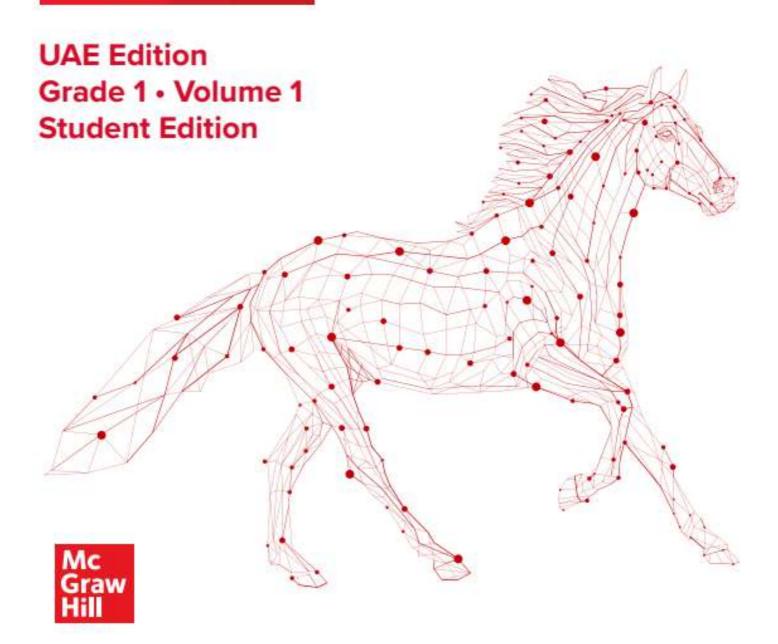


2023-2024

## Reveal MATH



# Reveal MATH

Student Edition

Grade 1 · Volume 1



Back cover: Welsh Designs/Stockimo/Alamy Stock Photo

#### mheducation.com/prek-12



Copyright © 2022 McGraw Hill

All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of McGraw Hill, including, but not limited to, network storage or transmission, or broadcast for distance learning.

Send all inquiries to: McGraw Hill 8787 Orion Place Columbus, OH 43240

ISBN: 978-0-07-665932-6 MHID: 0-07-665932-1

Printed in the United States of America.

23456789LWI2423222120

#### Contents in Brief

V	olume I
	① Math Is
	2 Number Patterns
	3 Place Value
	4 Addition within 20: Facts and Strategies
	Subtraction within 20: Facts and Strategies 157
	Shapes and Solids
	GlossaryGI
V	olume 2
	Meanings of Addition
	8 Meanings of Subtraction
	② Addition within IOO
	(D) Compare Using Addition and Subtraction
	Subtraction within IOO
116	Measurement and Data
4	(B) Equal Shares

#### Welcome to Reveal Math!

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

Throughout this 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.

#### Ralph Connelly, Ph.D.

Authority on the development of early mathematical understanding.

#### Annie Fetter

Advocate for students' ideas and student thinking that fosters strong problem solvers.

#### Linda Gojak, M.Ed.

Expert in both theory and practice of strong mathematics instruction.

#### Sharon Griffin, Ph.D.

Champion for number sense and the achievement of all students.

#### Ruth Harbin Miles, Ed.S.

Leader in developing teachers' math content and strategy knowledge.

#### Susie Katt, M.Ed.

Advocate for the unique needs of our youngest mathematicians.

#### Nicki Newton, Ed.D.

Expert in bringing studentfocused strategies and workshops into the classroom.

#### John SanGiovanni, M.Ed.

Leader in understanding the mathematics needs of students and teachers.

#### Raj Shah, Ph.D.

Expert in both theory and practice of strong mathematics instruction.

#### Jeff Shih, Ph.D.

Advocate for the importance of student knowledge.

#### Cheryl Tobey, M.Ed.

Facilitator of strategies that drive informed instructional decisions.

#### Dingh Zike, M.Ed.

Creator of learning tools that make connections through visualkinesthetic techniques.



## Math Is...

	pener: STEM in Action
IGNITE	! How Many Ways?
Lesson	ns
1-1	Math Is Mine
1-2	Math Is Exploring and Thinking
1-3	Math Is In My WorldII
1-4	Math Is Explaining and Sharing
1-5	Math Is Finding Patterns
1-6	Math Is Ours
Unit R	eview
Fluenc	y Practice

## **Number Patterns**

	pener: STEM in Action31
IGNITE	! Patterns
Lesson	ns
2-1	Counting Patterns to 100
2-2	Patterns on a Number Chart to I20
2-3	Patterns on a Number Line
Math	Probe Counting by Is
2-4	Patterns When Reading and Writing Numbers 47
2-5	Patterns When Representing Objects in a Group 51
Unit R	eview 55
Fluenc	y Practice

## Place Value

-117.	pener: STEM in Action61
IGNITE	! Seeing Dots
Lesson	ns
3-1	Numbers II to 19
Math	Probe Show the Value of the Digit:
	Student Interview
3-2	Understand Tens
3-3	Represent Tens and Ones
3-4	Represent 2-Digit Numbers
3-5	Represent 2-Digit Numbers in Different Ways 81
3-6	Compare Numbers
3-7	Compare Numbers on a Number Line
3-8	Use Symbols to Compare Numbers
Unit R	eview
Fluenc	y Practice



## Addition within 20: Facts and Strategies

	pener: STEM in Action
IGN TE!	Missing Numbers in Shapes 104
Lesson	s
4-1	Relate Counting to Addition 105
4-2	Count On to Add
4-3	Doubles
4-4	Near DoublesII7
4-5	Make a 10 to Add
4-6	Choose Strategies to Add
4-7	Use Properties to Add129
	Probe Solving Problems
	Add Three Numbers
4-9	Find an Unknown Number in an
	Addition Equation
4-10	Understand the Equal Sign
4-11	True Addition Equations
Unit Re	eview
Fluenc	v Practice 155



## Subtraction within 20: Facts and Strategies

	pener: STEM in Action
IGNITE	! Take the Last Counter
Lessor	ns
5-1	Relate Counting to Subtraction
5-2	Count Back to Subtract
5-3	Count On to Subtract
5-4	Make a IO to Subtract
5-5	Use Near Doubles to Subtract
5-6	Use Addition to Subtract
Math	Probe Showing Problems with Equations
5-7	
5-8	Find an Unknown Number in a Subtraction Equation
5-9	True Subtraction Equations
Unit R	eview
Fluenc	v Practice

## **Shapes and Solids**

	pener: STEM in Action
IGNITE	Shape Sudoku204
Lessor	ns
6-1	Understand Defining Attributes of Shapes205
6-2	Understand Non-Defining Attributes209
Math	Probe 2-Dimensional Shape Sort
6-3	Compose Shapes
6-4	Build New Shapes
6-5	Understand Attributes of Solids 227
6-6	Build New Solids
Unit R	eview
Fluenc	y Practice

#### Jump into Learning!

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

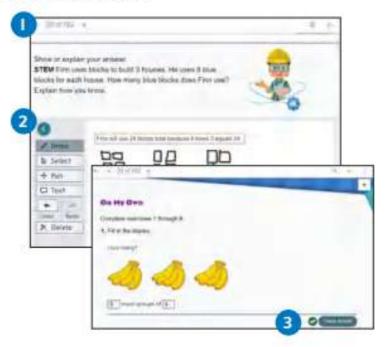


- See your work in the To-Do List.
- See the work you already completed.
- Go to your Interactive Student Edition.

You can use your Interactive Student Edition

for all your math work.

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



Copyright C Williams N3 Should

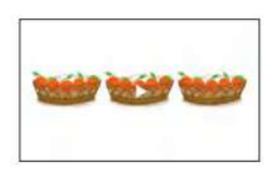
## Access Lesson Supports Online!

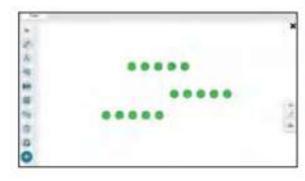
You can also use these to support while you practice.



#### Need an Instant Replay of the Lesson Content?

Each lesson has a Math Replay video that provides a I-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
- Geometry Sketch
- · Base-Ten Blocks · Money

- Array Builder
   Fact Triangles
- · Fraction Model · Number Line
- Bucket Balance and more!

## Key Concepts and Learning Objectives

#### Key Concept Habits of Mind and Classroom Norms for Productive Math Learning

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

#### Key Concept Addition and Subtraction

- I relate counting to addition. (Unit 4)
- I relate counting to and counting back to subtraction. (Unit 5)
- I use different strategies to add and subtract within 100. (Units 4, 5, 9, II)
- · I use addition to solve problems involving adding to and putting together. (Unit 7, 8, 10)
- I explain what the equal sign means. (Unit 4)

#### Key Concept Number Sense and Place Value

- I read and write numbers from 0 to 120. (Unit 2)
- I use place value to represent 2-digit numbers. (Unit 3)
- I explain that IO ones equal I ten. (Unit 3)
- I compare two 2-digit numbers by comparing the number of tens and the number of ones. (Unit 3)

#### Key Concept Measurement and Data

- I order three objects from shortest to longest. (Unit 12)
- I compare the lengths of two objects. (Unit 12)
- I measure the length of objects. (Unit 12)
- I tell time to the negrest hour and half hour. (Unit 12)
- I organize and interpret data into three categories. (Unit 12)

#### **Key Concept Attributes of Shapes**

- I can describe attributes that define shapes. Some defining attributes are the number of sides and the number of angles. (Unit 6)
- I can describe attributes that do not define shapes. Some non-defining attributes are color, size, and orientation. (Unit 6)
- I can compose two-dimensional and three-dimensional shapes to create composite shapes. (Unit 6)
- I can partition circles and rectangles into 2 and 4 equal parts. (Unit 13)
- I can describe the 2 and 4 equal parts of a circle or rectangle. (Unit 13)

#### Math is...

How would you complete this sentence?

Math is.....

Math is not just adding and subtracting.

#### Math is...

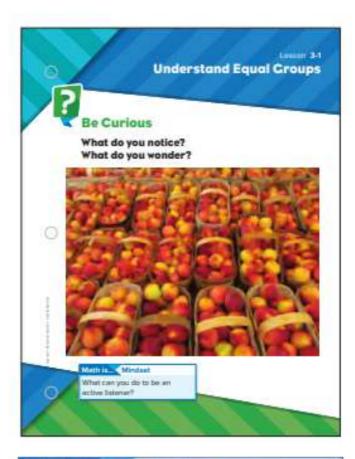
- · working together
- finding patterns
- · sharing ideas
- listening thoughtfully to our classmates
- sticking with a task even when it is a little challenging

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.



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.

- 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



What can you do to be an active listener?

Copyright Chicadon NY filteratory

#### 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 their career and talk about the different responsibilities.



Math In Action: Nutritionist

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



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





## Math Is ...

**Focus Question** 

What does it mean to do math?

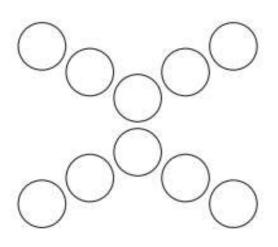


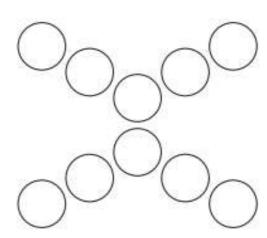


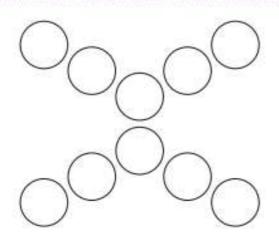
Name

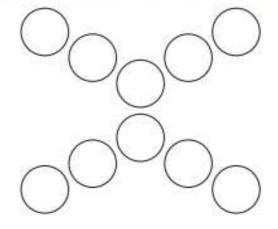
## **How Many Ways?**

How many ways can you show 10? Color the counters in each set with 2, 3, or 4 different colors. Then write an equation that matches.









## ? Be C

## **Be Curious**

## What do you notice? What do you wonder?



#### Learn

Math gives us power to solve problems. Everyone has math superpowers.

Find out about your teacher's special math skills.

What are your math superpowers?

Math is... Mindset

What makes me special in math?

How do your math superpowers help you?

Math is... Mindset

How can I use my skills in math?

Math is... Mindset

What are my strengths in math?

What new math skills do you want to develop?

Math is... Mindset

What do I want to learn about math?

## Work Together

What are some other math skills or superpowers that someone might have?

## On My Own



Name\_\_\_\_

What is your math superpower?



## Reflect

What about my "Math Me" do I want someone else to know?

Copyright & McGraw-Hill Education

# Math Is Exploring and Thinking

## **Be Curious**

## What do you notice? What do you wonder?



#### Learn

4 dogs are in the park. I dog comes.

How many dogs now?



When we do math, we solve problems.

A problem is a question to answer.

The problem is "how many dogs are in the park?"



Math is... Exploring What is the problem?

Math is... Planning

What do I know?

I know 4 dogs are in the park.



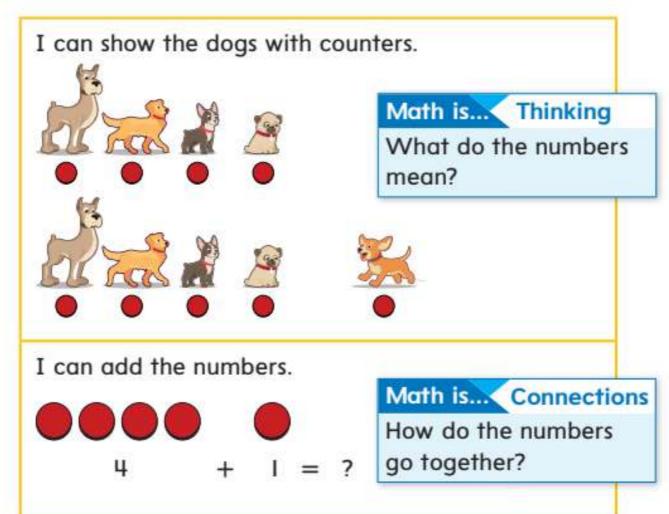
I know I dog comes.







When we do math, we think about numbers.



## Work Together

5 dogs are in the park. 2 dogs leave. How many dogs now? Show your thinking.

## On My Own



Name

2 cats sit in the sun.

4 cats come to sit in the sun.

How many cats? Show your thinking.



## Reflect

What is a problem? Show what a problem is.

## Math Is In My World

# ?

## **Be Curious**

## What do you notice? What do you wonder?





















#### Learn

How many dolls have brown or red hair?



















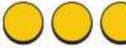


When we do math, we think about how to show a problem.

I can draw a picture.



I can use counters.







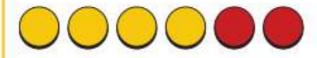




Math is... In My World

How can I show the problem?

I can write an addition equation.



$$4 + 2 = ?$$

Math is... Modeling

How can I use math to show the problem?

A ten-frame is a tool.

Math is... Choosing Tools What tools do I know?

I will use a ten-frame.

0		
83		

Math is... Choosing Tools What tools do I choose?

$$4 + 2 = 6$$

#### Work Together

How many dolls have black or blond hair? Show how you know.

## On My Own



Name

How many shoes are pink or black? Show how you know.















## Reflect

How can math show a problem?

# Math Is Explaining and Sharing

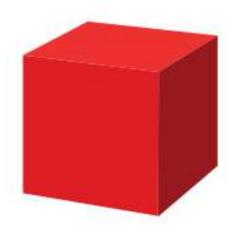


Which doesn't belong?









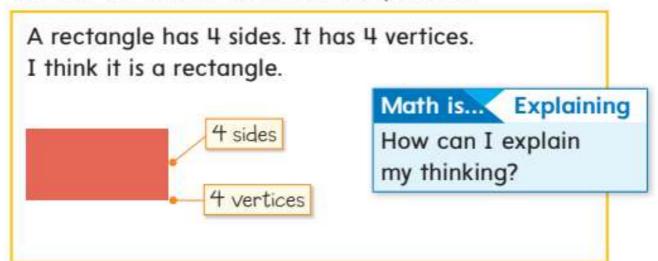
#### Learn

I have 4 sides. I have 4 vertices.

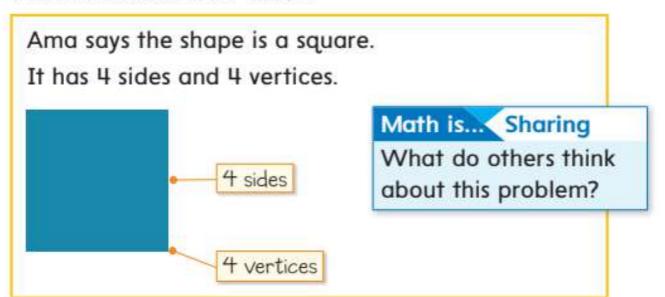
What do I look like? Draw me.

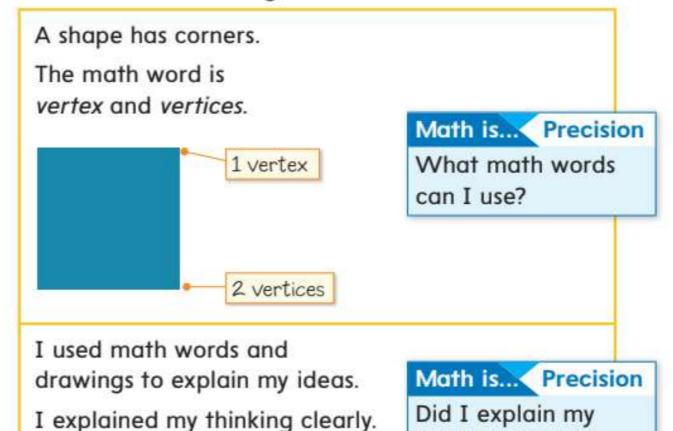


When we do math, we explain our thinking. We can use words, numbers, and pictures.



When we do math, we listen to others. We think about their ideas.





## Work Together

Yin says the shape is a triangle. Does her answer make sense to you? Show or tell why.

thinking clearly?



Name

I have 3 sides.

I have 3 vertices.

What do I look like? Draw me.

Show or tell your thinking.

## Reflect

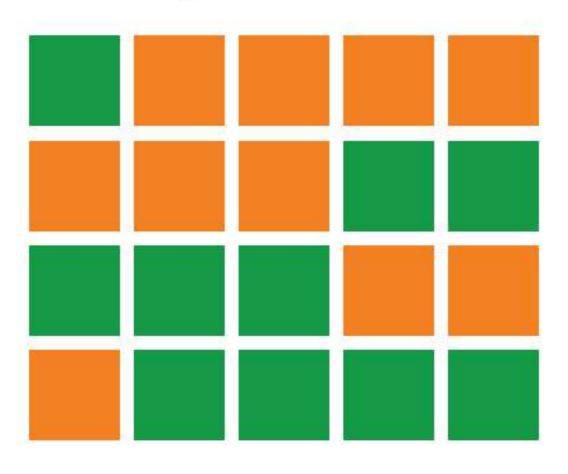
What math words do I know to describe shapes?

## **Math Is Finding Patterns**



## **Be Curious**

What do you notice? What do you wonder?



#### Learn

Sasha has 8 red and blue cubes.



How many can be red? How many can be blue?

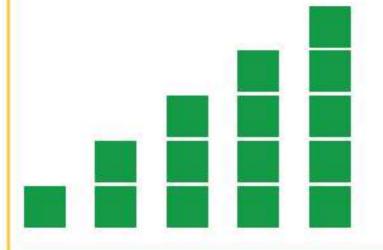
When we do math, we look for patterns.

There are many kinds of patterns.

