UNITED ARAB EMIRATES
MINISTRY OF EDUCATION

المدرسة الإماراتية

Student Edition
Grade 1 • Volume 1
UAE Edition
Grade 1
2021-2022

Reveal MATH
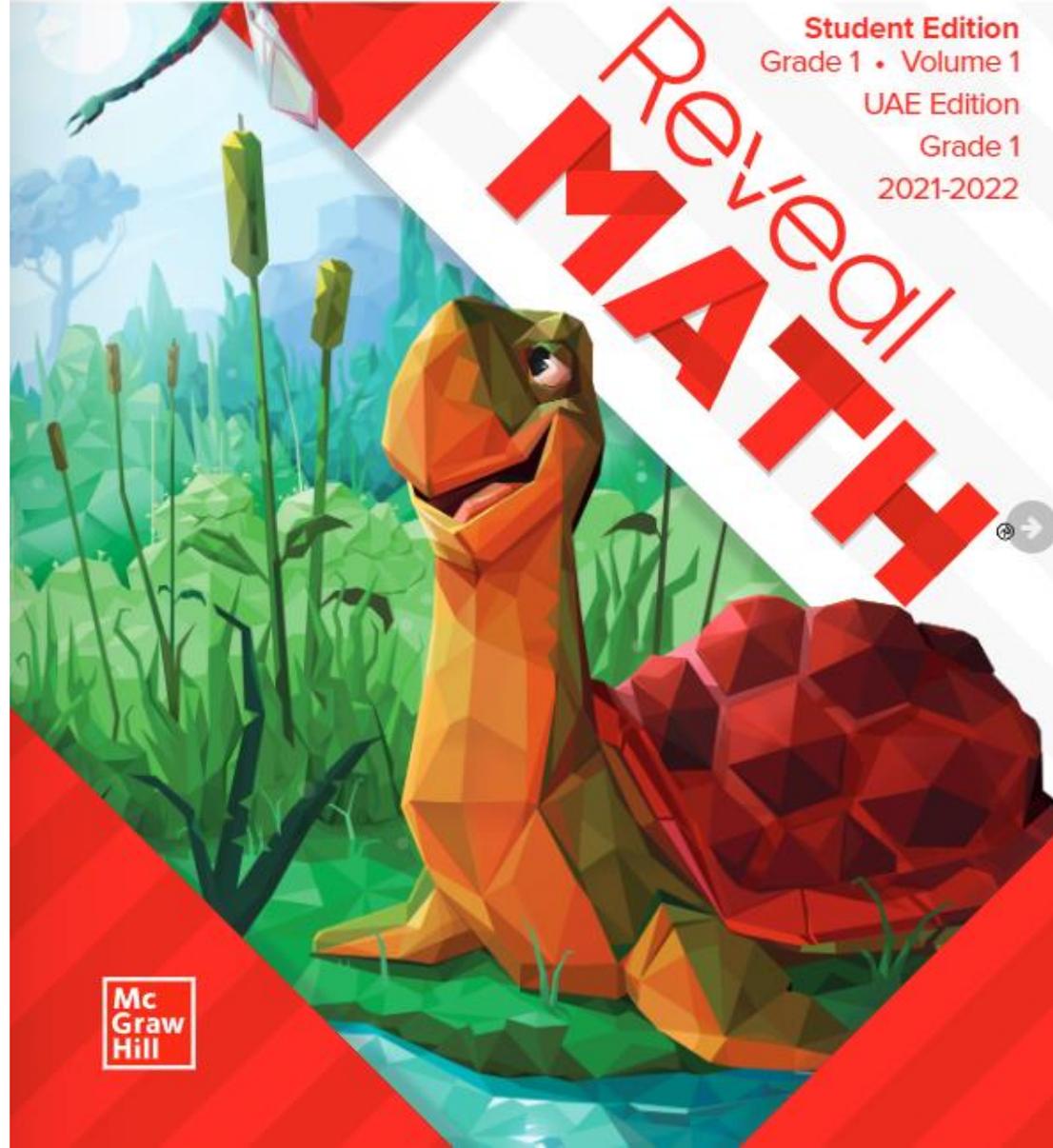
Mc
Graw
Hill

Contents in Brief

Unit 1

Math Is...

Number Patterns

Place Value

Addition within 20: Facts and Strategies

Subtraction within 20: Facts and Strategies

Shapes and Solids

Number Patterns

Focus Question

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

Hi, I'm Erik.

I want to make video games. I am playing a game now. When I hit a target, I will get one point. I have 25 points! Next I will have 26 points.

STEM video | GO ONLINE

Name _____

Patterns

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

A   B   C   D

A   B   C   D

Counting Patterns to 100

? Be Curious

What do you notice?
What do you wonder?

Mail

° 1	° 2	° 3	° 4	° 5	° 6	° 7	° 8	° 9	° 10
° 11	° 12	° 13	° 14	° 15	° 16	° 17	° 18	° 19	° 20
° 21	° 22	° 23	° 24	° 25	° 26	° 27	° 28	° 29	° 30
° 31	° 32	° 33	° 34	° 35	° 36	° 37	° 38	° 39	° 40

Math is... Mindset

What can you do to stay focused on your work?

