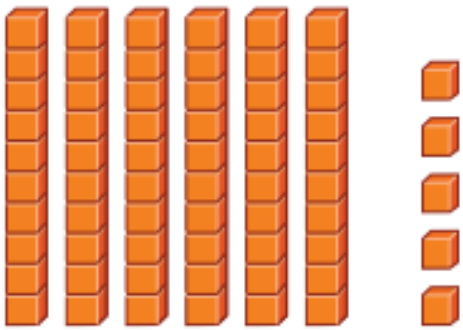
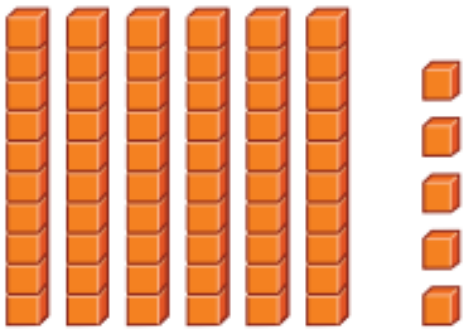
measure To find the length, height, or weight using standard or nonstandard units.	**medir** Hallar la longitud, estatura o peso mediante unidades estándar o no estándar.
meter A metric unit for measuring length. It is about the length of a baseball bat or the width of a door.	**metro** Unidad métrica para medir longitud. Es aproximadamente del largo de un bate de béisbol o del ancho de una puerta.



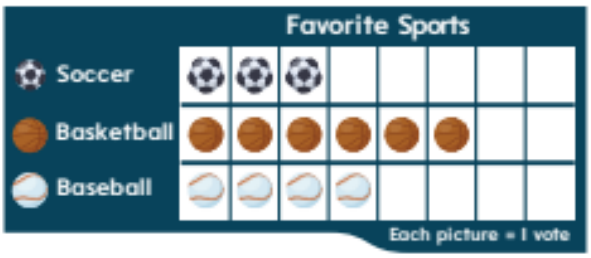
1 meter = 100 centimeters

1 metro = 100 centímetros

English	Spanish/Español
midnight The middle of the night. 12:00 at night	**medianoche** La mitad de la noche. Las 12:00 a.m.
minute A unit used to measure time. 1 minute = 60 seconds	**minuto** Unidad para medir tiempo. 1 minuto = 60 segundos
minute hand The longer hand on a clock that tells the minutes. 	**minutero** La manecilla más larga del reloj. Indica los minutos. 
missing addend In an addition equation, the sum and one addend are known, and the missing addend is unknown. 9 + ? = 16 The missing addend is 7.	**sumando que falta** En una ecuación de suma, se conoce la suma y un sumando y el sumando que falta es desconocido. 9 + ? = 16 El sumando que falta es 7.

English	Spanish/Español
Nn	
nickel nickel = 5¢ or 5 cents  head tail	**nickel** moneda de 5¢ = 5¢ o 5 centavos  cara cruz
noon The middle of the day. 12:00 in the afternoon	**mediodía** La mitad del día. Las 12 p.m.
number line A line with number labels. 	**recta numérica** Recta con marcas de números. 
Oo	
odd number Any number with 1, 3, 5, 7, or 9 in the ones place.	**número impar** Los números que terminan en 1, 3, 5, 7, 9.
ones The numbers in the range of 0–9. A place value of a number.  65 5 is in the ones place.	**unidades** Los números en el rango de 0 a 9. Valor posicional de un número.  65 El 5 está en el lugar de las unidades.

English	Spanish/Español
Pp	
p.m. The hours from noon until midnight.	p.m. Las horas que van desde el mediodía hasta la medianoche.
partial sums A step-by-step process to add one place value at a time, and then add those sums to find the total sum. 42 + 17 Decompose 42 into 40 and 2, and 17 into 10 and 7. Add the tens: 40 + 10 = 50 Add the ones: 2 + 7 = 9 Add the partial sums: 50 + 9 = 59	sumas parciales Proceso paso a paso para sumar un lugar posicional a la vez, y luego sumar los resultados para hallar la suma total. 42 + 17 Descomponer 42 en 40 y 2, y 17 en 10 y 7. Sumar las decenas: 40 + 10 = 50 Sumar las unidades: 2 + 7 = 9 Sumar los resultados parciales: 50 + 9 = 59
partition To divide or break up.	separar Dividir o desunir.
pattern An order that a set of objects or numbers follows over and over.  pattern unit	patrón Orden que sigue continuamente un conjunto de objectos o números.  unidad de patrón