I can look for repeating or growing parts. The colors and shapes repeat in this pattern.



The number of squares goes up in this pattern.



Math is... Patterns How do I know I see a pattern?

I always have 8 cubes.

The cubes are red or blue.

$$1 + 7 = 8$$

$$4 + 4 = 8$$

I can try different combinations.



$$3 + 5 = 8$$



$$7 + 1 = 8$$

Yes, it always works!

#### Math is... Generalizations

Does this always work?

## Work Together

Micah has 10 green and orange tiles.

How many can be green? How many orange? Show your thinking.



Name

Kara has 15 cubes. Some are red and some are green. What patterns can she make? Show the patterns.



## Reflect

How can you make a pattern with numbers? Share your number pattern with a friend.



## **Be Curious**

## What do you notice? What do you wonder?



Copyright & McGrow-Hit Education - Weederligs/159c8// Gethy Images

#### How do we do math?

\A/hon

When we do math, we work together.



We listen to our friends and teachers.



We think about others' ideas.

Math is... Mindset

What can I do to be a good listener?

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



We focus 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 select the tool that works.



We use patterns.

#### Math is... Mindset

What can I do when I feel stuck?



#### Work Together

How do we work well with our classmates?

How can we be good listeners?

How do we use tools responsibly?



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?

Conversity & McGrow-Hill Education

## **Vocabulary Review**

What is math? Which of these shows what math is? Circle all that show what math is.

Math is...

#### talking



thinking carefully



sharing ideas



working together



using tools



asking for help



#### Review

How do we act when we do math in our class? Show or tell how we act.



What is my favorite thing about doing math?

## Fluency Practice

Name

## Fluency Strategy

You can put together 5 and break apart 5 in many ways.



Put Together 5	Take Apart 5
5 + 0 = 5	5 = 5 + 0
4 + I = 5	5 = 4 + I
3 + 2 = 5	5 = 3 + 2
2 + 3 = 5	5 = 2 + 3
1 + 4 = 5	5 = 1 + 4
0 + 5 = 5	5 = 0 + 5

Write two ways to show how to put together 5.









#### Fluency Flash

What number shows a way to put together or break apart the number 5? Write the number.

2. 
$$4 + = 5$$
 3.  $5 = 1 +$ 

3. 
$$5 = 1 +$$

#### Fluency Check

What number shows a way to put together or break apart the number 5? Write the number.

10. 
$$5 = 3 +$$

13. 
$$5 = 0 + ____$$

#### Fluency Talk

Bryce broke apart 5 as 3 + 2. Mia broke apart 5 as 1 + 4. Who is correct? Explain.

When might knowing how to break apart 5 be used in math?

## **Number Patterns**

**Focus Question** 

How can I use patterns to count, read, and write numbers?

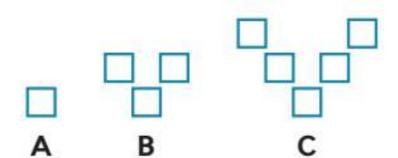


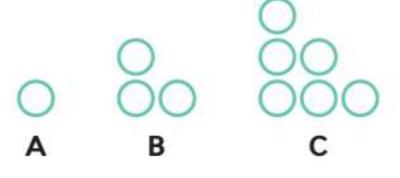


Name\_\_\_\_

#### **Patterns**

Describe the pattern. Draw the next picture for the pattern.





## **Counting Patterns to 100**

## **Be Curious**

# What do you notice? What do you wonder?



#### Math is... Mindset

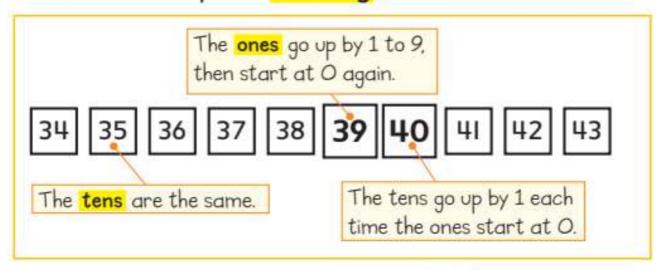
What can you do to stay focused on your work?

#### Learn

How can you put these numbers in an order?

57 56

Numbers can be put in **counting** order.



Counting numbers to 100 follow a pattern.

Math is... Generalizations How will the ones change after 100?

#### Work Together

What numbers are missing? Draw lines to show the missing numbers. Describe the counting pattern.

79

77

80

76

Name

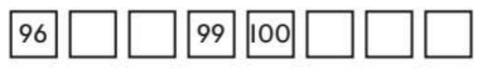
#### What pattern do you notice?



4. STEM Connection Erik plays a counting video game. How can he find the missing numbers?



5. Extend Your Thinking What numbers are missing? Draw lines to show the missing numbers.



102 101 103 97 98



What are counting patterns?

Math is... Mindset

How did you stay focused on your work?

## Patterns on a Number Chart to 120

## **Be Curious**

# What do you notice? What do you wonder?



#### Math is... Mindset

What helps you know when there is a problem?

#### Learn

Celia counts 97 pennies.

#### What numbers does Celia count next?



A **number chart** and counting patterns help you count.

			co	lum	n					
Start at 97. Use counting	I	2	3	4	5	6	7	8	9	10
patterns as you count on.	Ш	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
Math is Using Tools	31	32	33	34	35	36	37	38	39	40
How does the number	41	42	43	44	45	46	47	48	49	50
chart show the pennies?	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
row	81	82	83	84	85	86	87	88	89	90
	91	92	93	94	95	96	97	98	99	100
	101	102	103	104	105	106	107	108	109	IIC
	Ш	112	113	114	115	116	117	118	119	120

Counting patterns to 120 are the same as the patterns to 99.

## Work Together

Grace starts at 99. What are the next 4 numbers she counts? Explain how you know.

91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	IIO



Name

Use the number chart on the Learn page to help you answer the questions.

- I. What counting pattern do you notice for ones? Explain.
- 2. What counting pattern do you notice for tens? Explain.

3. What counting pattern do you notice after 100? Explain.

4. Jill counts 98 flowers. What are the next 8 numbers she counts?

91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	IIO

101	102	103	104	105	106	107	108	109	110
Ш	112	113	114	115	116	117	118	119	120

Error Analysis Joy counts 108 pennies. She counts 6 more pennies. She says she has II3 pennies. Help Joy count her pennies.

101	102	103	104	105	106	107	108	109	110
Ш	112	113	114	115	116	117	118	119	120

7. Extend Your Thinking What do you think about the counting patterns after 120? Explain.

## Reflect

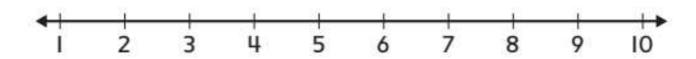
How can you identify patterns when counting to 120?

#### Math is... Mindset

What helped you know when there was a problem?

# P Be Curious

What do you notice? What do you wonder?



Math is... Mindset

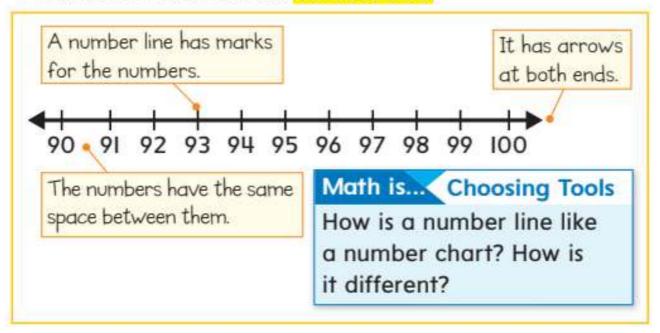
What are your strengths in math?

#### Learn

Today is day 100 of the school year. How can the students show how many days they have been in school?

Day 100

The students can make a number line.

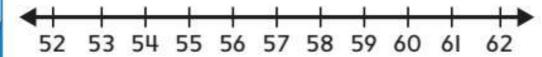


Number lines can show counting patterns.

#### Work Together

What counting patterns do you notice?

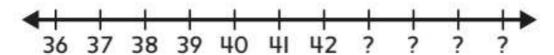
How are they like the counting patterns on the number chart?



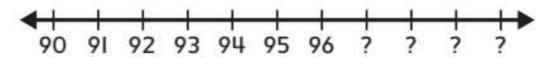
Name

Which numbers come next? Circle the answer.

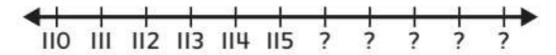
I. Start at 42. Count by Is. Which numbers come next?



- A. 43, 44, 45, 46
- B. 44, 46, 48, 50
- C. 52, 62, 72, 82
- Start at 96. Count by Is. Which numbers come next?

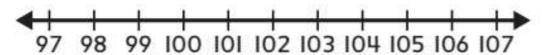


- A. 93, 94, 95, 96
- B. 97, 96, 95, 94
- C. 97, 98, 99, 100
- Start at II5. Count by Is. Which numbers come next?



- A. 110, 111, 112, 113, 114
- B. 114, 112, 110, 108, 106
- C. 116, 117, 118, 119, 120

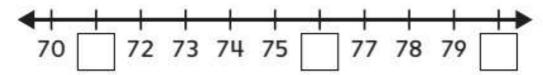
4. What counting patterns do you notice?



5. Ray starts at 103. He counts on 5 more. What patterns do you notice in the numbers Ray counts?



Extend Your Thinking How can you use number patterns to complete this number line? Explain.



## Reflect

How do number lines show counting patterns?

#### Math is... Mindset

How did your math strengths help you today?



## Counting by 1s

Name\_\_\_\_

The students are counting by Is from 55.
 They count 56, 57, 58, 59, 60, \_\_\_\_

Circle the number that comes next.

50 59

61 70

Tell or show how you know which number is correct.

2. The students are counting by Is from 106.

They count 107, 108, 109, \_\_\_\_.

Circle the number that comes next.

99 110

108

Tell or show how you know which number is correct.

#### Reflect On Your Learning

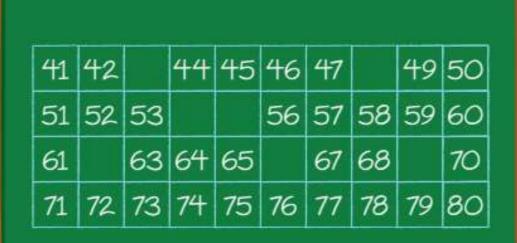




## Patterns When Reading and Writing Numbers



# What do you notice? What do you wonder?



Math is... Mindset

How can you share your ideas clearly?

#### Learn

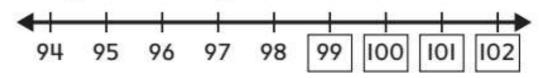
What numbers come next?

94, 95, 96, 97, 98,

You can use counting patterns to help write the numbers that come next.

The ones go up by I to 9.

Then they start at 0 again.



The tens stay the same.

Then they go up by I when the ones start at 0 again.

Math is... Patterns

How will the tens change after 109?

Counting patterns can help you read and write numbers.

## Work Together

What numbers come next? Write the next 3 numbers.

99, 100, 101, \_\_\_\_\_, \_\_\_\_, \_\_\_\_

Explain how you know.



Name

What numbers come next? Write the numbers.

1. 45, 46, 47, \_\_\_\_\_, \_\_\_\_, \_\_\_\_. Explain how you know.

2. 76, 77, 78, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_. Explain how you know.

3. 115, 116, 117, \_\_\_\_\_, \_\_\_\_\_. Explain how you know.

5. How do counting patterns help you read numbers?

6. Extend Your Thinking What number comes after 120? Explain how you know.

## Reflect

How can you use patterns to help read and write numbers?

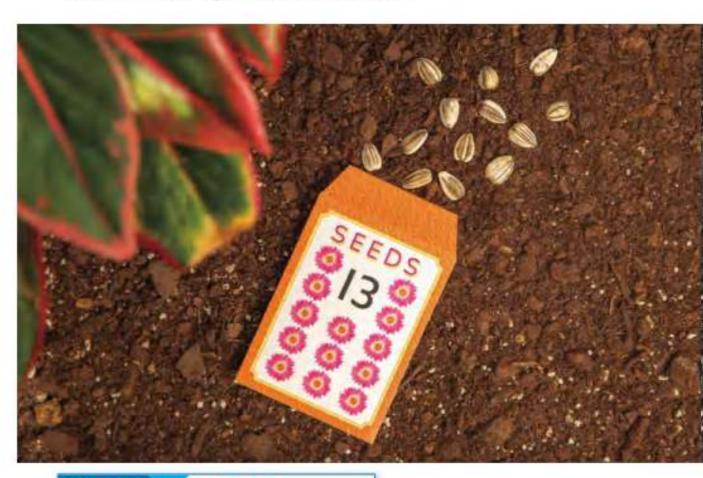
Math is... Mindset

What helped you to clearly share your ideas?

## Patterns When Representing Objects in a Group

## **Be Curious**

# What do you notice? What do you wonder?



Math is... Mindset

How can you show respect for your classmates?

#### Learn

How can you show the number of flowers?

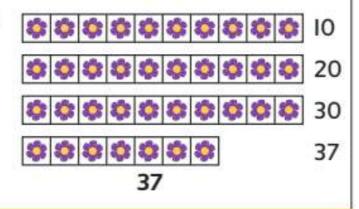


You can write a number to show how many.

Put the objects in groups.

Count the objects.

Write a number to show how many.



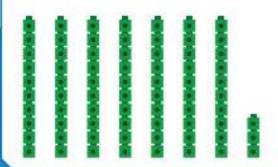
Putting objects in groups can help you count them.

#### Math is... Planning

What are different ways you can group objects to count them?

## Work Together

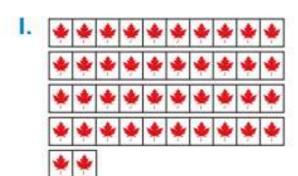
Count and write how many.



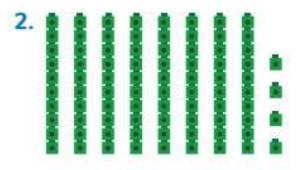


Name

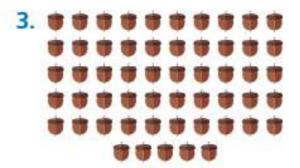
How many objects are there? Write a number to show how many.



leaves



connecting cubes



acorns



connecting cubes

#### How can you show how many?

5. STEM Connection Erik plays a video game about flying. There are clouds in the sky. How many clouds are there?



clouds

 Extend Your Thinking Mr. Cho writes this number on the board. Make a drawing to show how many.



#### Reflect

How can patterns help you count objects and write a number to show how many?

Math is... Mindset

How have you shown respect for your classmates?

Unit Review Name

#### **Vocabulary Review**

Use the vocabulary to complete each sentence.

column pattern

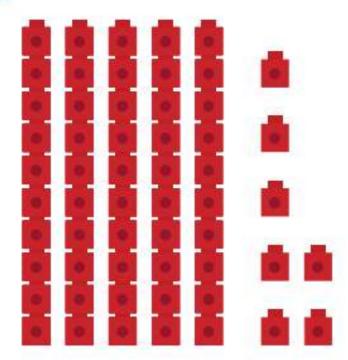
number line row

ones

- I. A \_\_\_\_\_ in a number chart shows numbers placed side by side.
- 2. When ones go up by I to 9 and then start again at O, it is called a \_\_\_\_\_\_.
- A in a number chart shows numbers placed up and down.
- 4. The number 26 has 6
- 5. A line with numbers and arrows at both ends is a

#### Review

6.



How can you count the connecting cubes? Write the number.

\_\_\_\_ connecting cubes

- 7. Carrie is counting by Is. She starts at 54. What are the next 3 numbers she counts?
  - A. 53, 54, 55
  - B. 55, 56, 57
  - C. 56, 57, 58
- What numbers are missing? Write the missing numbers.

43, \_\_\_\_, 45, 46, \_\_\_\_, 48, 49



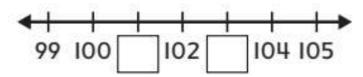


9. Which of these are true about the numbers in the row that begins with 21? Choose the correct answer.

1	2	3	4	5	6	7	8	9	10
П	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
101	102	103	104	105	106	107	108	109	110
Ш	112	113	114	115	116	117	118	119	120

- A. All the numbers begin with 2.
- B. The numbers go up by IO.
- C. The numbers go up by I.

IO. What numbers are missing? Write the numbers.



#### **Performance Task**

A store has I20 video games. Each game has a number label. Some of the labels fell off. Fill in the missing numbers on the chart.

1	2	3				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			
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71		73	74	75	76	77	78	79	80
81		83	84	85	86	87	88	89	90
91		93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
Ш	112	113	114	115	116	117	118	119	120

#### Reflect

What are some ways you use patterns when you count, read, and write numbers?

### Fluency Practice

Name

#### Fluency Strategy

You can put together and break apart 10 in many ways. Here is one way to put together 10.





$$3 + 7 = 10$$

Here is one way to break apart 10.



$$10 = 5 + 5$$

I. What number shows a way to put together IO? Write the number.

$$10 = 1 + \dots$$

#### Fluency Flash

What number shows a way to put together or break apart the number 10? Write the number.

#### Fluency Check

What number shows a way to put together or break apart the number 5 or 10? Write the number.

$$6.3 + = 5$$

10. 
$$10 = 5 +$$

II. 
$$10 = 3 +$$

12. 
$$10 = 2 +$$

13. 
$$5 = 3 +$$

#### Fluency Talk

How is breaking apart 10 the same as breaking apart 5? How is it different?

When might knowing how to put together 5 be used in math?

#### Place Value

**Focus Question** 

How can I use place value to represent and compare numbers?

# **Hi, I'm Jin.**I want to be a paleontologist. I collect dinosaur teeth. I have 2 boxes. Each bo

dinosaur teeth. I have 2 boxes. Each box has 10 teeth. I have 3 extra teeth. That is 2 tens and 3 more. I have 23 dinosaur teeth! Grouping tens and ones helps me count.







Name\_\_\_\_

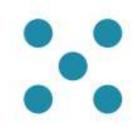
#### Seeing Dots

Listen to your teacher. Describe what you see.

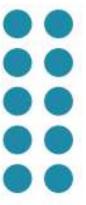
A.



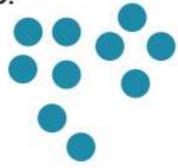
B.



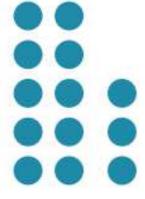
C.



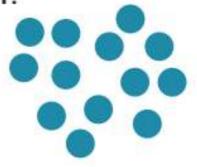
D



F.