Learn

How can you put these numbers in an order?

50 51 53 52 55 57 56 54 59 58

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

The **ones** go up by 1 to 9, then start at 0 again.

34 35 36 37 38 **39** **40** 41 42 43

The **tens** are the same.

The tens go up by 1 each time the ones start at 0.

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.

75 [ ] [ ] 78 [ ] [ ] 81 82

79   77   80   76

On My Own

Name _____

What pattern do you notice?

1. | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |

2. | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 |

3. | 84 | 85 | 86 | 87 | 88 | **89** | **90** | 91 | 92 | 93 |

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

13 14   16   19   21 22 24

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

| 96 | | | 99 | 100 | | | |

102   101   97   98   103

Reflect

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.

Start at 97. Use counting patterns as you count on.

column

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

row

Math is... Using Tools

How does the number chart show the pennies?

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	110

On My Own

Name_____

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

1. 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	110

5. Tim counts 115 books. What are the next 5 numbers he counts?

101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

6. **Error Analysis** Joy counts 108 pennies. She counts 6 more pennies. She says she has 113 pennies. Help Joy count her pennies.

101	102	103	104	105	106	107	108	109	110
111	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?

Patterns on a Number Line

Be Curious

**What do you notice?
What do you wonder?**
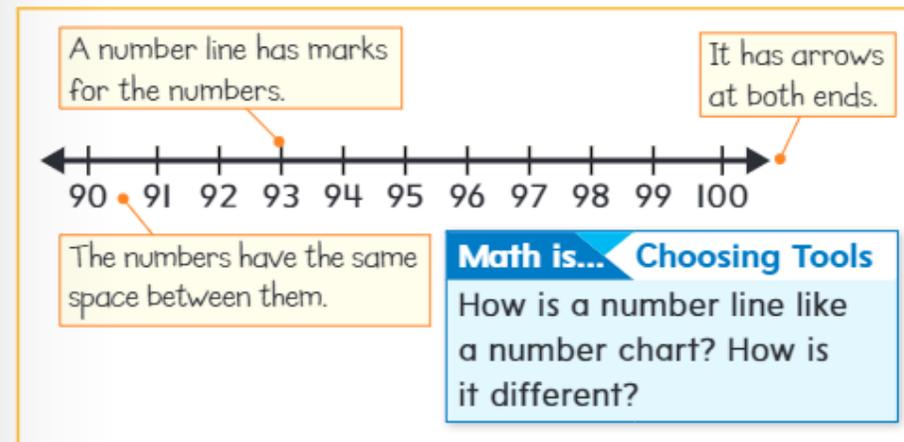
Math is... Mindset
What are your strengths in math?

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**.

A number line has marks for the numbers.

It has arrows at both ends.

The numbers have the same space between them.

Math is... Choosing Tools
How is a number line like a number chart? How is it different?

Number lines can show counting patterns.

Work Together

What counting patterns do you notice?

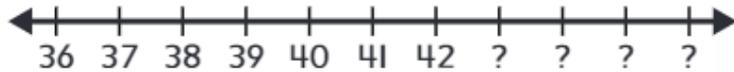How are they like the counting patterns on the number chart?
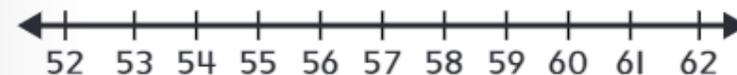
On My Own

Name _____
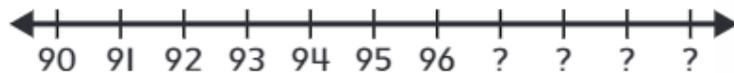
Which numbers come next? Circle the answer.

1. Start at 42. Count by 1s. Which numbers come next?

36 37 38 39 40 41 42 ? ? ? ?

A. 43, 44, 45, 46

B. 44, 46, 48, 50

C. 52, 62, 72, 82

2. Start at 96. Count by 1s. Which numbers come next?

90 91 92 93 94 95 96 ? ? ? ?

A. 93, 94, 95, 96

B. 97, 96, 95, 94

C. 97, 98, 99, 100

3. Start at 115. Count by 1s. Which numbers come next?
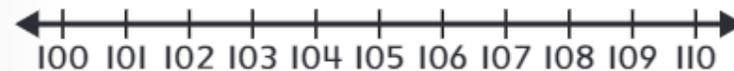
110 111 112 113 114 115 ? ? ? ? ?

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?

97 98 99 100 101 102 103 104 105 106 107

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

100 101 102 103 104 105 106 107 108 109 110

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

70 ☐ 72 73 74 75 ☐ 77 78 79 ☐
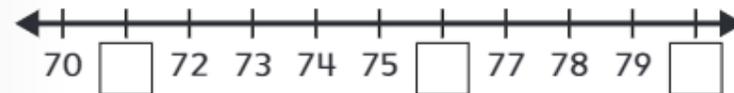
Reflect

How do number lines show counting patterns?

Math is... Mindset

How did your math strengths help you today?

Counting by 1s

MATH PROBES
CHERYL TOBEY

Name_____

1. The students are counting by 1s 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 1s from 106.
They count 107, 108, 109, _____.

Circle the number that comes next.