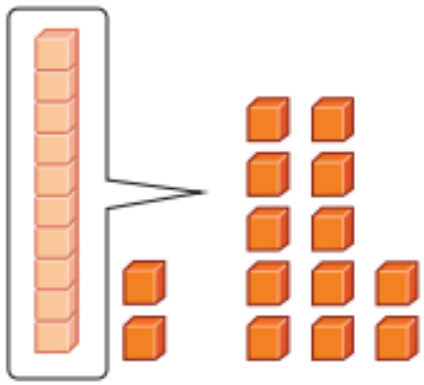
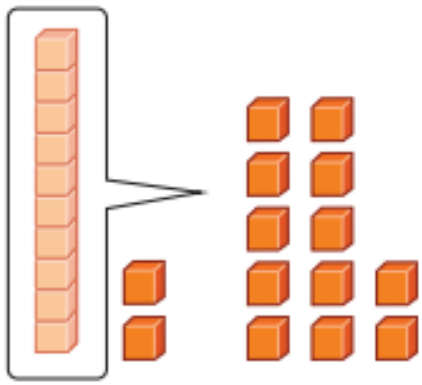
English	Spanish/Español
penny penny = 1¢ or 1 cent  head  tail	**penny** moneda de 1¢ = 1¢ o 1 centavo  cara  cruz
pentagon A figure with 5 sides. 	**pentágono** Un polígono con cinco lados. 
picture graph A graph that has different pictures to show data collected. 	**gráfica con imágenes** Gráfica que tiene diferentes imágenes para ilustrar la información recopilada. 

Qq

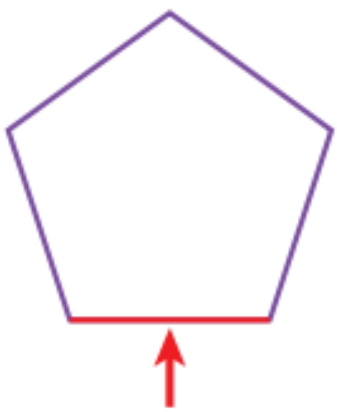
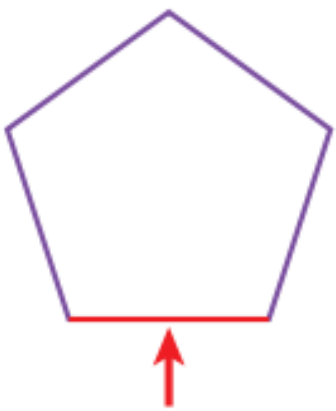
quarter quarter = 25¢ or 25 cents  head  tail	**quarter** moneda de 25¢ = 25¢ o 25 centavos  cara  cruz

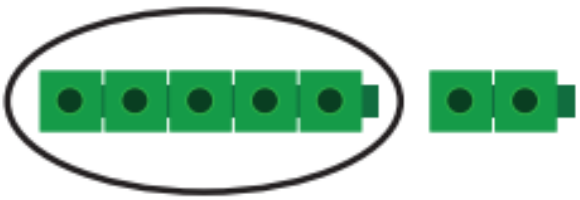
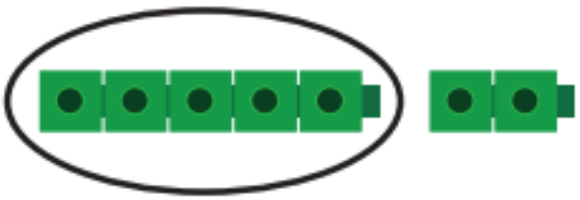
Rr

rectangle A shape with 4 sides and 4 angles.	**rectángulo** Figura con 4 lados y 4 esquinas.

English	Spanish/Español
regroup To take apart a number to write it in a new way.  I ten + 2 ones becomes 12 ones	**reagrupar** Separar un número para escribirlo en una nueva forma.  I decena + 2 unidades se convierten en 12 unidades
row A row goes left to right on a number chart.	**fila** Una fila se lee de izquierda a derecha en una tabla numérica.

Ss

side One of the lines that make up a shape.  A pentagon has 5 sides.	**lado** Uno de la lãneas que compone una figura.  El pentágono tiene cinco lados.