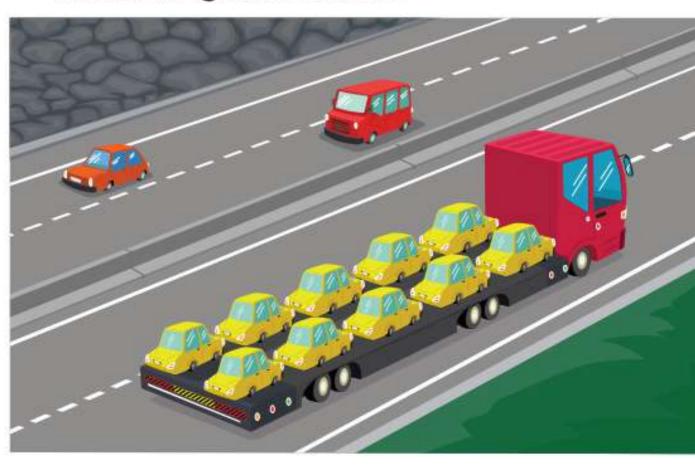
F



#### Numbers 11 to 19

# Pe Curious

# What do you notice? What do you wonder?

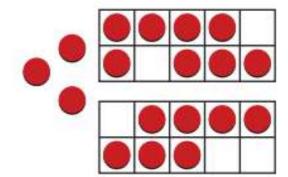


Math is... Mindset

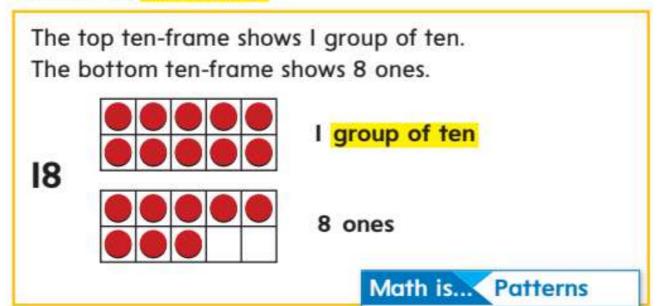
How do you feel about learning math?

#### Learn

How can you determine the number of counters?



You can fill ten-frames.



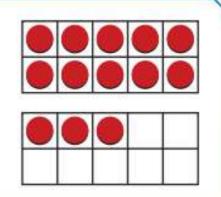
Numbers II, I2, I3, I4, I5, I6, I7, I8, and I9 are **teen numbers**.

What patterns do you notice in teen numbers?

They have I group of ten and some ones.

#### Work Together

How	many counter	s?
	group of ter	and
	ones is	<u> </u>

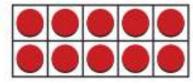


#### On My Own



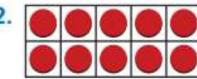
Name

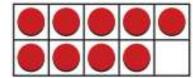
How many counters? Write the numbers.





group of ten and \_\_\_\_ ones is \_\_\_\_\_.

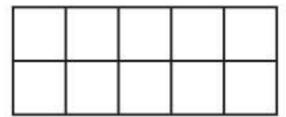




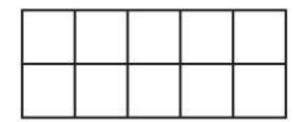
group of ten and

\_\_\_\_ ones is \_\_\_\_.

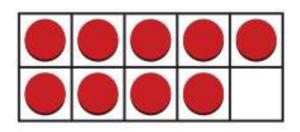
3. How can you show 17? Draw counters in the ten-frames. Write the numbers.

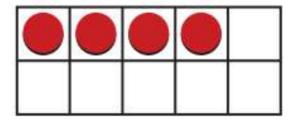


group of ten and ones is .



4. Error Analysis Do the ten-frames show 14?
Draw or cross out counters to show 14.





Extend Your Thinking Circle all the teen numbers. Explain your thinking.

5

10

13

19



How can you make teen numbers?

Math is... Mindset

How did you feel about learning math today?

#### Unit 3



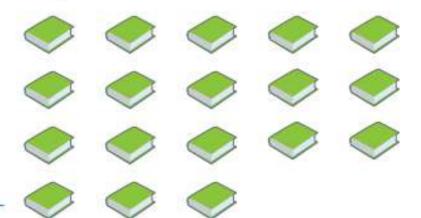
#### Show the Value of the Digit: Student Interview

Name

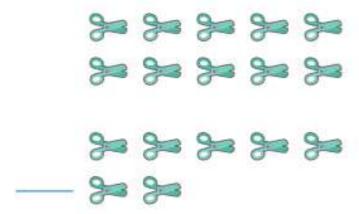
#### Card I Twelve Shoes



#### Card 2 Eighteen Books



#### Card 3 Seventeen Scissors



#### Reflect On Your Learning





## **Understand Tens**



What do you notice? What do you wonder?

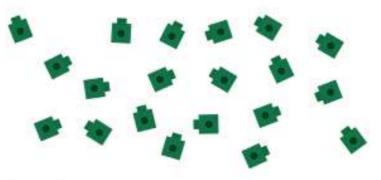




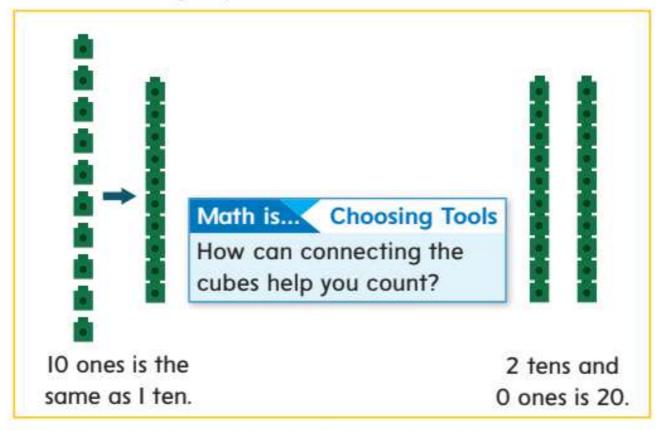
Math is... Mindset

What are your math superpowers?

How can you count the connecting cubes?



You can make groups of 10 cubes.



You can put together IO ones to make I ten.

#### Work Together

What number has 8 tens and 0 ones? Use connecting cubes to show the number.

8 tens and 0 ones is

#### On My Own



Name\_\_\_\_

How many groups of IO? Write the numbers.

tens and

\_\_\_\_\_ ones is \_\_\_\_\_.

2.

tens and

\_\_\_\_ ones is \_\_\_\_.

How many groups of ten? Use cubes to show the tens. Then write the number of tens and ones.

3. 90

tens and

ones

4. 40

tens and

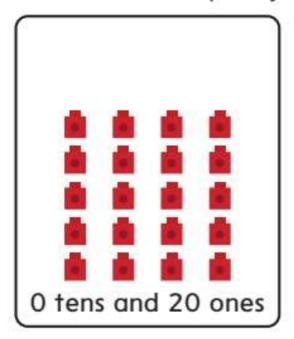
ones

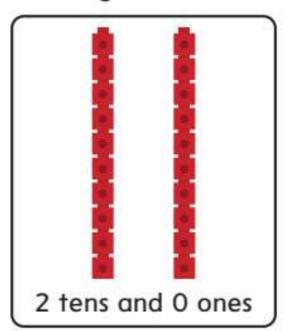
5. STEM Connection Jin sorts his dinosaur toys into groups of IO. He has 5 groups. How many dinosaur toys does Jin have?

\_\_\_\_ dinosaur toys



Extend Your Thinking Do these show the same number? Explain your thinking.







How can you show and group tens?

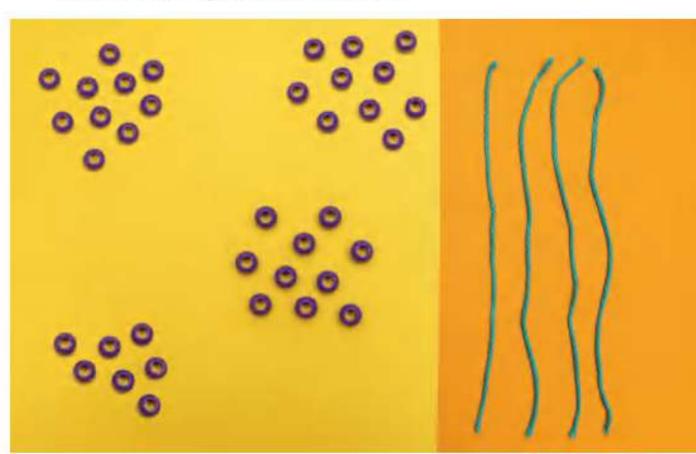
Math is... Mindset

How did you use your math superpowers today?

## Represent Tens and Ones

#### **Be Curious**

#### What do you notice? What do you wonder?



Math is... Mindset

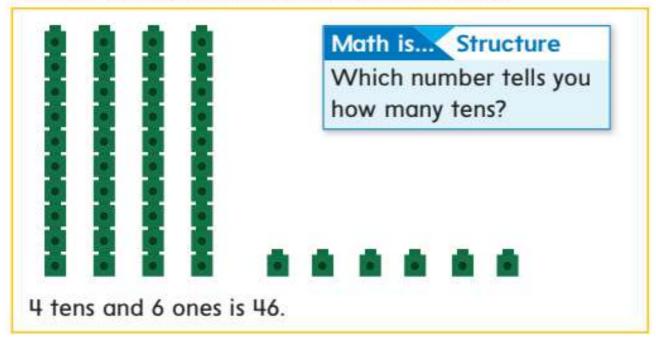
What do you want to accomplish today?

#### Learn

How can you show how many tens and ones?

#### 46

You can use cubes to show the tens and ones.



You can show a 2-digit number as tens and ones.

#### Work Together

How can you show 73? Draw or use cubes. Then write the numbers.

tens and \_\_\_\_ ones is \_\_\_\_.

#### On My Own



Name

How many? Circle the tens. Then write numbers to show how many.

tens and

\_\_\_\_ ones is \_\_\_\_\_. ones is \_\_\_\_\_.

tens and

3.

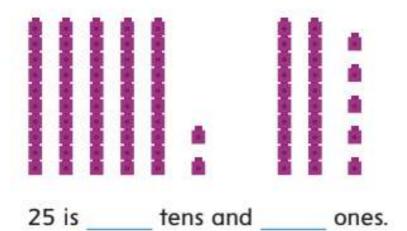
tens and

tens and

ones is \_\_\_\_\_ ones is \_\_\_\_\_.

75 is \_\_\_\_\_ tens and \_\_\_\_ ones.

6. Extend Your Thinking Which cubes show 25? Circle the cubes. Write how many tens and ones.



#### Reflect

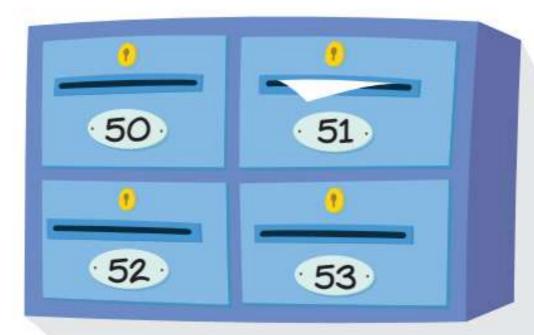
How can you show tens and ones?

Math is... Mindset

What goal did you accomplish in math today?

#### **Be Curious**

#### What do you notice? What do you wonder?

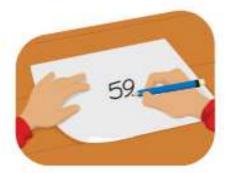


#### Math is... Mindset

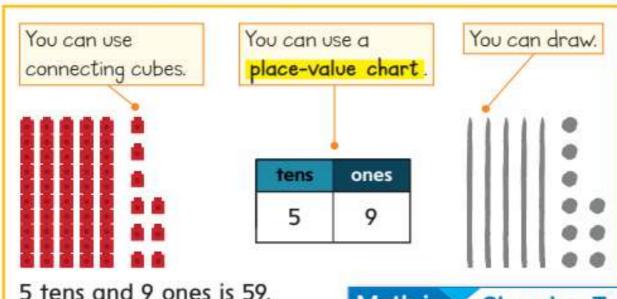
How can you work well with a classmate even when you might disagree?

#### Learn

How can you show a number with 5 tens and 9 ones?



You can show place value different ways.



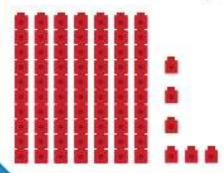
You can show the tens and ones of a number in different ways.

#### Math is... Choosing Tools

How do the connecting cubes show the tens and ones?

#### Work Together

How can you use a place-value chart to show how many?



tens	ones

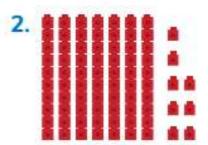
#### On My Own

Name

Write the number in the place-value chart.

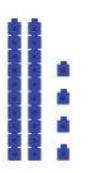


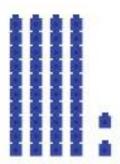
tens	ones



tens	ones

3. Which cubes show 42? Circle the cubes. Write to show the tens and ones.





42 is \_\_\_\_\_ tens and \_\_\_\_ ones.

4. How can you show 4 tens and 0 ones? Draw to show. Write the number in the place-value chart.

tens	ones

Extend Your Thinking Use the number 68 to answer the questions.

5. What is the value of the 6?

tens or

6. What is the value of the 8?

ones or

#### Reflect

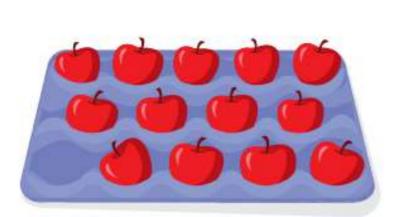
How can you show numbers with tens and ones?

#### Math is... Mindset

How did you work with a classmate even when you disagreed?

#### **Be Curious**

#### How are they the same? How are they different?





#### Math is... Mindset

What helps you understand your partner's ideas?

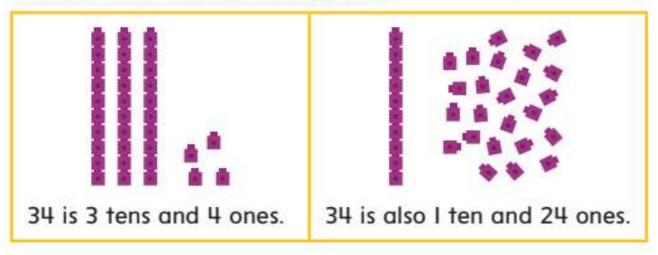
#### Learn

Grant shows a number with I ten and 24 ones. Laila shows a number with 3 tens and 4 ones.

Do they both show the same number?

Math is... Quantities
How can you show
the number?

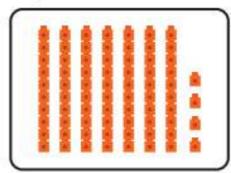
You can show the tens and ones.

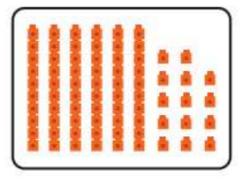


You can show a number in different ways.

#### Work Together

Does each group show the same number? How do you know? Write each number.





Copyright to McGrow-Hill Enscoll

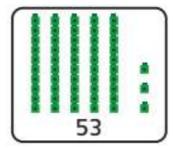
#### On My Own



Name

#### Circle the answer to each problem.

I. Which shows a different way to make the number shown?

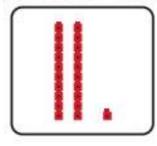


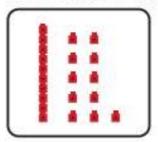




2. Do these show the same number?

Yes No





Write the numbers.

3. STEM Connection Jin has 76 fossils. What are two ways he can show the number?

tens and \_\_\_\_ ones is \_\_\_\_.

tens and \_\_\_\_ ones is \_\_\_\_.



#### Draw to show your thinking.

4. How can you draw to show the number 29?

5. How can you draw to show 29 a different way?

- Extend Your Thinking How can you show 49 in different ways? Use connecting cubes to help. Write the numbers.

0 tens and ones

I ten and ones

tens and 29 ones

3 tens and ones

tens and 9 ones

#### Reflect

How can you show a number in different ways?

Math is... Mindset

What did you do to understand your partner's ideas?

## **Compare Numbers**

#### **Be Curious**

#### What do you notice? What do you wonder?



#### Math is... Mindset

What helps you work well in a team?

#### Learn

Marcy has 39 erasers. Frank has 82 erasers.

Who has more erasers?

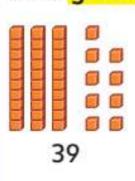


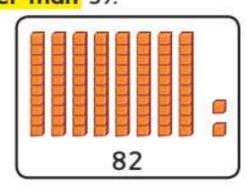
Frank's Erasers



You can compare the numbers to show who has more.

Compare the tens. 8 tens is more than 3 tens. 82 is greater than 39.





If the tens are the same, you compare the ones next.

A number can be greater than, less than, or equal to another number.

#### Math is... Choosing Tools

What is another tool you can use to compare numbers?



#### Work Together

Which number is greater? Circle the answer. Tell how you know.

74

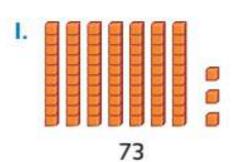
70

#### On My Own

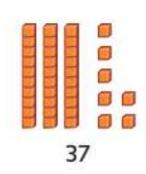


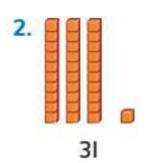
Name

How can you compare the numbers? Circle is greater than, is less than, or is equal to.

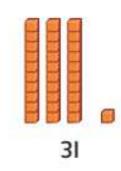


is greater than is less than is equal to



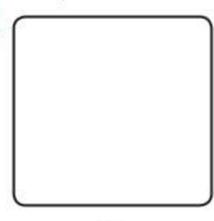


is greater than is less than is equal to

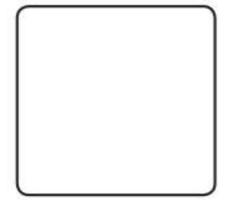


How can you compare the numbers? Draw to show the tens and ones. Circle is greater than, is less than, or is equal to.

3.



is greater than is less than is equal to



Copyright © McGraw Hitt Efficients

#### How do the numbers compare? Write greater or less than.

4. 25 is than 41 5. 68 is than 66

6. Error Analysis Harper's book has 38 pages. Eli's book has 48 pages. Harper says her book has more pages. How can you help Harper compare the numbers?

7. Extend Your Thinking What numbers can make the sentence true? is less than \_\_\_\_\_.

#### Reflect

How can you know which number is greater?

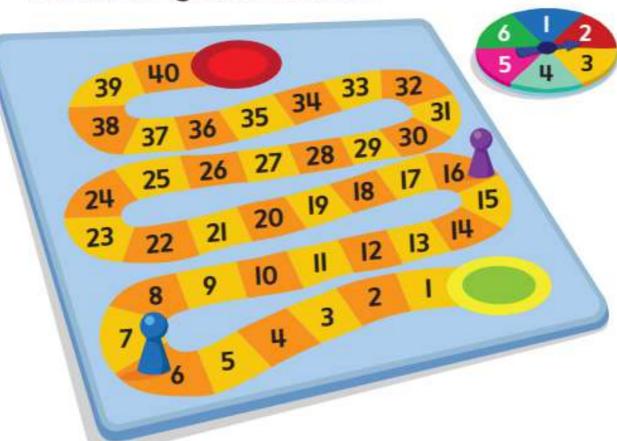
Math is... Mindset

How did you work with your team today?

# Compare Numbers on a Number Line

## Be Curious

# What do you notice? What do you wonder?



#### Math is... Mindset

What helps you feel relaxed when you are frustrated?

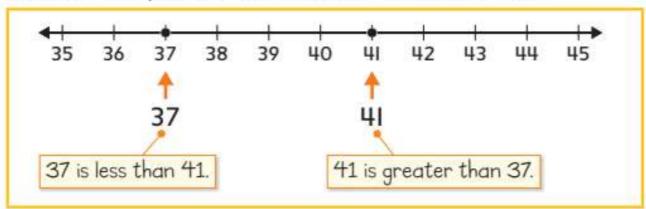
#### Learn

Quinn reads for 41 minutes on Monday. She reads for 37 minutes on Tuesday.

On which day does Quinn read for more minutes?

Reading Log		
Day	Time (Minutes)	
Monday	41	
Tuesday	37	

You can compare the numbers on a number line.



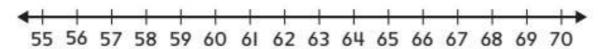
On a number line, the number to the right is greater. The number to the left is less.