99   110

108   119

Tell or show how you know which number
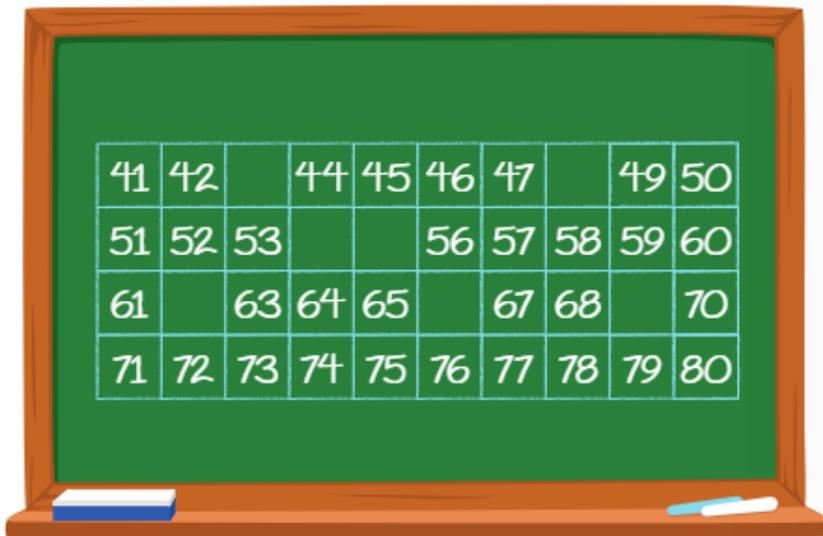is correct.

Reflect On Your Learning

Patterns When Reading and Writing Numbers

Be Curious

What do you notice?
What do you wonder?

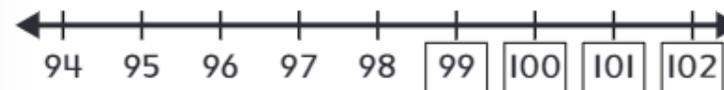| 41 | 42 | | 44 | 45 | 46 | 47 | | 49 | 50 |
51	52	53			56	57	58	59	60
61		63	64	65			67	68		70
71	72	73	74	75	76	77	78	79	80

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 1 to 9.

Then they start at 0 again.

94   95   96   97   98 | 99 | | 100 | | 101 | | 102 |

The tens stay the same.

Then they go up by 1 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.

On My Own

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.

4. **Error Analysis** Kimani counts by Is from 99. He counts 99, 100, 110, III, II2, II3. How can Kimani fix his mistake?

5. How do counting patterns help you read numbers?

6. **Extend Your Thinking** What number comes after I20? Explain how you know.

🔄 Reflect

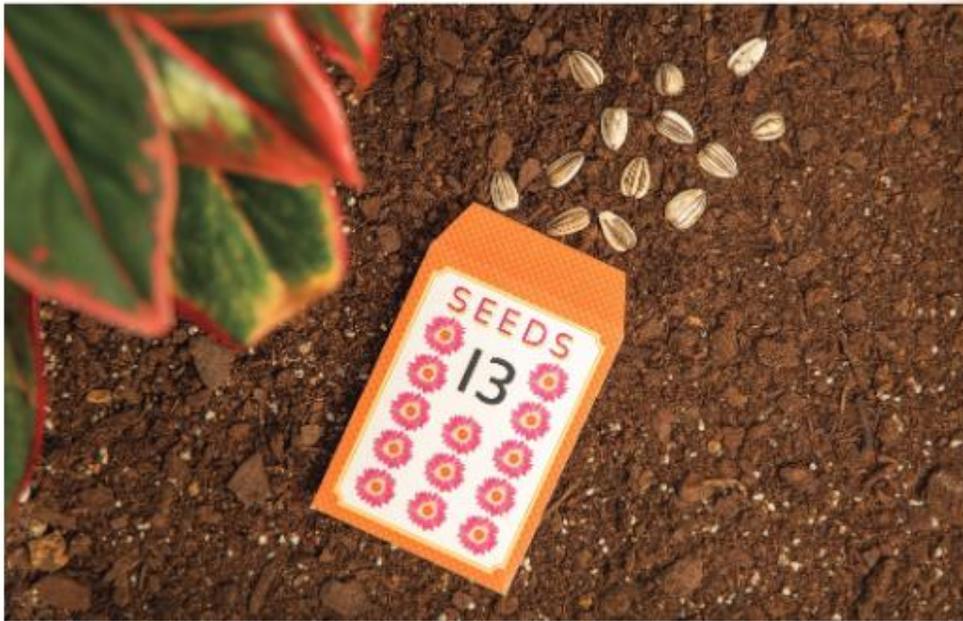How can you use patterns to help read and write numbers?

Math is... Mindset
What helped you to clearly share your ideas?

منتديات صقر الجنوب التعليمية المنهاج الاماراتي

Patterns When Representing Objects in a Group

Be Curious
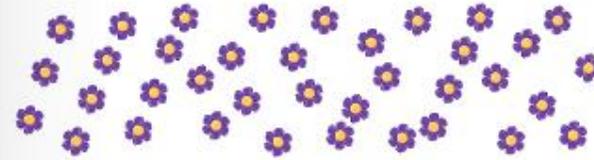
What do you notice?
What do you wonder?