English	Spanish/Español
skip count To count objects in equal groups of two or more. 2, 4, 6, 8, 10	**contar salteado** Contar objectos en grupos iguales de dos o más. 2, 4, 6, 8, 10
square A rectangle that has 4 equal sides.	**cuadrado** Rectángulo que tiene 4 lados iguales.
standard form A way of writing a number that shows only its digits, no words. 537 89	**forma estándar** Una manera de escribir un número solo con dígitos, no con palabras. 537 89
subtract (subtracting, subtraction) To take away, take apart, separate, or find the difference between two sets. The opposite of addition.  $7 - 2 = 5$	**restar (resta, sustracción)** Eliminar, quitar, separar o hallar la diferencia entre dos conjuntos. Lo opuesto de la suma.  $7 - 2 = 5$
sum The answer to an addition problem. $2 + 4 = 6$ sum	**suma** Respuesta a un problema de adición. $2 + 4 = 6$ suma

English	Spanish/Español
survey To collect data by asking people the same questions.	**encuesta** Recolectar datos haciendo las mismas preguntas a las personas.

Favorite Color	
Color	Tally
Blue	𝍸 |
Yellow	||||
Red	𝍸 |||

This tally chart shows the results from a survey.

Color Preferido	
Color	Marca
Azul	𝍸 |
Amarillo	||||
Rojo	𝍸 |||

Esta tabla de conteo muestra los resultados de una encuesta.

Tt

tally chart A way to show data collected using tally marks.

Favorite Sport	
Sport	Tally
	𝍸
	𝍸 ||||
	𝍸 ||

tabla de conteo Una manera de mostrar los datos obtenidos usando marcas de conteo.

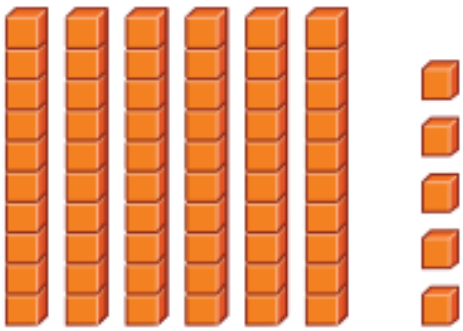
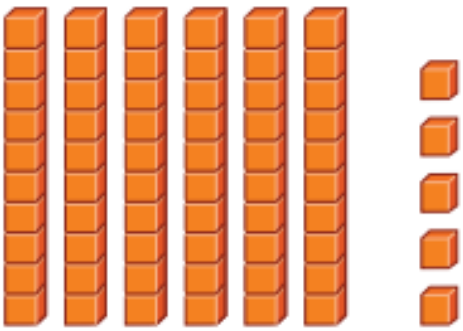
Deporte preferido	
Deporte	Marca
	𝍸
	𝍸 ||||
	𝍸 ||

tally mark(s) A mark used to record data collected in a survey.

𝍸 ||

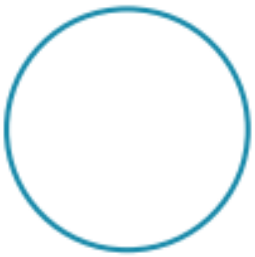
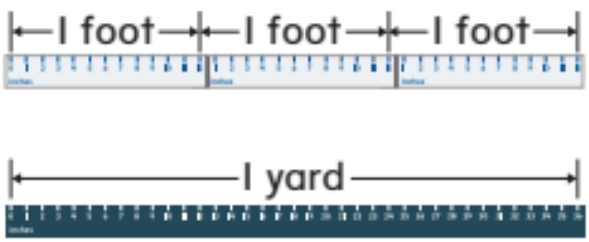
marca(s) Símbolo usado para anotar datos de una encuesta.

𝍸 ||

English	Spanish/Español
tens A place value of a number.  65 6 is in the tens place.	**decenas** Valor del lugar de un número.  65 6 está en el lugar de las decenas.
thirds Three equal parts.	**tercios** Tres partes iguales.
trapezoid A four-sided shape with only two opposite sides that are the same length. 	**trapecio** Figura de cuatro lados con solo dos lados opuestos que son paralelos. 
triangle A shape with 3 sides and 3 angles. 	**triángulo** Figura con 3 lados y 3 esquinas. 

Uu

unit An object used to measure. 	**unidad** Objeto que se usa para medir. 

English	Spanish/Español
unknown A missing number in an equation. $9 + ? = 10$	**incógnita** El número que falta en una ecuación. $9 + ? = 10$
Ww	
whole The entire object. 	**el todo** El objeto completo. 
word form A form of a number that uses written words. 472 four hundred seventy-two	**en palabras** Forma de escribir un número en palabras. 472 cuatrocientos setenta y dos
Yy	
yard A unit of measure for length. 1 yard = 3 feet 	**yarda** Unidad de medida de longitud. 1 yarda = 3 pies