### Math is... Structure

If you know 41 is greater than 37, what else do you know?

# Work Together

Which number is greater, 59 or 66? Show your thinking on the number line.

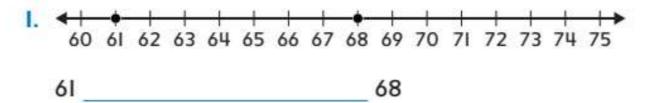


## On My Own



Name\_\_\_\_

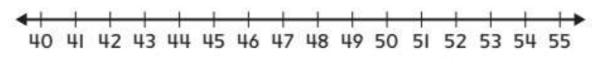
Write is greater than, is less than, or is equal to.



Draw dots to show the numbers on the number line. Write is greater than, is less than, or is equal to.

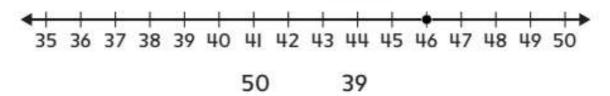
4. STEM Connection Jin digs for fossils. He digs 49 holes in his yard. He digs 51 holes in his garden. Use the number line and words to compare the numbers.



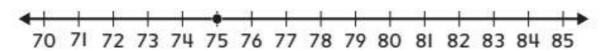


19	- 5

Which number completes the sentence? Circle the number. 46 is greater than



6. Extend Your Thinking What number is less than 75? Draw a dot on the number line to show your answer. Explain your thinking.



# Reflect

How can a number line help you compare numbers?

#### Math is... Mindset

Were you relaxed or frustrated during math today?

# Use Symbols to Compare Numbers

# ?

# **Be Curious**

# What do you notice? What do you wonder?





# pyright is Michael Mill Eth.

#### Math is... Mindset

How can you be flexible in your thinking?

#### Learn

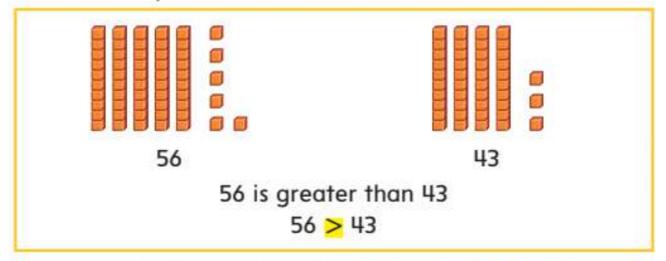
The pet store has 56 clownfish and 43 goldfish.

Which kind of fish does the pet store have more of?





You can compare the numbers.



You can use > (greater than), < (less than), and ≡ (equal to) to compare numbers.

## Math is... Thinking

Why might you want to compare two numbers?

# Work Together

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

31 () 13

## On My Own

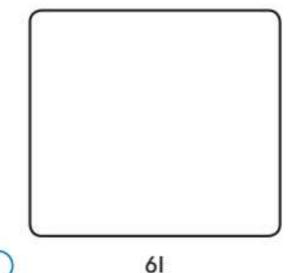
Name

Which sign matches the meaning? Circle >, <, or =.

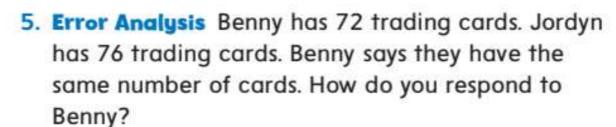
- less than
   equal to
   greater than

How can you compare the numbers? Draw the tens and ones. Write >, <, or =.





63



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

6. 39 ( ) 27

7. 88 ( )88

8. 48 ( ) 49

- 9. 57 75
- 10. Extend Your Thinking The pet store sells 47 kinds of cat food. It sells 65 kinds of dog food. How can you compare the numbers using >, <, or =? Explain your thinking.

# Reflect

How did you work like a mathematician to compare numbers?

Math is... Mindset

How were you flexible in your thinking today?

# **Vocabulary Review**

Use the vocabulary to complete each sentence.

compare

equal to

greater than

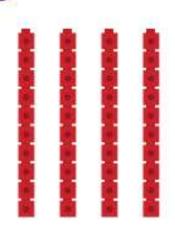
ten

less than

- I. The = sign means \_\_\_\_\_\_.
- 2. The < sign means \_\_\_\_\_\_.
- 3. A group of IO ones is I \_\_\_\_\_\_\_.
- 4. To look at numbers and see which is greater is to
- 5. The > sign means ...

# Review

Look at the cubes.Complete the sentence.



tens and 0 ones is \_\_\_\_\_.

- 7. What is another way to show the number 18?
  - A. I ten and I one
  - B. I ten and 8 ones
  - C. 8 tens and I one
- 8. Look at the number.

75

Complete the sentence.

tens and	ones is	
iens unu	ones is	- 1

Is the comparison true or false? Mark the correct answer.

	True	False
17 = 17		
39 < 93		
53 > 81		



IO. Use the number line.



Is the comparison true or false? Mark the correct answer.

	True	False
80 is less than 77.		
78 is greater than 72.		
83 is greater than 86.		

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

26 ( 29

- 12. How can you compare the numbers? Write >, <, or =. 51 (
- I3. How can you compare the numbers? Write >, <, or =.

63 (

#### **Performance Task**

Jin's class takes a bus to the history museum.
 There are 27 students on the bus.

Part A: There are fewer adults than students on the bus. How many adults might be on the bus?

Part B: 10 people are allowed in an exhibit at one time. Can Jin's entire class go into an exhibit together? Why or why not?

Part C: How might Jin's teacher separate the class into groups so every student can go into an exhibit?

# Reflect

What are different ways you can use place value to show and compare numbers?

Cooxinght to McGrow-Hill Ethicotion

# Fluency Practice

Name

# Fluency Strategy

You can count on to help you add.

$$4 + 2 = ?$$

5 6

So, 
$$4 + 2 = 6$$
.

I. How can you draw to show how to add 7 + I? Write the number.

#### Fluency Flash

How can you count on to add? Write the number.

5

$$3 + 2 =$$

$$5 + 1 =$$

# Fluency Check

What number shows a way to put together or break apart? Write the number.

6. 
$$7 + _{--} = 10$$

7. 
$$5 = 5 + ____$$

What is the sum? Count on to add.

8. 
$$6 + 1 = ____$$

II. 
$$3 + 2 =$$

12. 
$$7 + 1 =$$
\_\_\_

10. 
$$5 + 2 =$$

#### Fluency Talk

What are some tools you could use to help you count on to add? Explain.

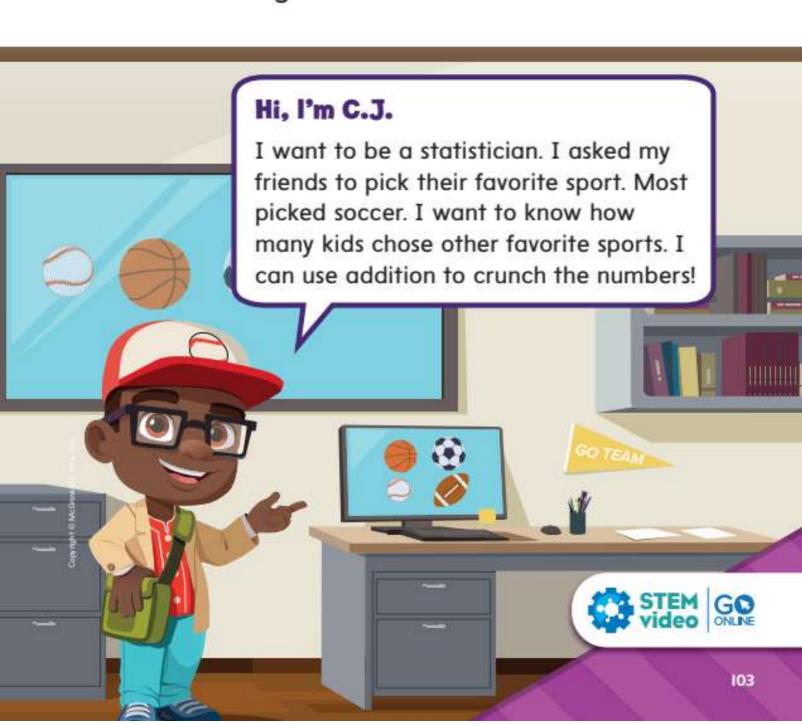
What are some tools you could use to help you break apart 10?



# Addition within 20: Facts and Strategies

**Focus Question** 

What strategies can I use to add?





Name\_\_\_\_

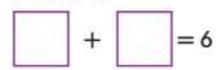
# Missing Numbers in Shapes

Look at each puzzle. Find the missing numbers.

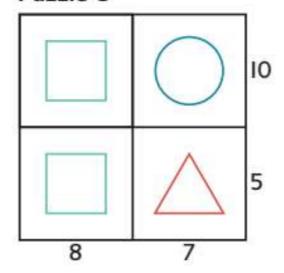
#### Puzzle I



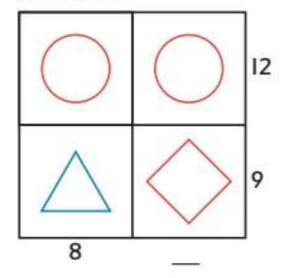
#### Puzzle 2



#### Puzzle 3



#### Puzzle 4



# Be Curious

# What do you notice? What do you wonder?



#### Math is... Mindset

How well do you think you will understand today's lesson?

#### Learn

#### How many frogs are there?

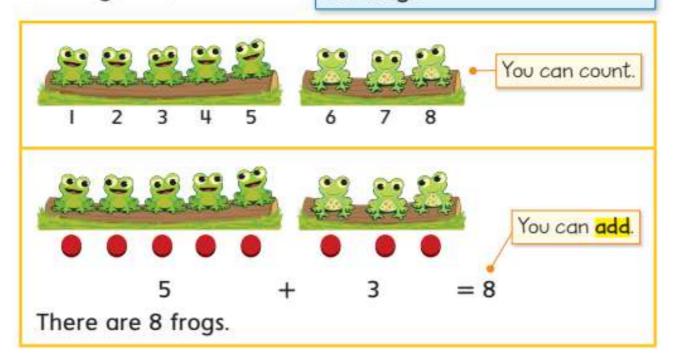
You can count or add to get the total.





#### Math is... Modeling

What is another way to show the frogs?



One way to find a sum is to add the addends.

# Work Together

How many ducks? Explain how you can add.



ducks

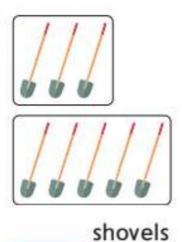
## On My Own

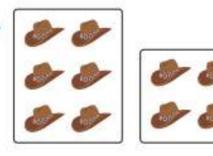


Name

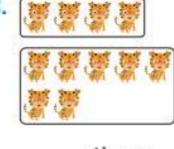
How many? Write the number.

I.





hats



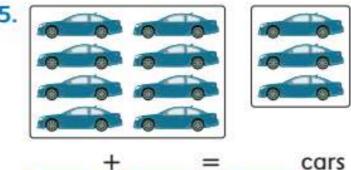
tigers



basketballs

How many? Write numbers to match the picture.

5.





7. How many leaves? Write the number.





leaves

8. Extend Your Thinking Draw a picture to show how to add 4 + 2.

# Reflect

Why is adding sometimes quicker than counting?

Math is... Mindset

How well have you understood today's lesson?

# P Be Curious

# What question could you ask?



#### Math is... Mindset

What behaviors show that you are an active listener?

#### Learn

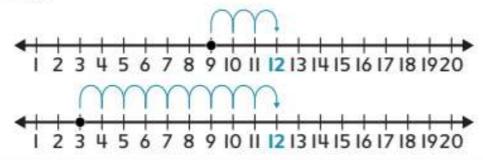
Hadley blows 9 bubbles. Anthony blows 3 bubbles. **How many** bubbles do they blow?

You can use a number line to count on.



Start with one addend. Count on by the other addend.

$$9 + 3 = 12$$



Counting on is quicker when you start with the greater addend.

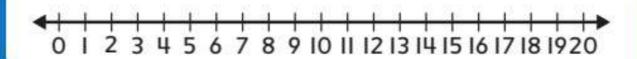
Math is... Choosing Tools

What other tools can you use to find a sum?

# Work Together

What is the sum? Use the number line.

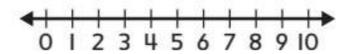
$$4 + 13 = ____$$

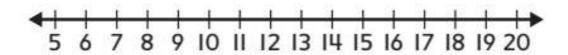


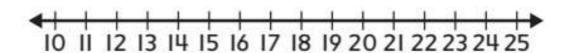
## On My Own

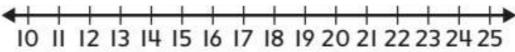
Name

How can you count on to add? Write the sum.





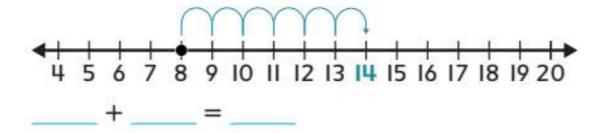




6. In one class, 2 students like baseball. In another class, 9 students like baseball. How many students in both classes like baseball?



Extend Your Thinking Write the addends and sum that match the number line.



# Reflect

How is a number line a useful tool for adding?

#### Math is... Mindset

How did you show that you were an active listener today?

# Be Curious

# What do you notice? What do you wonder?



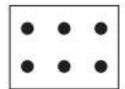
### Math is... Mindset

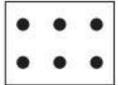
What helps you want to do your best work?

#### Learn

How many dots are there?

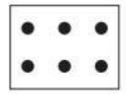
You can use doubles to add.

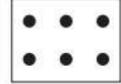




There are 6 dots on each card.

Both addends are 6.





$$= 12$$

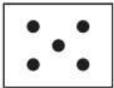
When you use doubles, the two addends are the same.

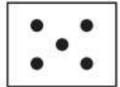
Math is... Quantities

What does it mean to be a double?

# Work Together

How many dots are there? Explain how to add.





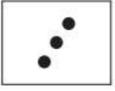
\_\_\_\_ dots

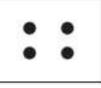
## On My Own



Name

How many dots are there? Write numbers to match the picture.





What is the sum?

7. STEM Connection Jin saw 5 dinosaur bones last year and 5 dinosaur bones this year. How many dinosaur bones did he see?

+ \_\_\_\_ = \_\_\_\_ dinosaur bones



8. Tyler eats 2 grapes. Sarah eats 2 grapes. How many grapes do they eat?

\_\_\_\_ + \_\_\_ = \_\_\_ grapes

9. Extend Your Thinking Draw to explain how to add doubles.

# Reflect

How do you know when you can use doubles to add?

Math is... Mindset

How have you done your best work?

# Be Curious

Tell me everything you can.



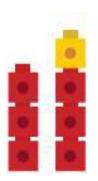
#### Math is... Mindset

What behaviors show that you respect your classmates?

## Learn

#### How many cubes are there?

You can use doubles to help you add.

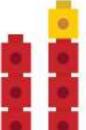


$$3 + 4 = ?$$

Add 
$$3 + 3 = 6$$
.

Then add I more.

$$3 + 4 = 7$$



#### Math is... Patterns

What do you notice when you add I or 2 to a double?

$$7 + 9 = ?$$

$$\bigcirc$$



Add 
$$7 + 7 = 14$$
.

$$\bigcirc$$

Then add 2





more.

$$7 + 9 = 16$$







## Work Together

Use doubles to add. Explain your thinking.





## On My Own

Name

How can you use doubles to add? Write the sum.

$$1. 4 + 3 =$$

Players		
Bulldogs	8	
Pumas	10	

How many players are on the two teams?

\_\_\_\_ players



10. Extend Your Thinking The coach has 4 baseballs.
She gets 5 more baseballs. How many baseballs does the coach have now?

Write an equation to match the problem.

774		
+	=	

# Reflect

How do you know when a double can help you add?

#### Math is... Mindset

How have you shown that you respect your classmates?

# Make a 10 to Add

# Be Curious

# What do you notice? What do you wonder?



Math is... Mindset

What feelings do you have about learning math?

#### Learn

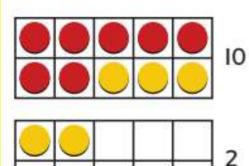
Zoe has 7 markers. Max has 5 markers.



#### How many markers do they have?

You can make a 10 to add 7 + 5.

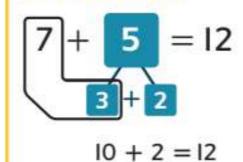
One way is to use ten-frames.



$$10 + 2 = 12$$

You can make a 10 to add.

Another way is to use number bonds.



#### Math is... Connections

Why can you use the sum of 10 + 2 to find the sum of 7 + 5?

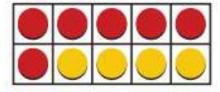
# Work Together

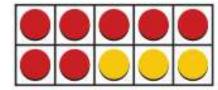
How can you make a 10 to add 3 + 8? Show your thinking.

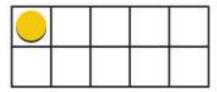
## On My Own

Name

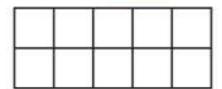
#### What is the sum?

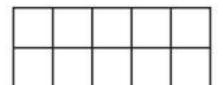




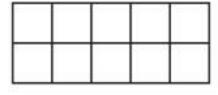


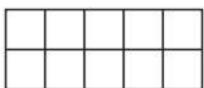
#### What is the sum? Show how to make a 10 to add.



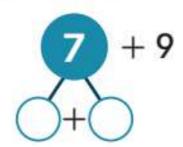


$$4.9 + 4 =$$





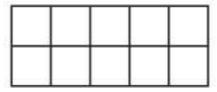
$$6.7 + 9 =$$

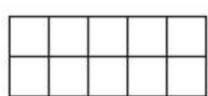


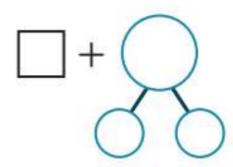
Beth has 6 baseballs. She finds 9 more baseballs.
 How many baseballs does she have? Draw to show your thinking.

baseballs

Extend Your Thinking Show how to add 6 + 7 in two different ways.







Reflect

How can making a 10 help you add?

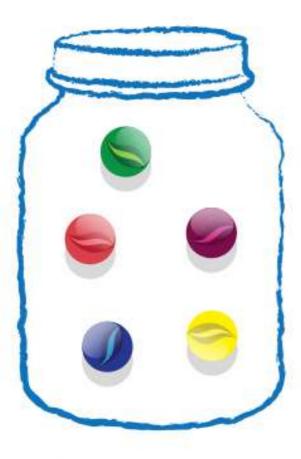
Math is... Mindset

How did you feel about learning math today?

# Choose Strategies to Add

# **Be Curious**

# What do you notice? What do you wonder?





#### Math is... Mindset

How can you understand a problem situation?

#### Learn

Dan has 6 marbles.

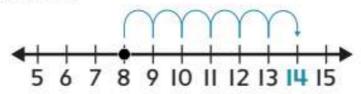
Linda has 8 marbles.

How many marbles do they have in all?

You can add 6 + 8 in different ways.



You can count on.

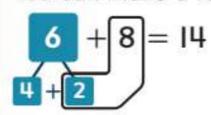


You can use doubles.



$$6 + 8 = 14$$

You can make a 10.



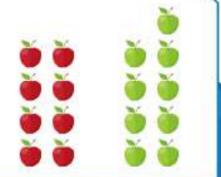
You can add two numbers in different ways.

Math is... Choosing Tools What tools can you use to add?