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.
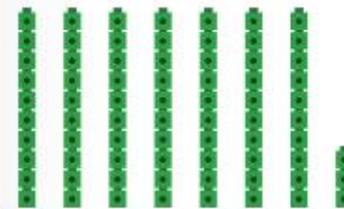
Write a number to show how many.

10

20

30

37

37

Putting objects in groups can help you count them.

Math is... Planning

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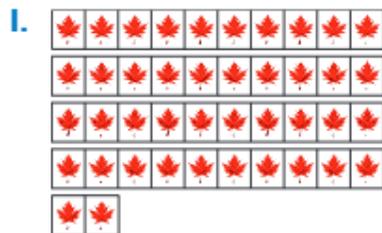
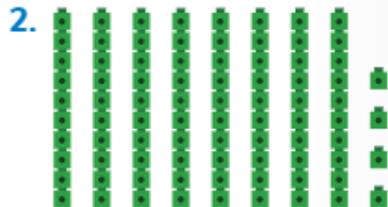## Work Together

Count and write how many.

On My Own

Name _____

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

1.

_____ leaves

2.

_____ connecting cubes
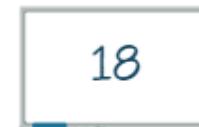
3.

_____ acorns

4.

_____ 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

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

18

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.
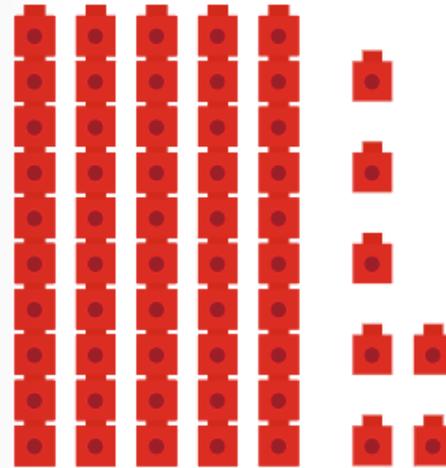
column	pattern
row	number line
ones	

1. A _____ in a number chart shows numbers placed side by side.

2. When ones go up by 1 to 9 and then start again at 0, it is called a _____.

3. 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 _____.

6.

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

_____ connecting cubes

7. Carrie is counting by 1s. She starts at 54. What are the next 3 numbers she counts?

A. 53, 54, 55

B. 55, 56, 57

C. 56, 57, 58

8. What numbers are missing? Write the missing numbers.

43, _____, 45, 46, _____, 48, 49

منتديات صقر الجنوب التعليمية - المنهاج الإماراتي

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
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

A. All the numbers begin with 2.

B. The numbers go up by 10.

C. The numbers go up by 1.

10. What numbers are missing? Write the numbers.

99 100 [ ] 102 [ ] 104 105
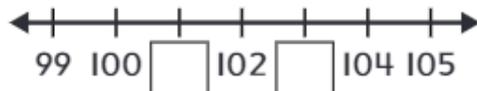
Performance Task

A store has 120 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
111	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.

$10 = 5 + 5$

1. What number shows a way to put together 10? Write the number.

$10 = 1 +$ _____.

Fluency Flash

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

2. $10 = 8 +$ _____

3. $6 +$ _____ $= 10$

Fluency Check

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

4. $10 = 9 +$ _____

5. $4 +$ _____ $= 10$

6. $3 +$ _____ $= 5$

7. $5 = 0 +$ _____

8. $1 +$ _____ $= 10$

9. $3 +$ _____ $= 10$

10. $10 = 5 +$ _____

11. $10 = 3 +$ _____

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 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.

STEM video | GO ONLINE

IGNITE!

Name _____

Seeing Dots

Listen to your teacher. Describe what you see.

A.

B.

C.

D.

E.

F.

منتديات صقر الجنوب التعليميّة - المنهاج الاماراتي
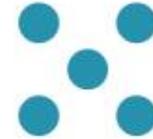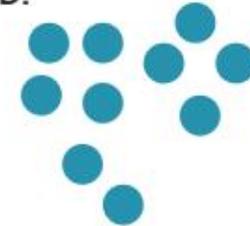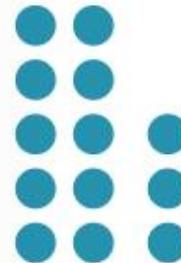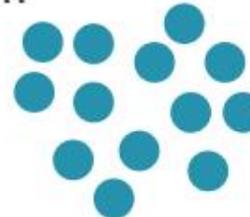
Numbers 11 to 19

? Be 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?
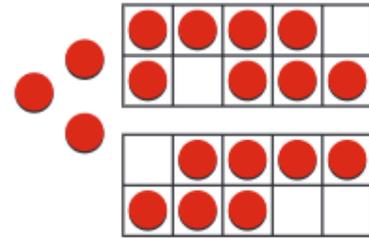
You can fill **ten-frames**.

The top ten-frame shows 1 group of ten.
The bottom ten-frame shows 8 ones.