#### Work Together

What is the sum of 8 + 9? Explain how you added. apples



#### On My Own

Name

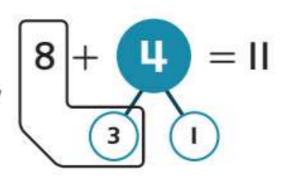
What is the sum? Tell or show how you added.

$$1.6+7=$$

5. Evan skis down a hill 9 times. Laura skis down the hill 4 times. How many times do they ski down the hill?

times

 Error Analysis Mel makes a 10 to add 8 + 4. How can you help Mel fix his mistake? Show or explain your thinking.



Extend Your Thinking Explain why you chose your strategy for exercise I.

#### Reflect

Which way of adding do you think is most useful? Why?

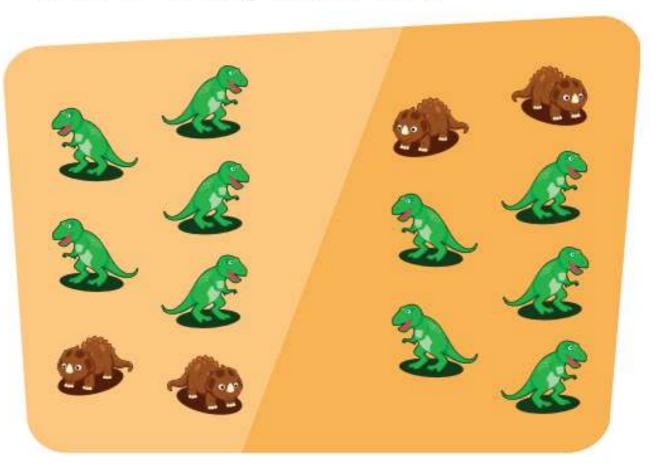
#### Math is... Mindset

What helped you understand a problem situation?

#### Use Properties to Add

## Be Curious

## How are they the same? How are they different?



Math is... Mindset

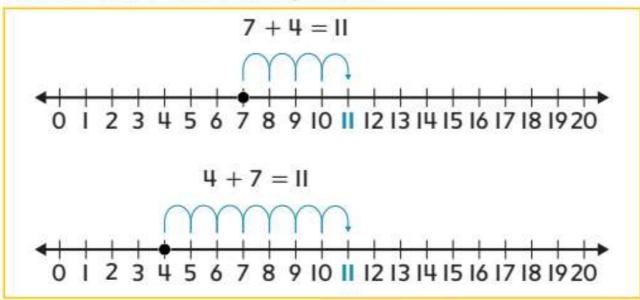
What helps you feel calm when you are angry?

#### Learn

Maya has 7 toy cars. Joe has 4 toy cars. How many toy cars do they have in all?



You can add 7 and 4 in any order.



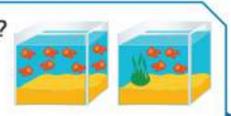
You can add two addends in any order. The sum is the same.

#### Math is... Choosing Tools

What other tools can you use to add 7 + 4?

#### Work Together

How many fish are in the two bowls? Gene adds 8 + 4. Toby adds 4 + 8. Will their sums be the same? Explain.



#### On My Own

Name

#### What is the sum?

5. Which has the same sum as 3 + 6?

$$A.2 + 6$$

$$B.4 + 3$$

$$C.6 + 3$$

6. What is another way to add 8 + I that has the same sum? Write the numbers.

7. STEM Connection Erik has 6 sports video games and 4 action video games. How many sports and action games does he have? Write numbers to show two ways to add.



Extend Your Thinking Why does 5 + 2 have the same sum as 2 + 5? Draw to show your thinking.

#### Reflect

Why can numbers be added in any order?

#### Math is... Mindset

How have you calmed yourself when you were angry?

### Solving Problems



Name\_\_\_\_

Solve the problem.

Sam has 5 crayons. His friend gives him 6 more.
 How many crayons does Sam have now?
 Circle the correct answer.

5 6 10 11 15 16

Tell or show why.

Ali has 8 red balloons and 6 blue balloons.
 How many balloons does Ali have in all?
 Circle the correct answer.

6 8 13 14 16 18

Tell or show why.

3. 4 boys and 9 girls are on the playground. How many children are on the playground? Circle the correct answer.

9 12 13 14 19

Tell or show why.

#### Reflect On Your Learning

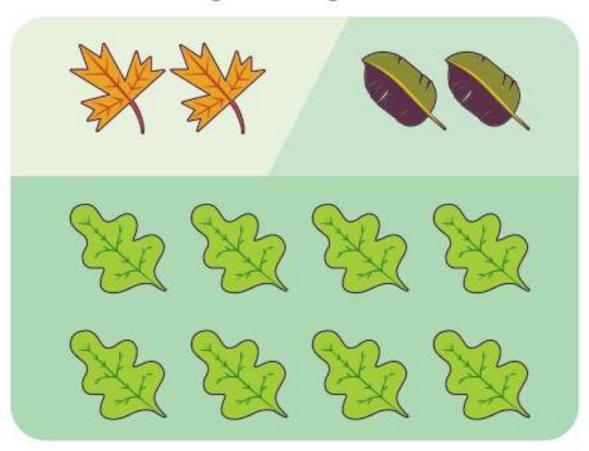




# ?

#### **Be Curious**

#### Tell me everything you can.

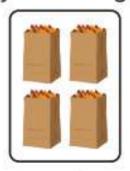


#### Math is... Mindset

What are some ways you can connect with your classmates?

#### Learn

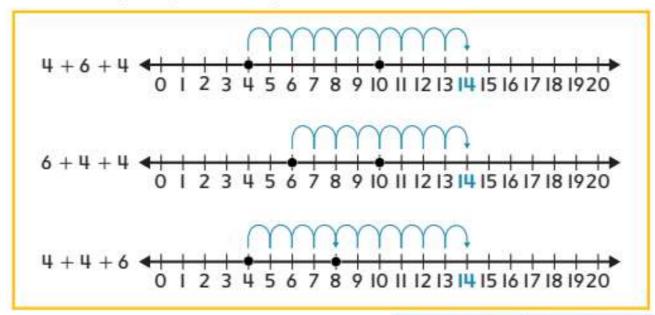
Ebony fills 4 bags. Mason fills 6 bags. Raja fills 4 bags.







How many bags do they fill?



You can add three addends in any order. The sum is the same.

#### Math is... Quantities

How is each part of the problem shown on the number line?

#### Work Together

Tim has 9 beads. Leah has I bead. Sye has I bead.

How many beads do they have? beads





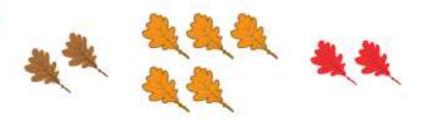


#### On My Own

Name

Which groups of leaves will you add first? Circle the groups. Then write the sum.

1.



$$2 + 5 + 2 =$$

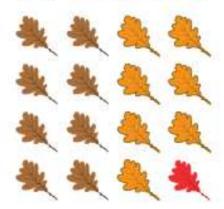


$$7 + 3 + 3 =$$

What is the sum?

5. 
$$4 + 8 + 2 =$$

7. Error Analysis Rainn has 8 brown leaves, 7 orange leaves, and I red leaf. Rainn says he has 15 leaves. How can you help Rainn add his leaves?



- 8. Emma has 4 footballs, Ken has 9 footballs, and Aki has 4 footballs. How many footballs do they have? footballs
- 9. Extend Your Thinking What are two other ways to order the addends 3 + 7 + 3 to find their sum?

#### Reflect

How can you decide how to add three numbers?

#### Math is... Mindset

How did you connect with your classmates today?

## Find an Unknown Number in an Addition Equation

#### **Be Curious**

Todd has some pieces of fruit in a bowl.

His mom puts more in.

Now there are more pieces of fruit.

How many did Todd's mom put in?

Copyright & McGraw-Hill Education

Math is... Mindset
What helps you solve

a problem?

#### Learn

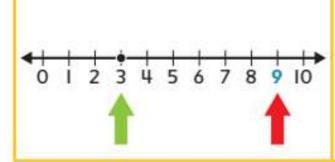
Todd has 3 pieces of fruit in a bowl. His mom puts more in. Now there are 9 pieces of fruit. How many pieces of fruit did Todd's mom put in?



You can find the unknown addend.

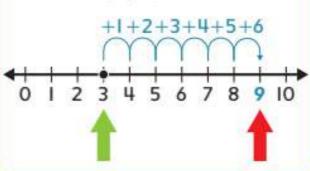
Start at 3 End at 9

$$3 + ? = 9$$



The unknown addend is 6.

$$3 + 6 = 9$$



You can use one addend and the sum to find an unknown addend.

Math is... Making Sense

How do you know to add to show the problem?

#### Work Together

Ama has 7 crayons.

Jack gives her some crayons.

Now Ama has I2 crayons.



How many crayons does Jack give her?

crayons

#### On My Own



Name

#### What is the unknown addend?

I. 
$$5 + = 8$$

$$+ 8 = 17$$

$$+ 6 = 12$$

#### 9. STEM Connection C.J. counts

8 points scored. Then he counts some more points. He counts 15 points in all. How many more points did he count?



Which matches the problem? Circle your answer.

$$8 + 15 = ?$$
  $8 + ? = 15$ 

$$8 + ? = 15$$

What is the unknown addend?

C.J. counts more points.

#### 10. Extend Your Thinking Draw a picture to show 3 + ? = 12.

#### Reflect

How can you find the unknown addend when you know the other addend and the sum?

Math is... Mindset

How have you solved a problem?

## Be Curious

What do you notice? What do you wonder?



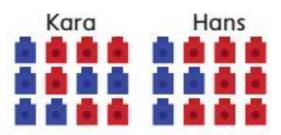
Math is... Mindset

What helps you stay focused on your work?

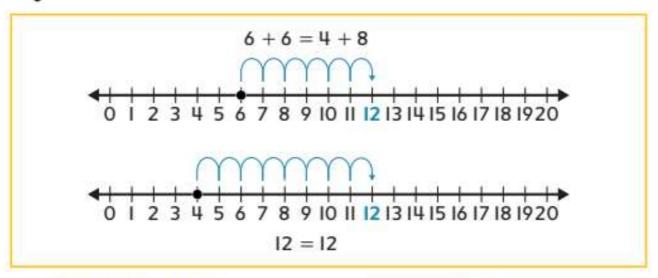
#### Learn

Kara has 6 blue cubes and 6 red cubes.

Hans has 4 blue cubes and 8 red cubes.



How can you show that Kara and Hans have an equal number of cubes?



The equal sign (=) means the amounts on both sides are equal.

#### Math is... Connections

How do the number lines show that 6 + 6 is equal to 4 + 8?

#### Work Together

John has 7 orange erasers and 3 purple erasers.



Mia has 4 orange erasers and 6 purple erasers.



How can you show that John and Mia have an equal number of erasers?

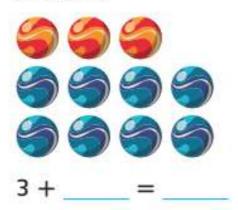
#### On My Own



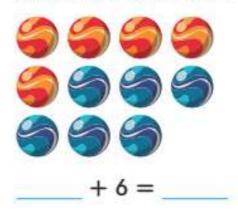
Name

#### Are the amounts the same? Write numbers to match the pictures.

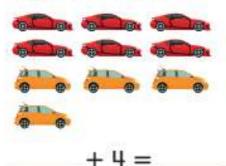
I. Akiko has 3 orange marbles and 8 blue marbles.



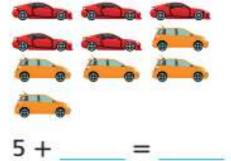
Tom has 5 orange marbles and 6 blue marbles.



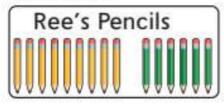
Nick has 6 red cars and 4 yellow cars.



Sue has 5 red cars and 5 yellow cars.



3. Error Analysis Milo says he has more pencils than Ree.





How can you show Milo that he has the same number of pencils as Ree?

4. Extend Your Thinking Draw a picture to show that 8 + 8 = 10 + 6 is true.

Reflect

When would you use an equal sign?

Math is... Mindset

What helped you stay focused on your work?

# ?

#### Be Curious

#### Is it always true?

$$2 + 3 = 4 + 1$$

#### Math is... Mindset

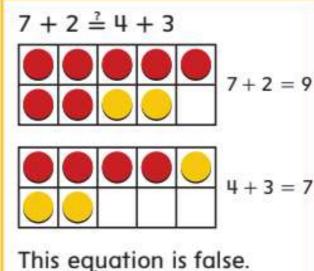
How can you show you understand how others are feeling?

#### Learn

Is this true or false?  $7 + 2 \stackrel{?}{=} 4 + 3$ 

You can compare the amounts to show if the equation is true or false.

An equation is true when



Math is... Choosing Tools
What is another tool you
could use?

#### Work Together

Is this equation true or false? Explain.

$$5 + 3 \stackrel{?}{=} 2 + 6$$

are equal.

#### On My Own

Name

Is the equation True or False? Circle the answer.

$$1.3+6=9$$

True False

$$2.9 + 2 = 17$$

True False

3. 
$$6 + 8 = 10 + 4$$

True False

$$4.8 = 7 + 1$$

True False

5. 
$$9+9=8+9$$

True False

$$6.2+7=5+3$$

True False

7. Is the equation 2 + 9 = 7 + 4 true? Write Yes or No.

- 8. Error Analysis Lila says the equation 8 + 3 = 6 + 5 is false. Do you agree? Show your thinking.
- 9. Dan says the equation 5 + 3 = 2 + 7 is true. Rami says it is false. Is it true or false? Show your thinking.
- 10. Extend Your Thinking What numbers make the equations true? Write numbers to make two different true equations.

#### Reflect

How can you decide if an equation is true?

#### Math is... Mindset

How have you shown you understood how others were feeling?

#### Unit Review Name

#### **Vocabulary Review**

Use the vocabulary to complete each sentence.

addend

doubles

equal sign

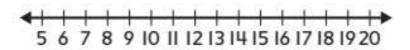
equation

unknown

- I. An addition includes an equal sign (=).
- 2. A missing number in an equation is the \_\_\_\_\_\_.
- 3. The amounts on both sides of an \_\_\_\_\_ are equal.
- 4. An \_\_\_\_\_ is any number being added to another number.
- 5. Two addends that are the same number are .

#### Review

Janet has 9 sweaters. She buys 5 more sweaters. How many sweaters does Janet have now? Count on to add.



A. II

B. 13

C. 14

- D. 17
- 7. A farm has 12 cows and 6 roosters. How many total cows and roosters are there?
  - A. 6

B. 14

C. 15

- D. 18
- 8. Which doubles fact helps you solve the addition problem shown in the picture?

$$A.2 + 2 = 4$$

B. 
$$3 + 3 = 6$$

$$C. 1 + 1 = 2$$

D. 
$$4 + 4 = 8$$



9. How many more triangles are needed to make a 10?



A. 3

B. 4

C. 6

- D. 7
- 10. Mac makes 9 baskets, Raul makes 6 baskets, Mac says 9 + 6 = 15 shows how many baskets they make in all. What is another way to show how many baskets they make?

**A.** 
$$6 + 9 = 15$$
 **B.**  $6 + 15 = 9$ 

B. 
$$6 + 15 = 9$$

C. 
$$9 + 9 = 15$$
 D.  $9 + 15 = 6$ 

D. 
$$9 + 15 = 6$$

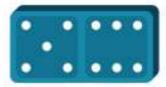
II. Choose the missing number in each number sentence.

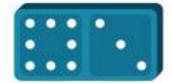
	0	ı	2	3
12 + ? = 15				
8 = 7 + ?				
16 = 14 + ?				
? + II = II			,	

#### **Performance Task**

A statistician records the numbers of times he picks two dominos with the same sum.

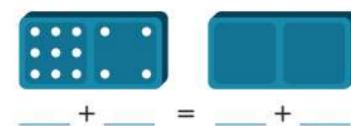
On the first round, he picks these dominos.





Part A: Do the dominoes have the same sum? Explain.

Part B: Draw a domino that has the same sum as the one below. Then write an equation comparing the sums.



Part C: If you flip the domino around, does the sum change? Explain.



What strategies can I use to add?

Copyright O McGrow-Hill Education

#### Fluency Practice

Name\_\_\_\_

#### Fluency Strategy

You can count back to help you subtract.

$$8 - 2 = ?$$

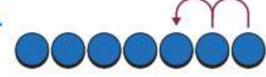
So, 
$$8 - 2 = 6$$
.

 How can you draw counters and a jump or jumps to show 5 — I? Write the number.

#### Fluency Flash

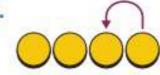
How can you count back to subtract? Write the number.

2.



$$7 - 2 =$$

3.



#### Fluency Check

What number shows a way to put together or break apart? Write the number.

6. 
$$10 = _ + 6$$

5. 
$$10 = 5 + ___$$

$$7.1 + _ = 10$$

What is the sum or difference? Write the number.

12. 
$$5 + 2 =$$

13. 
$$4 - 2 =$$
\_\_\_

10. 
$$4 + 2 = ___$$

II. 
$$6 - 2 =$$

#### Fluency Talk

How can you count back to subtract 7 − 2? Show and explain your work.

When would you use counting on in a problem? How is it the same and different from counting back?

## Subtraction within 20: Facts and Strategies

**Focus Question** 

What strategies can I use to subtract?

#### Hi! I'm Jordan!

I want to be an animal trainer. Some animal trainers work at zoos. They make sure the animals get the right amount of food. How much do you think an elephant eats? Chow down, fellas!





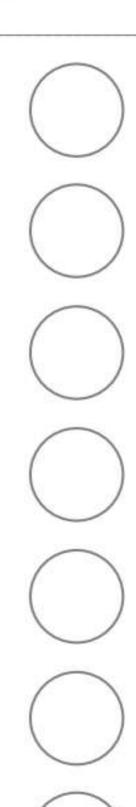
Name

#### Take the Last Counter

#### Rules

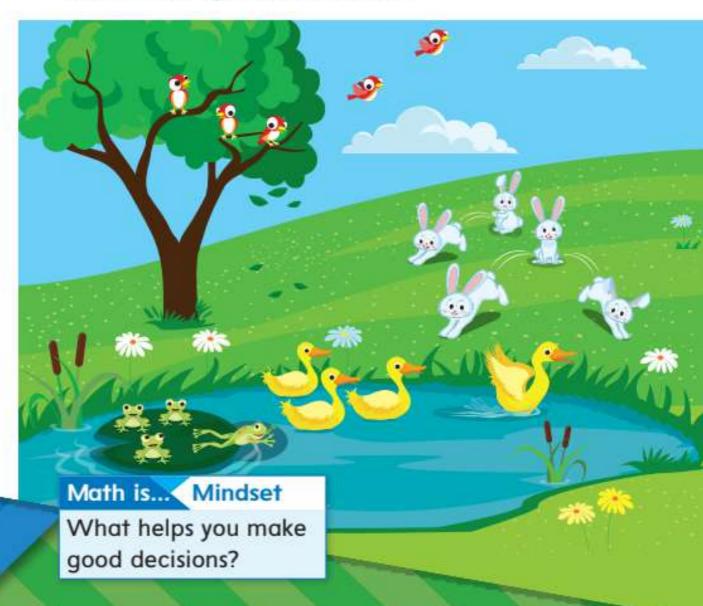
- Place I counter on each of the 7 circles.
- Player A goes first.
   Player A must take away
   I or 2 counters from the circles, starting from the top.
- Player B must now take away
   I or 2 counters from those that are left, from the top.
- Play continues with each player taking turns to take away
   I or 2 counters from the circles.
- The player to take away the last counter wins.

(A player may win by taking away 2 counters on the last turn.)



### **Be Curious**

## What do you notice? What do you wonder?



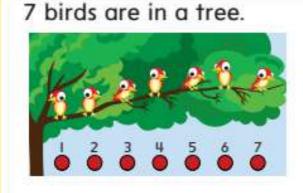
#### Learn

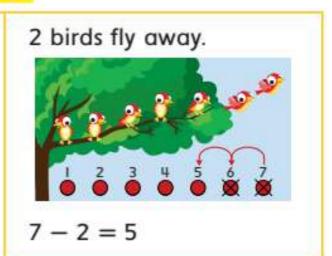
- 7 birds are in a tree.
- 2 fly away.

#### How many birds are left?

You can count back to subtract.







One way to subtract is to count back from the total to find the difference.

Math is... Connections What does each counter left show?

#### Work Together

There are 9 fish. 3 fish swim away. How many fish are left? fish





#### On My Own

Name

How many are left? Solve the equation.



$$9 - 2 =$$
\_\_\_\_\_





$$10 - 4 =$$
\_\_\_\_



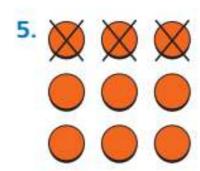




$$II - 2 = ____$$

#### What equation matches the picture? Complete the equation.





 Extend Your Thinking Draw a picture to show how to subtract 10 - 7.

# Reflect

How is counting back like subtracting?

#### Math is... Mindset

How can you know that you made good decisions?

# Count Back to Subtract

**Be Curious** 

What do you notice? What do you wonder?

# **Balloon Pop**



Math is... Mindset

Why is it important to speak clearly and concisely?

There are 12 bottles.

Bo knocks down 5 bottles.

How many bottles are still standing?

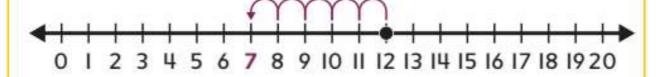


A number line can help you count back to subtract.



Math is... Quantities Why do you start at 12?

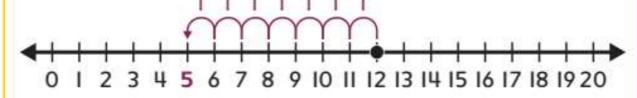
12 - 5 = 7



Another Way Start at 12.

Count back to 5.

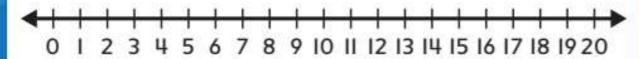
$$12 - 5 = 7$$



You can count back to subtract.

#### Work Together

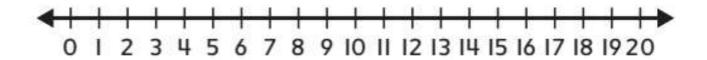
How can you count back to subtract 18 - 5? Use the number line.

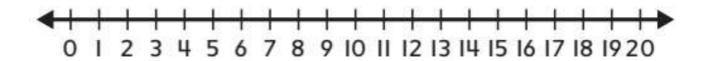


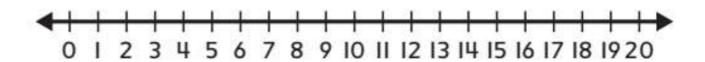
Name

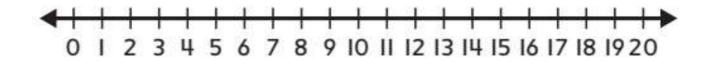
How can you count back to subtract? Use the number line. Write the difference.

1. 
$$9 - 3 =$$









#### What is the difference?

5. 
$$13 - 9 =$$

7. STEM Connection C.J. asks 17 students to say their favorite pet. 3 students answer C.J. How many students did not answer?

\_\_\_\_ students



 Extend Your Thinking Tell or show how to use a number line to subtract I3 — 8.

# Reflect

How do number lines help you subtract?

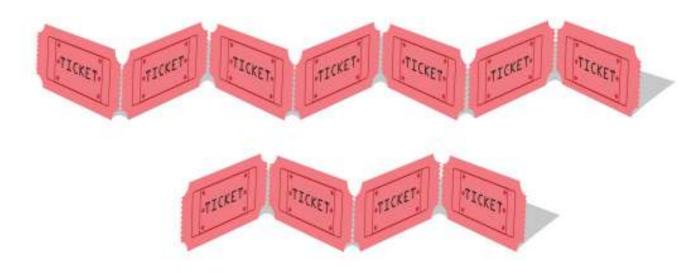
#### Math is... Mindset

How did speaking clearly and concisely help you share your ideas?

# Count On to Subtract

# Be Curious

# What question could you ask?



How can your strengths help you learn today?

How can you subtract 15 - 9?



You can count on to subtract.

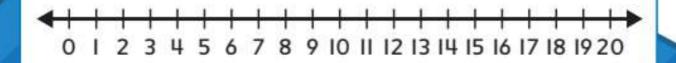
Start at 9. Count on to 15.

Math is... Connections

What other operation could you use?

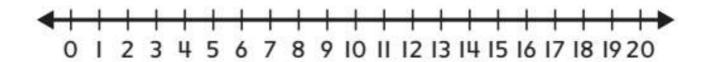
# Work Together

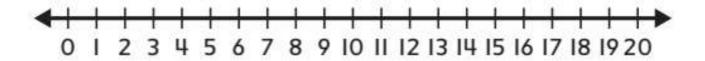
How can you count on to subtract 12 - 7? Use the number line.

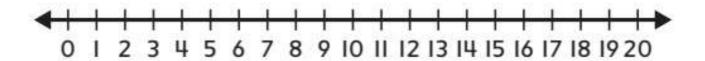


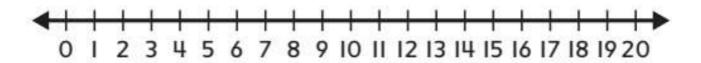
Name

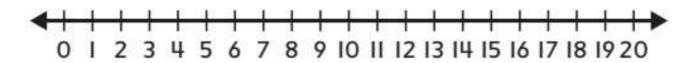
How can you count on to subtract? Use the number line. Write the difference.











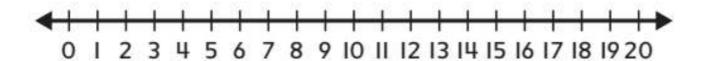
#### What is the difference?

6. 
$$12 - 9 =$$

8. Gehrman has 16 action figures. He gives 4 to his friend. How many action figures does he have left?

action figures

Extend Your Thinking How can you use a number line to count on to find a difference? Show an example.



# Reflect

How is counting on to subtract like counting on to add?

#### Math is... Mindset

How did your strengths help you learn today?

# Make a 10 to Subtract

# Be Curious

Tell me everything you can.

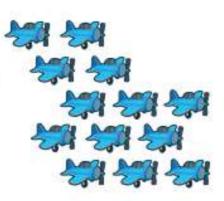


#### Math is... Mindset

How can different ideas help you learn better?

Ray has 13 toy planes. He gives 5 to Cia.

How many toy planes does Ray have left?



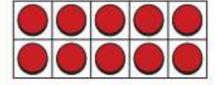
You can make a 10 to subtract.

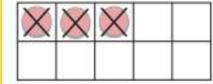
$$13 - 5 = ?$$

Break apart 5 to make a 10.

$$5 = 3 + 2$$

$$13 - 3 = 10$$





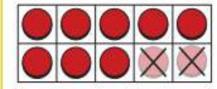
Math is... Thinking

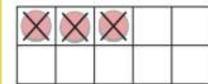
What do the 3 and 2 represent?

$$13 - 3 = 10$$

Then subtract 2.

$$10 - 2 = 8$$





Ray has 8 toy planes.

One way to subtract is to make a 10.

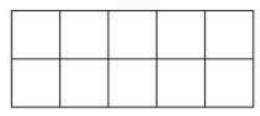


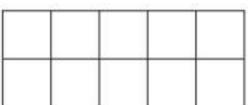
#### Work Together

How can you make a 10 to subtract 17 - 8?

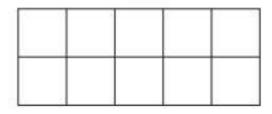
Name

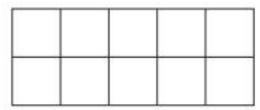
How can you make a 10 to subtract? Solve the equation.

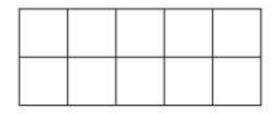


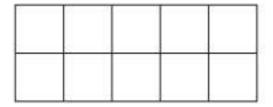


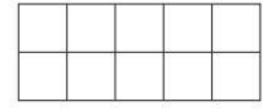
$$2.14 - 6 =$$

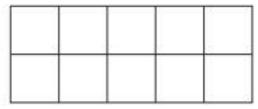






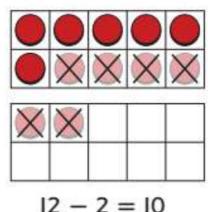






What is the difference?

7. Error Analysis Jorge uses ten-frames to subtract 12 - 5. How can you help him find the difference?



$$12 - 2 = 10$$

$$10 - 4 = 6$$

8. Extend Your Thinking There are 14 boats. 7 boats sail away. How many boats are left? Make a 10 to find the difference. Then solve a different way. Show your work.

boats

# Reflect

How can making a 10 help you solve a subtraction equation?

#### Math is... Mindset

How have different ideas helped you learn better?

# ?

# Be Curious

# How are they the same? How are they different?



#### Math is... Mindset

What other ways can you think of to solve a problem?

Jana has 14 crayons. She gives 6 crayons to her friend.

How many crayons does Jana have left?



You can use doubles to help you subtract.

Doubles

$$7 + 7 = 14$$

So, 
$$14 - 7 = 7$$
.



$$\times \times \times \times \times \times \times \times$$

Near Doubles

$$8 + 6 = 14$$



So, 
$$14 - 6 = 8$$
.



$$\bigcirc$$
XXXXXX

One way to subtract is to use doubles and near doubles.

Math is... Modeling

What do the counters represent?



#### Work Together

Micha has 16 markers. He gives 9 markers to Tom. How many markers does Micha have left? Use doubles to solve. Show your thinking.

Name\_\_\_\_

What is the difference? Write a double to help you subtract.

What is the difference? Explain how you used a double to help you subtract.



dolphins

- 8. Rajesh draws 9 pictures. He gives 5 pictures to his friends. How many pictures does Rajesh have now? pictures
- 9. Extend Your Thinking Explain how you can use doubles to help you subtract 10 - 6.

# Reflect

What ways have you learned so far to subtract?

Math is... Mindset

What ways have you used to solve a problem?

# Be Curious

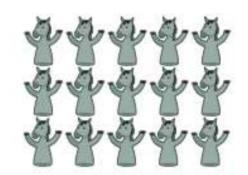
What do you notice? What do you wonder?



#### Math is... Mindset

What can you do today to help build a good relationship with a classmate?

Bea has 15 toy horses. She gives 7 toy horses to Max. How many toy horses does Bea have now?



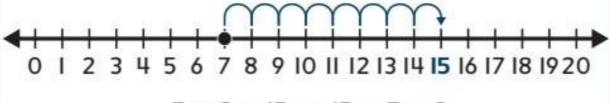
You can use addition to help you subtract.

$$15 - 7 = ?$$

Write an addition equation with an unknown addend.

$$7 + ? = 15$$

Find the unknown addend.



$$7 + 8 = 15$$
, so  $15 - 7 = 8$ .

You can write a subtraction equation as an unknown addend equation.

Math is... Structure How is subtraction like addition?

### Work Together

How can you add to subtract 12 - 8? Show your work.

Name

How can you use the addition equation to help you subtract? Write the difference.

1. 
$$8 + 7 = 15$$
, so 2.  $3 + 6 = 9$ , so

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

2. 
$$3 + 6 = 9$$
, so

$$9 - 3 = ...$$

What addition equation can help you subtract? Write the addition equation. Write the difference.

.....

9. STEM Connection C.J. asks 16 friends to name their favorite baseball team. 9 friends answer. How many friends did not answer?



friends

10. Extend Your Thinking How you can add to help you subtract 13 - 8?

# Reflect

How can you use addition to subtract?

#### Math is... Mindset

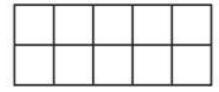
How were you able to build a good relationship with a classmate today?

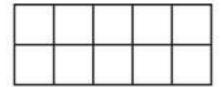
# **Showing Problems** with Equations



Name

 Mari has II flowers. Her friend gives her 6 more flowers. How many flowers does Mari have now? Show the problem using the ten-frames.





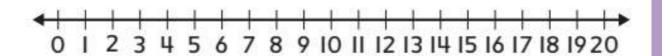
Circle the equation that shows the problem.

II + 6 = OR II - 6 =

Tell or show why you chose that equation.

2. Sarah holds 13 balloons. Then 5 balloons float away. How many balloons does Sarah have now?

Show the problem using the number line.



Circle the equation that shows the problem.

$$13 - 5 =$$

$$13 - 5 = OR 13 + 5 =$$

Tell or show why you chose that equation.

#### Reflect On Your Learning

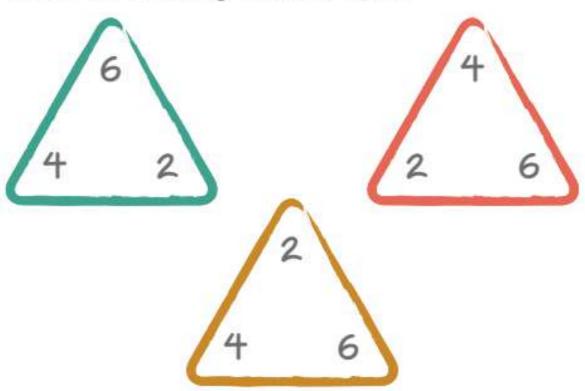




# ?

# **Be Curious**

# How are they the same? How are they different?

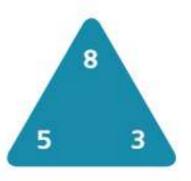


# Copyright © McGrow-Hill Education

#### Math is... Mindset

What helps you stay focused on your work?

How can you make equations using these numbers?



You can use a fact triangle to make related facts.

The facts in a **fact family** all use the same three numbers.

$$5 + 3 = 8$$

$$3 + 5 = 8$$

$$8 - 5 = 3$$

$$8 - 3 = 5$$



You can use a related fact to complete an equation.

Numbers in a fact triangle are related.

#### Math is... Explaining

How are the numbers in the fact triangle related?

# Work Together

How can you use a related fact to complete the equation?

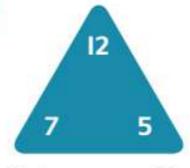
$$15 - ? = 6$$



Name\_\_\_\_

Complete the related facts for the fact triangle.

1.



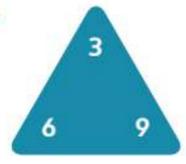
$$7 + _{_{_{_{_{_{_{_{_{_{_{1}}}}}}}}}} = 12$$

$$5 + 7 =$$

$$12 - _ = 5$$

$$_{--}$$
 - 5 = 7

2.

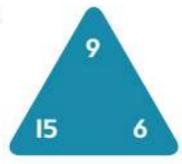


$$3 + 6 =$$

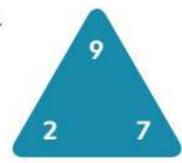
$$-3 = 6$$

What is the fact family for the fact triangle? Write the facts.

3.



4.



What two facts complete the fact family? Write the two facts.

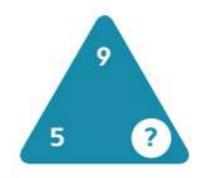
5. 
$$6 + 7 = 13$$

6. 
$$9 + 2 = 11$$

$$7 + 6 = 13$$

$$11 - 9 = 2$$

7. Error Analysis Brenda says different numbers can complete the fact triangle. Do you agree? Explain.



8. Extend Your Thinking The greatest number in a fact family is 7. What could the fact family be?

# Reflect

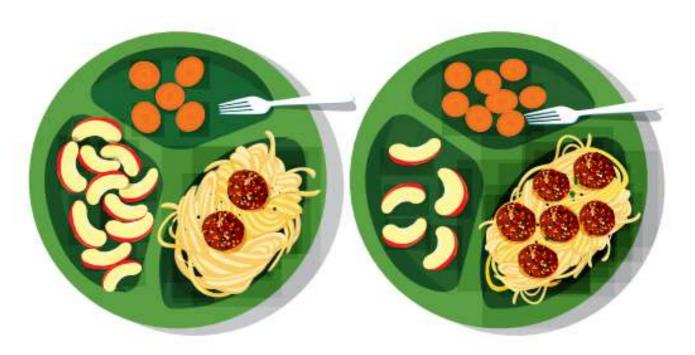
How can you make a fact triangle?

#### Math is... Mindset

What helped you stay focused on your work?

# **Be Curious**

# How are they the same? How are they different?



#### Math is... Mindset

How can you show respect for your classmates?

Liz had 14 trading cards. She lost some cards. Now she has 8 trading cards.



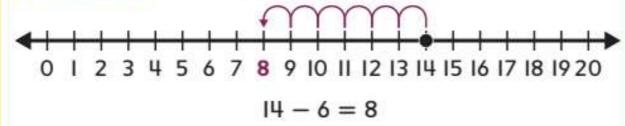
#### How many cards did Liz lose?

You can solve 14 - ? = 8in different ways.

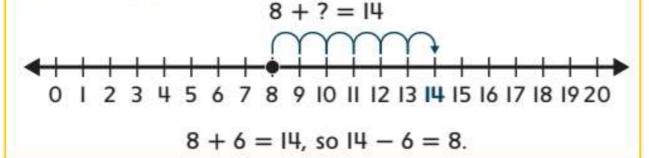
#### Math is... Structure

How can you check to make sure your solution is correct?

One Way is to count back.



Another Way is to think addition.



You can use strategies you know to solve equations.

# Work Together

Solve the equation in more than one way. Show your thinking.

$$9 = 17 - ?$$

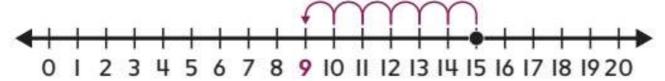


Name

How can you complete the equation? Tell or show how you solved.

$$= 11 - 3$$

7. Error Analysis Tony uses a number line to solve 15 - ? = II. He says the unknown number is 6. Do you agree? Explain.



8. Extend Your Thinking Show two ways to solve 12 - ? = 5. Explain your thinking.

# Reflect

How do you choose how to solve subtraction equations?

#### Math is... Mindset

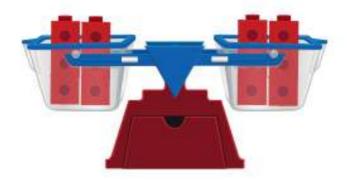
How have you shown respect for your classmates?