18   1 **group of ten**

      8 ones
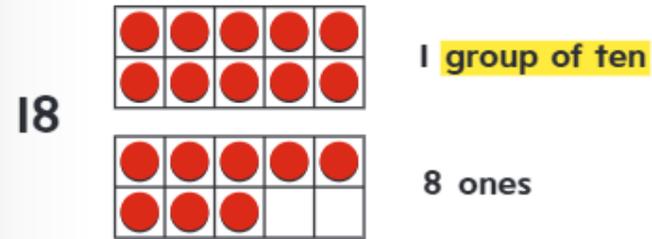
Math is... Patterns

What patterns do you notice in teen numbers?

Numbers 11, 12, 13, 14, 15, 16, 17, 18, and 19 are **teen numbers**.
They have 1 group of ten and some ones.

💬 Work Together

How many counters?

_____ group of ten and
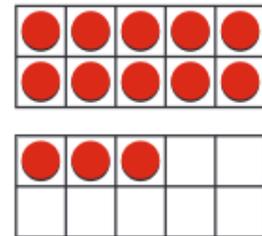
_____ ones is _____.

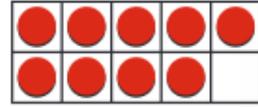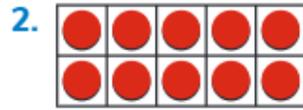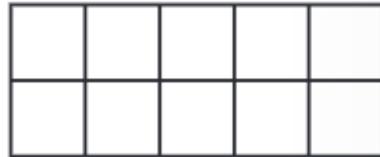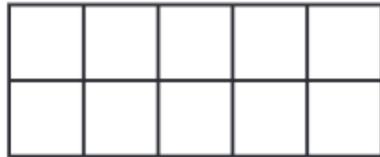## On My Own

Name _____

How many counters? Write the numbers.
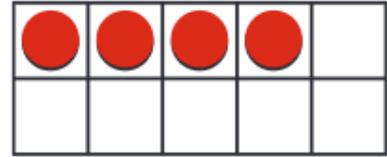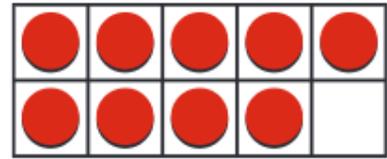
1.

_____ group of ten and

_____ ones is _____ .

2.
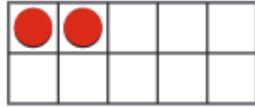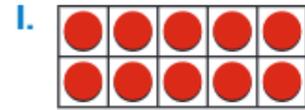
_____ group of ten and

_____ 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.

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

5   10   13   19

Reflect

How can you make teen numbers?

Math is... **Mindset**
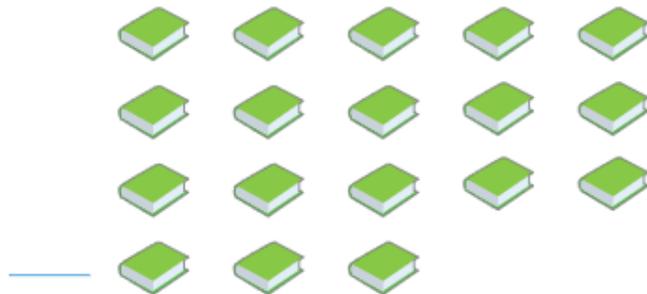
How did you feel about learning math today?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

Show the Value of the Digit: Student Interview

MATH PROBES
CHERYL TOBEY

Name _____

Card 1   **Twelve Shoes**

_____

Card 2   **Eighteen Books**

_____

Card 3   **Seventeen Scissors**

_____
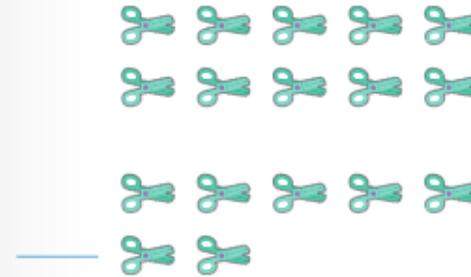
Reflect On Your Learning

Understand Tens

Be Curious

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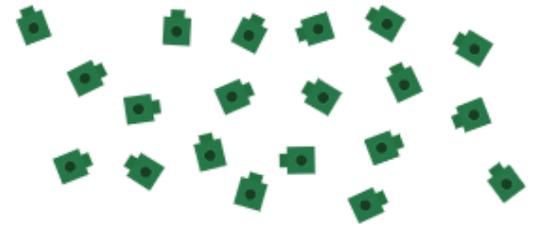### What do you wonder?

> **Math is...** Mindset
>
> What are your math superpowers?

Learn

How can you count the connecting cubes?

You can make groups of 10 cubes.

> **Math is...** Choosing Tools
>
> How can connecting the cubes help you count?

10 ones is the same as 1 ten.

2 tens and 0 ones is 20.

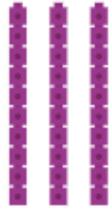You can put together 10 ones to make 1 ten.

Work Together

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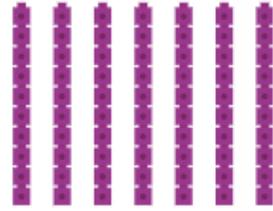
8 tens and 0 ones is _____.

On My Own

Name _____

How many groups of 10? Write the numbers.

1.

_____ 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.
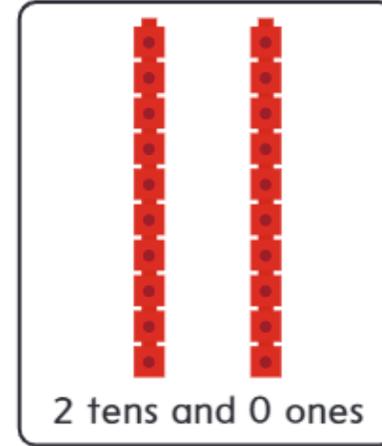
3. 90

_____ tens and

_____ ones

4. 40

_____ tens and

_____ ones

5. **STEM Connection** Jin sorts his dinosaur toys into groups of 10. He has 5 groups. How many dinosaur toys does Jin have?

_____ dinosaur toys

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

0 tens and 20 ones

2 tens and 0 ones

🔄 Reflect

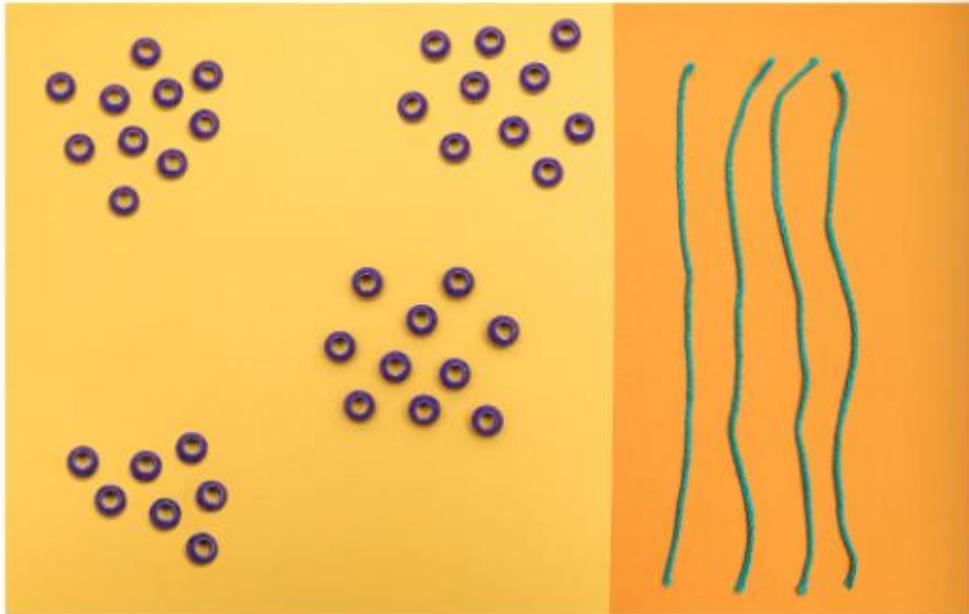How can you show and group tens?

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?
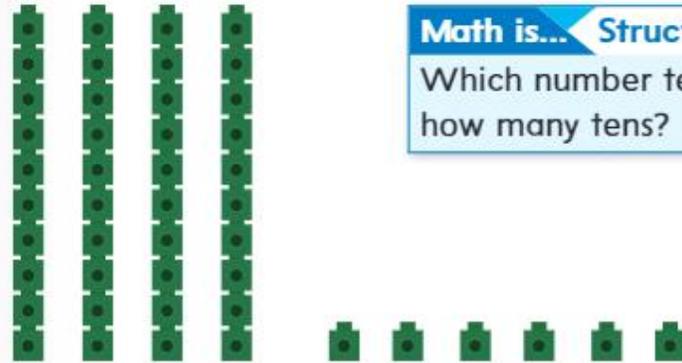
Math is... Mindset

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.

Math is... Structure

Which number tells you how many tens?

4 tens and 6 ones is 46.

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.
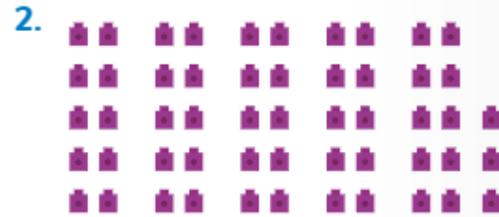
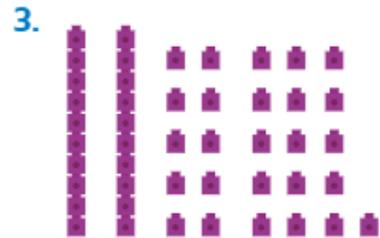_____ tens and _____ ones is _____.

On My Own

Name _____

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

1.

_____ tens and

_____ ones is _____.

2.

_____ tens and

_____ ones is _____.

3.

_____ tens and

_____ ones is _____.

4.
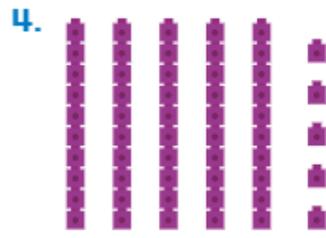
_____ tens and

_____ ones is _____.

5. 75 is _____ tens and _____ ones.