# ?

# **Be Curious**

### Is it always true?



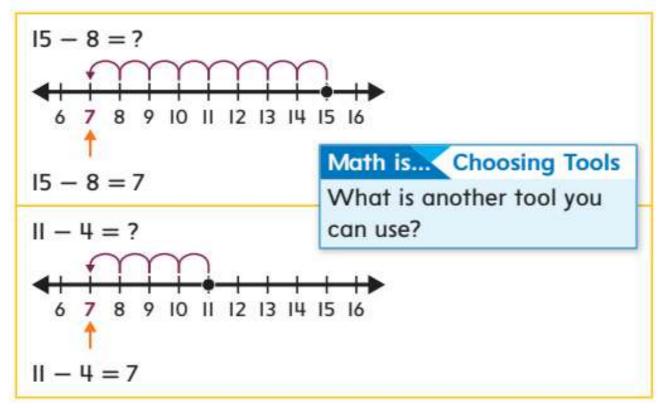


#### Math is... Mindset

What do you do to get yourself excited to learn?

Is this equation true or false?  $15 - 8 \stackrel{?}{=} 11 - 4$ 

You can make two equations.



The two equations have the same difference.

$$15 - 8 = 11 - 4$$

The equation is true.

# Work Together

Is this equation true or false? Explain.

Name\_\_\_\_

Is the equation true or false? Circle True or False.

$$1. 13 - 4 = 11$$

2. 
$$15 - 8 = 7$$

True

False

True

False

3. 
$$8-6=7-5$$

4. 
$$16 - 7 = 18 - 9$$

True

False

True

False

5. 
$$9 - 4 = 10 - 3$$

6. 
$$12 - 4 = 15 - 6$$

True

False

True

False

7. Is the equation 13 - 7 = 11 - 6 true? Write Yes or No. Explain your thinking.

Complete the equation to make it true.

8. 
$$_{-}$$
 = 18 - 5

10. STEM Connection Erik has 19 video games. He gives 5 away. Sam has 15 video games. He loses 2. Do Erik and Sam have the same number of video games left? Explain.



II. Extend Your Thinking Complete the equation to make it true.



What does the equal sign mean?

Math is... Mindset

How did you get excited to learn?

# Unit Review Name

# **Vocabulary Review**

Circle the example of the term.

subtract

$$5 + 1 = 6$$

$$15 - 8 = 7$$

difference

$$12 - 7 = 5$$

3. fact family

$$2 + 8 = 10$$

$$8 + 2 = 10$$

$$10 - 2 = 8$$

$$10 - 8 = 2$$

$$1 + 8 = 9$$

$$9 + 2 = 11$$

$$9 - 3 = 6$$

$$8 + 1 = 9$$

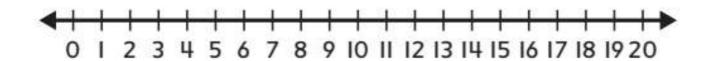
4. unknown

$$? - 4 = 2$$

equal sign

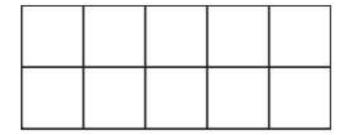
#### Review

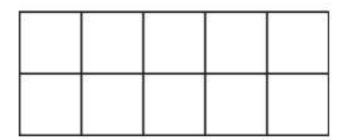
6. Count back to subtract. Write the difference.



7. Janet has 12 blueberries. She eats 4 blueberries. How many blueberries does Janet have left?

Use the ten-frames to subtract.





blueberries

8. What double can help you subtract 14 — 6?

$$A.5 + 9 = 14$$

B. 
$$14 = 13 + 1$$

C. 
$$14 = 4 + 10$$

D. 
$$14 = 7 + 7$$

9. Which number makes the equation true?

$$17 - ? = 8$$

- A. 6
- C. 9

- B. 8
- D. II
- 10. Which equations are part of the fact family from this fact triangle? Choose all the correct answers.



- A.7 + 7 = 14
- C.5 + 9 = 14

- B. 14 7 = 7
- D. 7 + 14 = 7
- II. Is the equation true or false? Circle True or False.

$$10 = 14 - 4$$

True

False

12. Which addition equation can you use to subtract 12 - 3?

$$A.3 + 3 = 6$$

B. 
$$5 + 7 = 12$$

$$C.9 + 6 = 15$$

D. 
$$9 + 3 = 12$$

#### **Performance Task**

Jordan feeds 15 birds at the pond. He feeds more ducks than geese.

Part A: Could Jordan have fed 8 geese? Explain your thinking.

Part B: How many ducks and how many geese could Jordan have fed? Give 3 possible options.

#### Reflect

Describe two ways to subtract. Which way do you find more helpful?

Unit 5

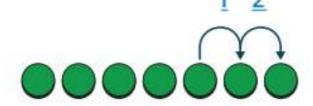
#### Fluency Practice

Name

#### Fluency Strategy

You can count up to help you subtract.

$$7 - 5 = ?$$



So, 
$$7 - 5 = 2$$
.

 How can you draw counters and a jump or jumps to show 8 - 7? Draw and then write the number.

$$8 - 7 =$$

#### Fluency Flash

How can you count up to subtract? Write the number.

2.





$$8 - 6 =$$
\_\_\_\_

$$5 - 4 =$$

#### Fluency Check

What is the sum or difference? Write the number.

$$7.7 + 2 =$$

8. 
$$6 + 2 =$$

10. 
$$6-5=$$

12. 
$$6 - 4 =$$

13. 
$$9 - 2 =$$

#### Fluency Talk

How can you use counters and jumps to subtract? Show an example and explain your work.

How is counting up to subtract the same as counting back to subtract? How is it different?

#### Shapes and Solids

**Focus Question** 

ЩЦ

TITITITI

6

What are shapes and solids?

#### Hi, I'm Riley.

I love cars! I want to be an automotive engineer. A car has lots of parts. The parts can be different shapes. What shapes can you see?



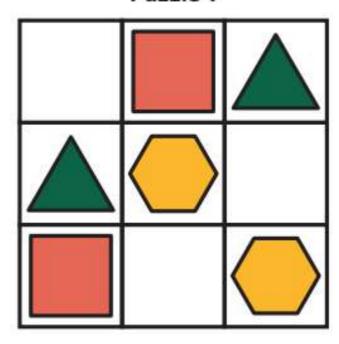


Name \_\_\_\_\_

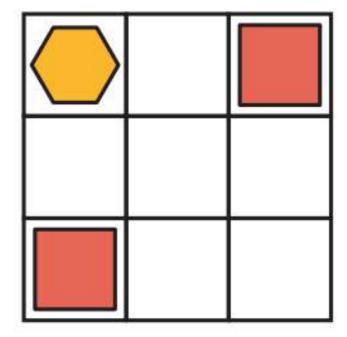
#### Shape Sudoku

Use pattern blocks to complete the puzzles.

Puzzle I

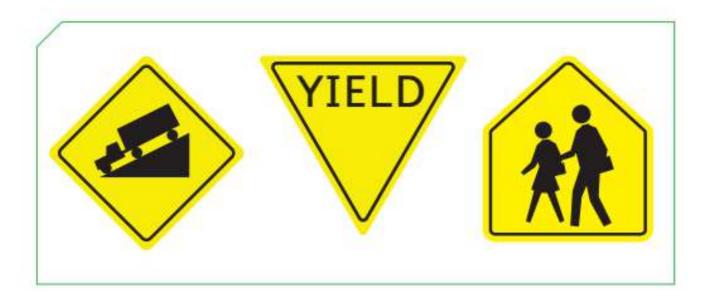


Puzzle 2



### Be Curious

#### How are they the same? How are they different?

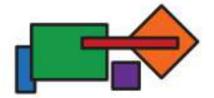


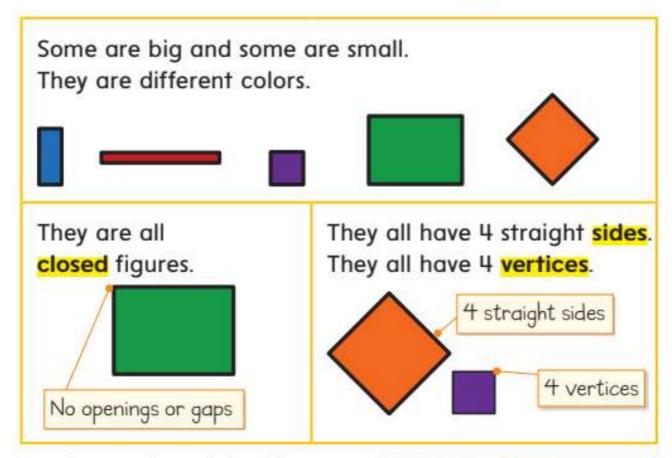
#### Math is... Mindset

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

#### Learn

#### How can you describe these shapes?





Vertices and straight sides are defining attributes of some 2-dimensional shapes.

Math is... Patterns
What patterns do
you see?

#### Work Together

What shape is this? Explain how you know.



#### On My Own



Name

Which shapes match the description? Circle all the correct answers.

closed shape



2. shape with 4 vertices



3. rectangle





4. square



- 5. Which statement is true for a square? Choose all the correct answers.
  - A. It has 4 vertices.
  - B. It has more sides than vertices.
  - C. All its sides are the same length.

- 6. Which statement is always true for a rectangle? Choose all the correct answers.
  - A. It is a closed 2-dimensional shape.
  - B. It has 4 vertices
  - C. All of its sides are the same length.
- 7. STEM Connection Erik is playing a video game about shapes. He has to find all the rectangles. Circle the rectangles.











8. Extend Your Thinking Carol says this shape is not a rectangle because the sides are all the same length. Do you agree with Carol?





What attributes are always the same for squares and rectangles?

#### Math is... Mindset

How have you and your classmates built a safe classroom culture?

#### Understand Non-Defining Attributes

#### Be Curious

#### Which doesn't belong?









Math is... Mindset

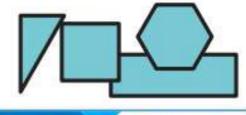
What do you do well in math? In reading?

#### Learn

Angie says these shapes are all the same.

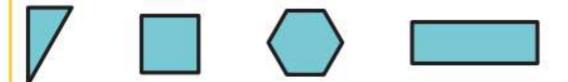
#### Do you agree?

All the shapes are blue.



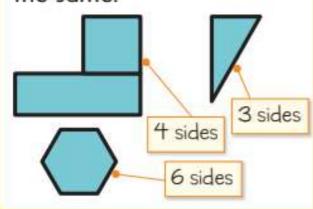
Math is... Patterns

How are the shapes alike and different?



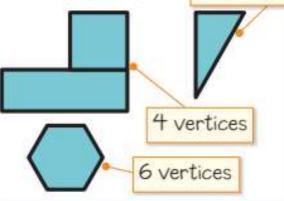
All the shapes are about the same size.

The number of sides is not the same.



The number of vertices is not the same.

3 vertices



Color and size are not defining attributes of shapes.

#### Work Together

Draw a square that is a different size and color and turned in a different direction. How do you know your shape is a square?

#### On My Own



Name

Use the shape to answer the question.



- I. Which are not defining attributes of this shape? Choose all the correct answers.
  - A. 4 straight sides
  - B. 4 vertices
  - C. green
  - D. large

What are the defining attributes of the shape? Draw to show the shape.

2. triangle

3. circle

4. hexagon

5. rectangle







7. Extend Your Thinking Draw two shapes that have one attribute that is different. What is the different attribute?

#### Reflect

Explain why changing the size, color, or direction of a shape does not change its name.

Math is... Mindset

How did you use your strengths in reading in math today?

#### Unit 6

#### 2-Dimensional Shape Sort



Name

Cut out the cards on pages 213, 215, and 217.



Triangle or Rectangle

Other

a



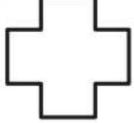
b.



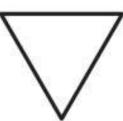
C.



d.







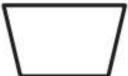


h.

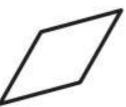


i.





k.

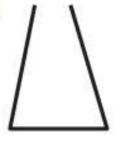








q.



#### Reflect On Your Learning





#### **Compose Shapes**

## Be Curious

### What do you notice? What do you wonder?

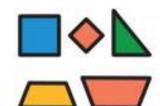


Math is... Mindset

What helps you control your actions in class?

#### Learn

How can you use these shapes to make other shapes?



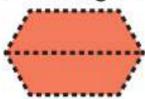
You can use 2 squares to make a rectangle.



You can use 2 triangles to make a rectangle.



You can use these shapes to make a hexagon.



You can make other shapes.



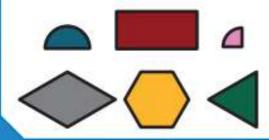
You can use 2-dimensional shapes to make other 2-dimensional shapes.

#### Math is... Precision

How can you name the new shapes you make?

#### Work Together

How can you make a flower using these shapes? Draw your new shape.



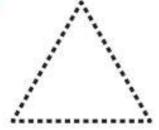
#### On My Own



Name

How can you make the shape using other shapes? Draw lines to show how.

1.





How can you use the shapes to make a new shape? Draw to show how.













5. Which shape can you make by putting these 2 shapes together?

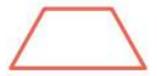


A. square

B. triangle

C. circle

- D. hexagon
- 6. Extend Your Thinking What are two ways you can make this shape using other shapes?
  Draw your shapes.



#### Reflect

How can you put shapes together to make new shapes?

Math is... Mindset

What worked well to control your actions in class?

## ?

#### **Be Curious**

#### How are they the same? How are they different?



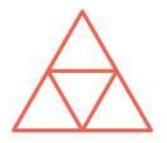
#### Math is... Mindset

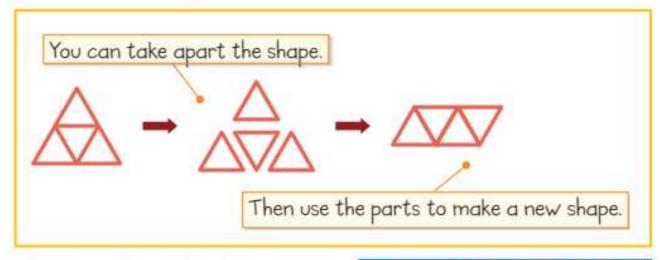
How confident do you feel about math?

#### Learn

### How can you use these shapes to make a new shape?

You can use the parts of a shape to make a new shape.





The new shape looks different, but it has the same parts.

#### Math is... In My World

When might you want to use the parts of a shape to make a new shape?

#### Work Together

Make a new shape using some of these shapes. How can you use the parts of your shape to make a different shape?

Draw your two shapes.



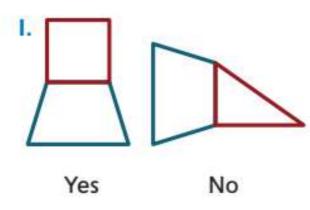
Copyright © McGrow-HII Education

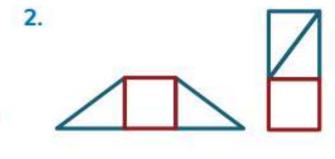
#### On My Own



Name

Can you make the pair of shapes from the same parts? Circle Yes or No.

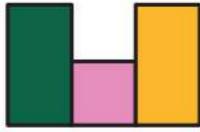




No

How can you make a different shape using the same parts? Draw to show how.

3.



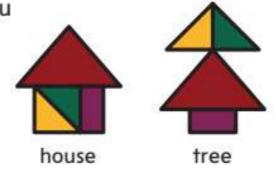


Yes

How can you use the parts of this shape to make a hexagon? Draw to show your thinking.



6. Extend Your Thinking How can you take apart the house and use the parts to make the tree?



#### Reflect

How can you make new shapes from shapes you already have?

#### Math is... Mindset

Why were you confident about math today?

Capyinght © McGrow-Hill Education

### Understand Attributes of Solids

#### **Be Curious**

### What do you notice? What do you wonder?



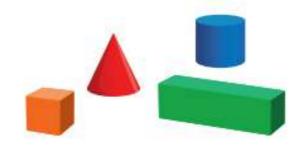
#### Math is... Mindset

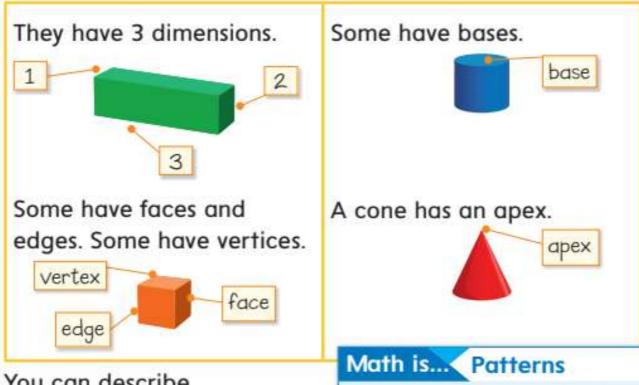
How can you show that you value the ideas of others?

#### Learn

#### How can you describe these shapes?







You can describe

What patterns do you see? 3-dimensional shapes by the defining attributes they always have.



Are these all 3-dimensional shapes? Tell how you know.



#### On My Own



Name

Circle all the correct answers for the question.

I. Which are cubes?









2. Which are cylinders?









3. Which are cones?

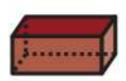








4. Which are rectangular prisms?









STEM Connection Riley makes a car using blocks. Are blocks 3-dimensional shapes? Tell how you know.



6. Which 3-dimensional shape has faces?

A. cube

B. cone

C. cylinder

D. sphere

Extend Your Thinking Violet says a cone is the same as a cylinder. Do you agree? Explain.

#### Reflect

What defining attributes do 3-dimensional shapes have?

Math is... Mindset

How have you shown that you value the ideas of others?

# ? Be

#### **Be Curious**

### What do you notice? What do you wonder?



#### Math is... Mindset

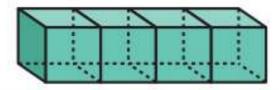
What are some ways to build a positive relationship with classmates?

#### Learn

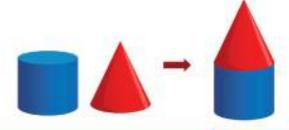
How can you use 3-dimensional shapes to make other 3-dimensional shapes?



You can combine cubes to make a rectangular prism.



You can make objects with 3-dimensional shapes.



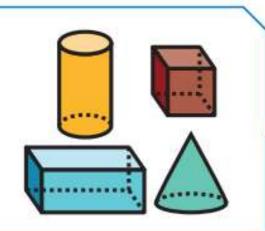
You can combine 3-dimensional shapes to make new 3-dimensional shapes.

Math is... Thinking What other new shapes can you make?

#### Work Together

Make a new shape using some of these shapes. How can you use the parts of your shape to make a different shape?

Draw or describe your two shapes.



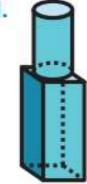
#### On My Own



Name

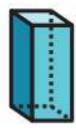
Circle the shapes that make up the object.

1.









2.



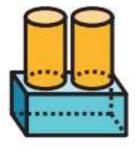


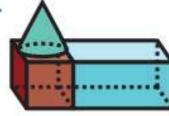




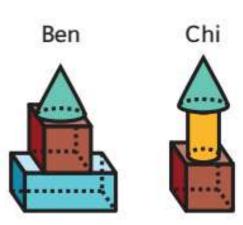
Use the parts of the object to make a new object. Draw or describe your object.

3.





5. Error Analysis Chi wants to make a new object using Ben's shapes. Does Chi's object use the same shapes as Ben's? Explain.



6. Extend Your Thinking Brett has 3 cubes. He says there is only one way to make a new shape with them. Do you agree? Explain.

## Reflect

How is making new 3-dimensional shapes like making new 2-dimensional shapes?

### Math is... Mindset

How did you build a positive relationship with classmates today?

# Unit Review Name

## Vocabulary Review

Use the vocabulary to complete each sentence.

2-dimensional shape

attributes

closed

defining attributes

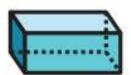
edges

rectangular prism

sides

vertices

- I. All triangles have 3 and 3\_\_\_\_\_.
- 2. A 3-dimensional shape has faces, vertices, and
- 3. A \_\_\_\_\_\_ is flat.
- 4. A shape with no openings or gaps is
- 5. A \_\_\_\_\_ has 6 faces.



- Color, size, vertices, and sides are some of shapes.
- 7. Only the \_\_\_\_\_ of a shape help us name it.

### Review

Which are closed shapes? Circle all the correct answers.









9. How many vertices does the shape have?



A. 2

B. 3

C. 4

D. 6

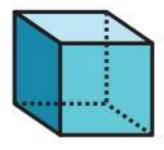
10. Use the shapes shown.



What shapes can you use to make this shape?



II. How many edges does the shape have?



A. 4

B. 6

C. 12

D. 18

- 12. Which shapes have 0 vertices? Choose all the correct answers.
  - A. rectangular prism
- B. cube

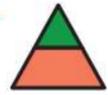
C. cylinder

- D. sphere
- I3. Which other shapes can you make from this one? Choose all the correct answers.

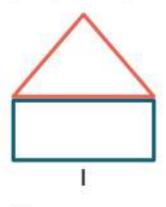




D.



14. Can you use the parts of Shape I to make Shape 2? Circle Yes or No.





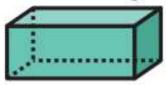
2

Yes

No

### **Performance Task**

Automotive engineers use these shapes in car designs.





Part A: What are the names of the shapes in the group?

What is one way they are alike?

What is one way they are different?

Part B: Which shapes are the faces of those shapes?
Circle all the correct answers.











How can you identify 2-dimensional and 3-dimensional shapes?

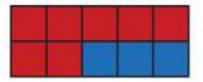
Cooynotes to McGraw-Mill Enteration

# Fluency Practice

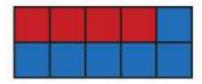
Name

## Fluency Strategy

You can use a ten-frame to help add to 10.

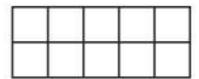


$$7 + 3 = 10$$



$$4 + 6 = 10$$

I. How can you color the ten-frame to add 5 + 5? Show your work.

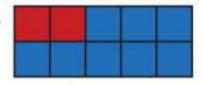


What is the sum? Write the number.

### Fluency Flash

How can you use the ten-frame to add? Write the sum.

2.



3.



### Fluency Check

What is the sum or difference? Write the number.

10. 
$$9 - 8 =$$

13. 
$$7 - 2 =$$

### Fluency Talk

How can you show that 5 + 4 does not equal 10? Explain your work.

How can you count up to subtract 9 — 7? Show and explain your work.

### Glossary/Glosario

#### English

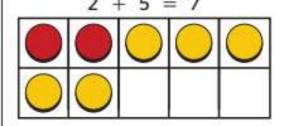
#### Spanish/Español

Aa

add (adding, addition) To join together sets to find the total or sum.

2 + 5 = 7

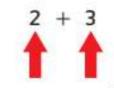
sumar (adición) Unir conjuntos para hallar el total o la suma.



addend Any numbers or quantities being added together.



2 is an addend and 3 is an addend sumando Números o cantidades que se suman.



2 es un sumando y 3 es un sumando

analog clock A clock that has an hour hand and a minute hand.

minute hand

reloj analógico Reloj que tiene manecilla horaria y minutero.

minutero

10
12
9
8 7 6 5

manecilla
horaria



circle A closed, round figure.



círculo Figura redonda y cerrarda.



closed shape A shape that begins and ends at the same point.

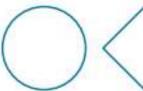




figura cerrada Figura que comienza y termina en el mismo punto.







column A column goes up and down on a number chart.

compare To look at objects, shapes, or numbers and see how they are alike or different. columna Una columna sube y baja en una tabla numérica.

comparar Observar objetos, formas o números para saber en qué se parecen y en qué se diferencian.

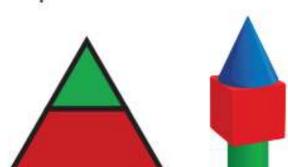
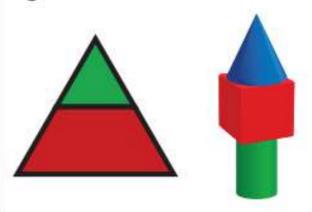
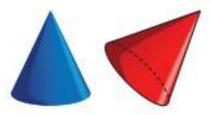


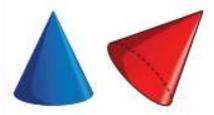
figura compuesta Figura formada por dos o más figuras.



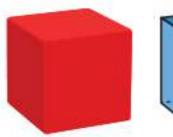
cone A 3-dimensional shape with I round base and I apex.

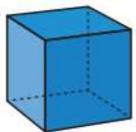


cono Figura tridimensional con una base redonda y un punto de unión.



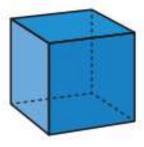
cube A 3-dimensional shape with 6 square faces, 8 vertices, and 12 edges.





cubo Figura tridimensional con 6 caras cuadradas, 8 vértices y 12 bordes.





cylinder A 3-dimensional shape with 2 round faces and a curved surface.





cilindro Figura tridimensional con 2 caras redondas y una cara curva.





Dd

data Numbers or symbols collected to show information.

Name	Number of Pets		
Mary	3		
James	ı		
Alonzo	4		

datos Números o símbolos que se reúnen para mostrar información.

Nombre	Número de mascotas		
Mary	3		
James	1		
Alonzo	4		

difference Subtracting one number from another number gives the difference.

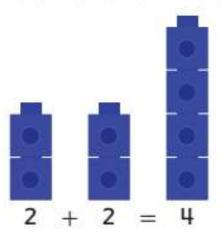
The difference is 2.

diferencia Restando un número de otro número da la diferencia.

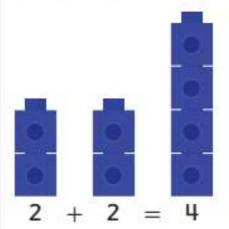
La diferencia es 2.

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. doubles Two addends that are the same number.

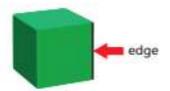


dobles Dos sumandos que son el mismo número.

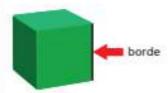


Ee

edge The line where two sides or faces meet.



borde Línea donde dos lados o caras se unen.



equal shares Each share is the same size.

Example: This muffin 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.



equal sign (=) Having the same value as or is the same as.

signo igual (=) Que tienen el mismo valor o son lo mismo.

#### equal to (=)

$$6 = 6$$

6 is equal to or the same as 6

igual a (=)



$$6 = 6$$

6 es igual o lo mismo que 6

equation A number sentence that includes an equal sign.

$$5 + 7 = 12$$

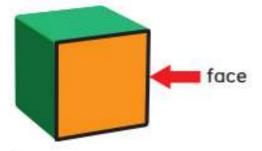
ecuación Una oración numérica que incluye el signo igual.

$$5 + 7 = 12$$



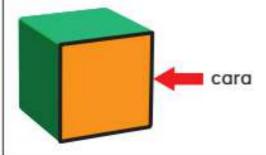
face The flat part of a 3-dimensional figure.

Example: A square is a face of a cube.



cara La parte plana de una figura tridimensional.

Ejemplo: Un cuadrado es la cara de un cubo.



fact family Addition and subtraction sentences that use the same numbers. Sometimes called *related* facts.

$$6 + 7 = 13$$
  $13 - 7 = 6$   
 $7 + 6 = 13$   $13 - 6 = 7$ 

#### familia de operaciones

Enunciados de suma y resta que tienen los mismos números. Algunas veces se llaman operaciones relacionadas.

$$6 + 7 = 13$$
  $13 - 7 = 6$   
 $7 + 6 = 13$   $13 - 6 = 7$ 

fewer Not as many or a smaller amount.

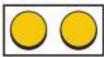




There are fewer yellow counters than red ones.

menos El número o grupo con menos.



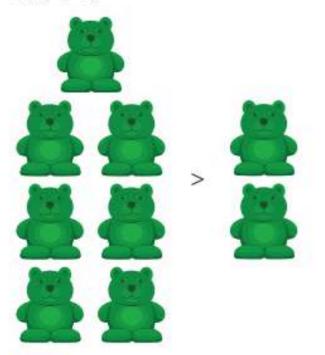


Hay menos fichas amarillas que fichas rojas.

fourths Four equal parts of a whole. Each part is a fourth, or a quarter, of the whole.

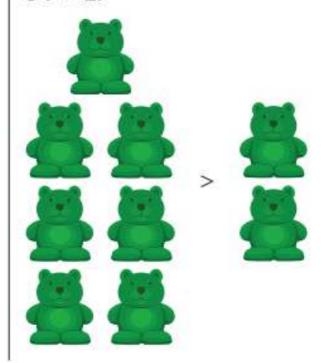
cuartos Cuarto partes iguales de un todo. Cada parte es un cuarto, o la cuarta parte del todo. greater than (>) When an amount is larger than another amount.

Example: 7 is greater than 2 or 7 > 2.



mayor que (>) Cuand o una cantidad es más grande que otro.

Ejemplo: 7 es mayor que 2 o 7 > 2.



Hh

half hour (or half past) One half of an hour is 30 minutes. Sometimes called half past or half past the hour.





### media hora (o y media)

Media hora son 30 minutos.

A veces se dice hora y
media.





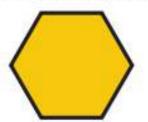
halves Two equal parts of a whole. Each part is a half of the whole.

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









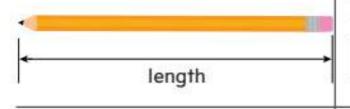
hour hand. The hand on a clock that tells the hour. It is the shorter hand.

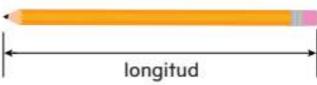
manecilla horaria Manecilla del reloj que indica la hora. Es la manecilla más corta.



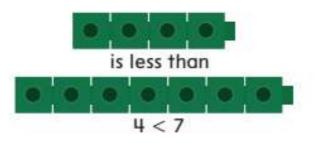


length How long or how far away something is. longitud La mayor de las dos dimensiones principales que tienen las cosas o figuras planas.

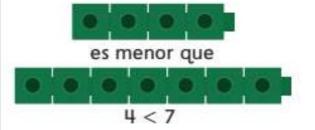


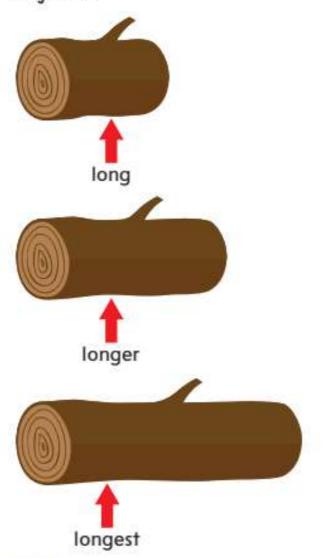


less than (<) 4 is less than 7.



menor que (<) 4 es menor que 7.





largo (más largo, el más largo) Forma de comparar la l ongitud de objetos.



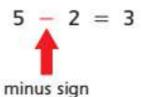
Mm

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.

#### English

#### Spanish/Español

minus (-) The sign used to show subtraction.



menos (-) Signo que indica resta.

\_\_\_\_

minute A unit used to measure time.

I minute = 60 seconds

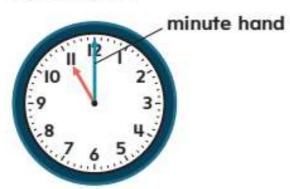


minuto Unidad para medir tiempo.

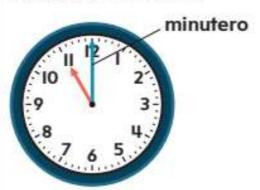
I minuto = 60 segundos



minute hand The longer hand on a clock that tells the minutes.

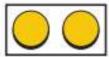


minutero La manecilla más larga del reloj que indica los minutos.



more A larger or greater amount.





There are more red counters than yellow ones.

más Una cantidad mayor o más grande.

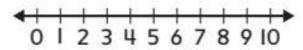




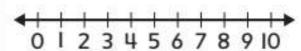
Hay más fichas rojas que amarillas.

Nn

number line A line with number labels.

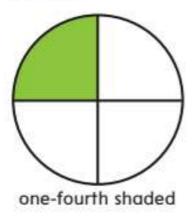


recta numérica Recta con marcas de números.



00

one-fourth One of 4 equal shares.



un cuarto Una de 4 partes iguales.



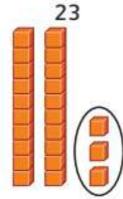
one-half One of 2 equal shares.



mitad Una de 2 figuras iguales.

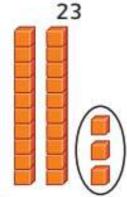


ones The numbers in the range of 0–9. It is the place value of a number.



This number has 3 ones.

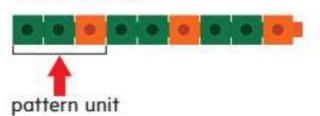
open shape A figure not connected at one or more points. unidades Los números en el rango de 0 a 9. Es el valor posicional de un número.



Este número tiene 3 unos.

figura abierta Figura que no está unida en uno o más puntos. Pp

pattern An order that a set of objects or numbers follows over and over.



patrón Orden que sigue continuamente un conjunto de objectos o números.



picture graph A graph that has different pictures to show information collected.



gráfica con imágenes

Gráfica que tiene diferentes imágenes para ilustrar la información recopilada.



place value The value given to a digit by its place in a number.

65 6 tens 5 ones valor posicional Valor de un dígito según el lugar en el número.

65 6 decenas 5 unidades

plus (+) The sign used to show addition.

más (+) Símbolo para mostrar la suma.

Rr

rectangle A shape with 4 straight sides and 4 vertices.



rectángulo Figura con 4 lados y 4 esquinas.

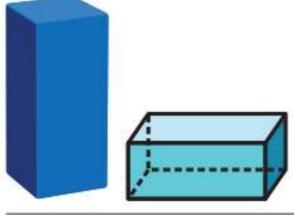


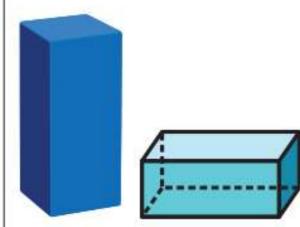
### rectangular prism A

3-dimensional shape with 6 faces, 8 vertices, and 12 edges.









related fact(s) Basic facts using the same numbers. Sometimes called a fact family.

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

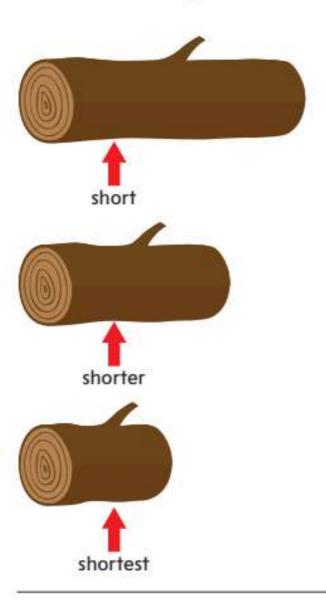
números. También se llaman familias de operaciones.

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

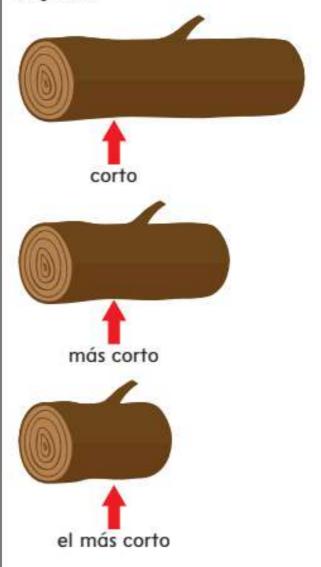
row A row goes left to right on a number chart.

fila Una fila se lee de izquierda a derecha en una tabla numérica.

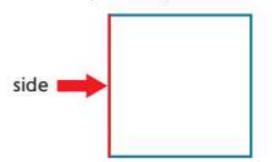
short (shorter, shortest) To compare length or height of two (or more) objects.



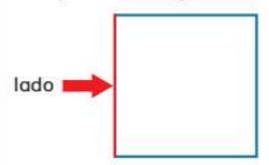
corto (más corto, el más corto) Comparar la longitud o la altura de dos (o más) objetos.



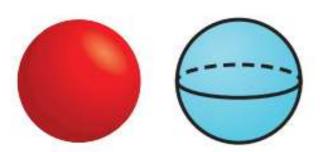
side One of the lines that make up a shape.



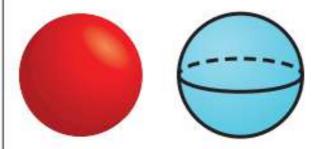
lado Uno de la laneas que compone una figura.



sphere A solid shape that has the shape of a round ball.



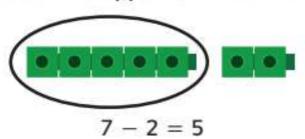
esfera Figura sólida con la forma de una pelota redonda.



square A rectangle that has 4 equal sides.

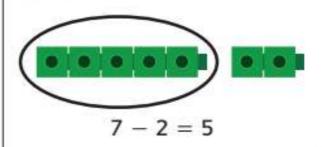
cuadrado Rectángulo que tiene 4 lados iguales.

subtract (subtracting, subtraction) To take away, take apart, separate, or find the difference between two sets. The opposite of addition.



### restar (resta, sustracción

Eliminar, quitar, separar o hallar la diferencia entre dos conjuntos. Lo opuesto de la suma.



sum Adding two or more numbers gives the sum.

suma Sumando dos o más números da la suma.

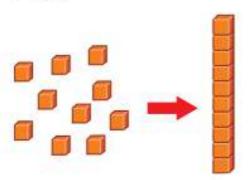
Tt

tally mark(s) A mark used to record data collected in a survey.

teen number A number that is I group of ten and some ones.

Example: 12

ten One group of 10 ones is I ten.



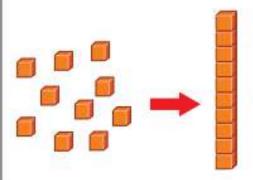
marca(s) Símbolo usado para anotar datos de una encuesta.



números del II al 19 Un número formado por una decena y algunas unidades.

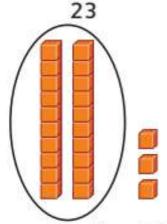
Ejemplo: 12

decena Un grupo de 10 es una decena.



tens A place value of a number.

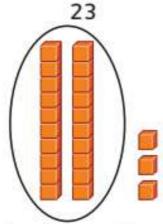
Example: In the number 23, the 2 is in the tens place.



This number has 2 tens.

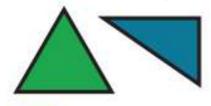
decenas El valor posicional de un número.

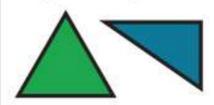
Ejemplo: En el número 23, el 2 está en el lugar de las decenas.



Este número tiene 2 decenos.

triangle A shape with 3 sides.







unit An object used to measure.







unidad Objeto que se usa para medir.

trapecio Figura con 3 lados.







unknown A missing number in an equation.

$$9 + ? = 10$$

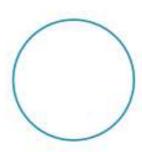
incógnita El número que falta en una ecuación.

$$9 + ? = 10$$

Ww

whole The entire object.





el todo El objeto completo.