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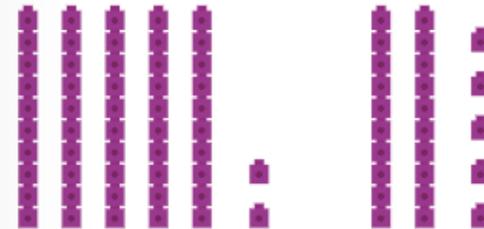
25 is _____ tens and _____ ones.

Reflect

How can you show tens and ones?

Math is... Mindset

What goal did you accomplish in math today?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

Represent 2-Digit Numbers

Be Curious
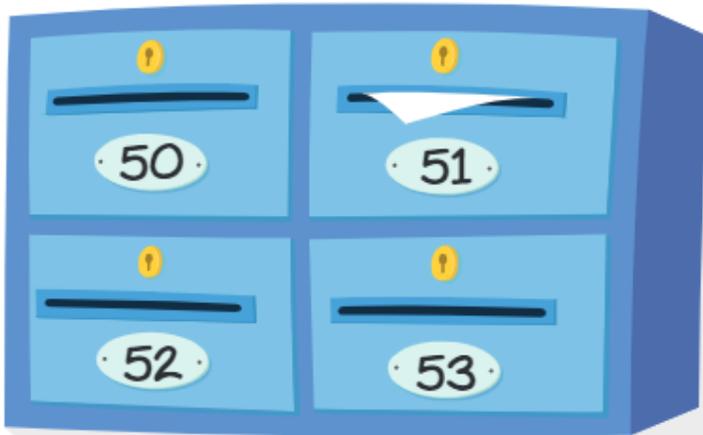
What do you notice?
What do you wonder?

50   51
52   53

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?

59
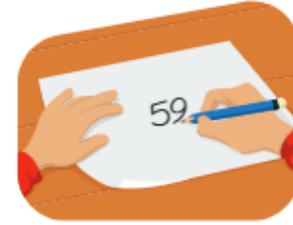
You can show **place value** different ways.

You can use connecting cubes.

You can use a **place-value chart**.

tens	ones
5	9
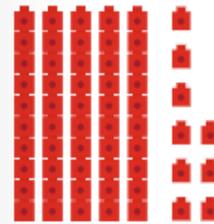
You can draw.

5 tens and 9 ones is 59.
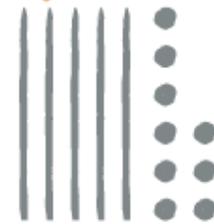
You can show the tens and ones of a number in different ways.

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?
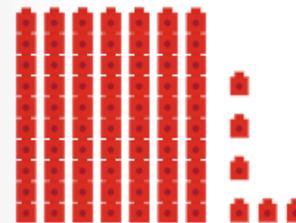
tens	ones

On My Own

Name _____

Write the number in the place-value chart.

1.

tens	ones

2.

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?

Represent 2-Digit Numbers in Different Ways

Be Curious

How are they the same?
How are they different?
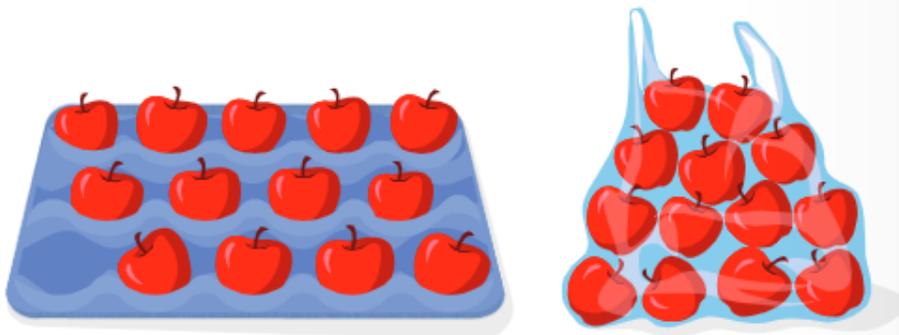
Math is... **Mindset**
What helps you understand your partner's ideas?

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.

34 is 3 tens and 4 ones.

34 is also I ten and 24 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.

On My Own

Name _____

Circle the answer to each problem.
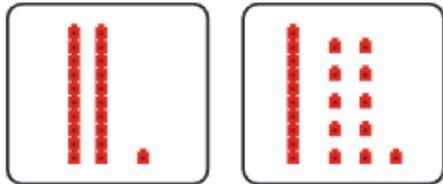
1. Which shows a different way to make the number shown?

53

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?

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

0 tens and _____ ones

1 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's Erasers   Frank's Erasers

Marcy has 39 erasers.
Frank has 82 erasers.

Who has more 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.

39   82
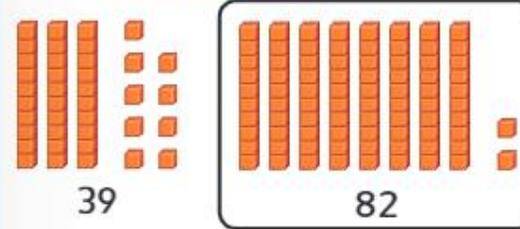
If the tens are the same, you compare the ones next.

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.*

1.

is greater than
is less than
is equal to

73   37

2.

is greater than
is less than
is equal to

31   31

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

52   53

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?
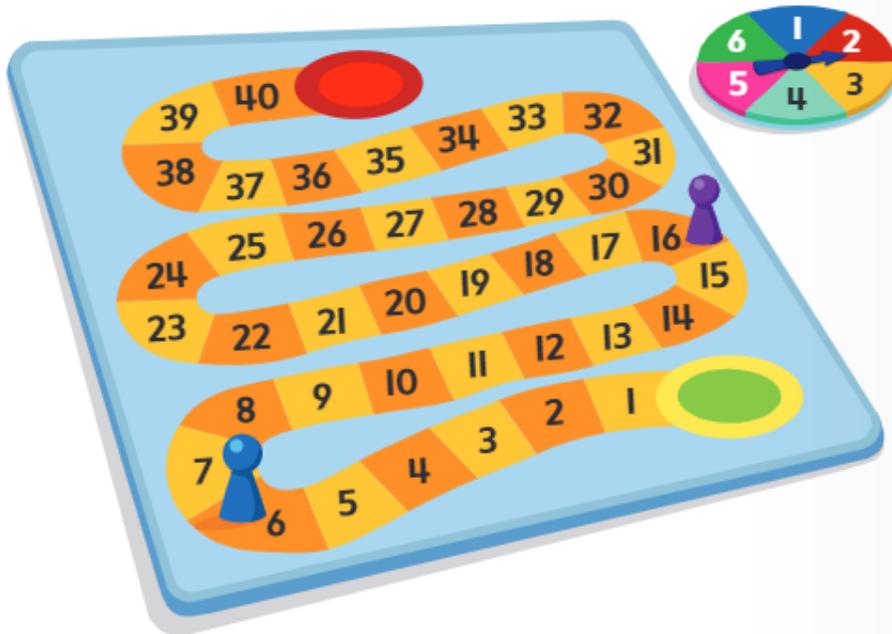
Learn

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.

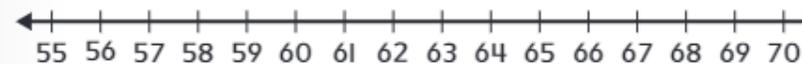37 is less than 41.

41 is greater than 37.
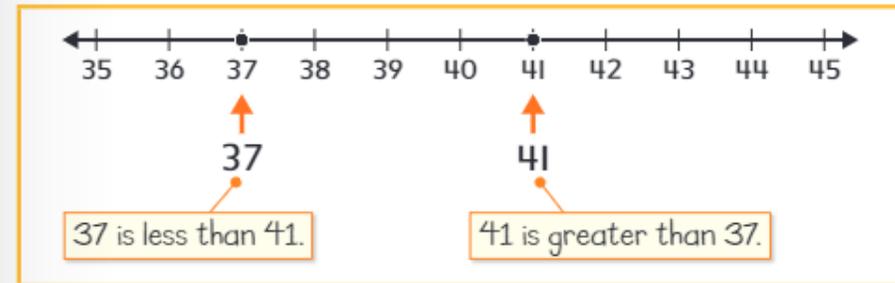
On a number line, the number to the right is greater. The number to the left is less.

Math is... **Structure**

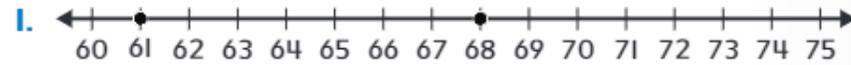If you know 41 is greater than 37, what else do you know?

Work Together

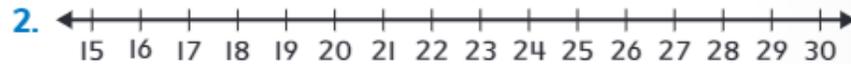Which number is greater, 59 or 66? Show your thinking on the number line.

55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70

On My Own

Name _____

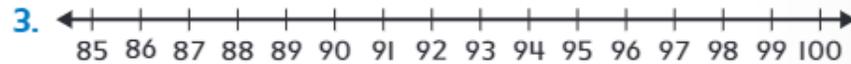**Write is greater than, is less than, or is equal to.**

1.
60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75

61 _____ 68

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

2.
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

27 _____ 17

3.
85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
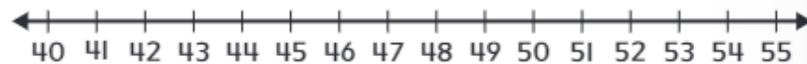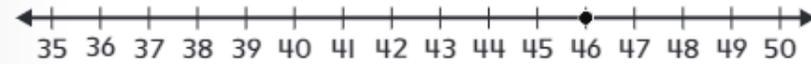
89 _____ 97

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.

40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55

49 _____ 51

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

35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

50   39

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

70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85
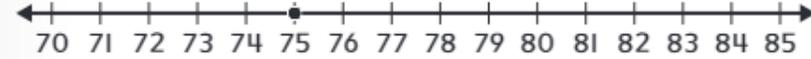
⏱ Reflect

How can a number line help you compare numbers?

Math is... Mindset
Were you relaxed or
frustrated during
math today?

منتديات صقر الجنوب التعليمية – المنهاج الإمارات

Use Symbols to Compare Numbers

? Be Curious

**What do you notice?
What do you wonder?**

Learn

The pet store has 56 clownfish
and 43 goldfish.

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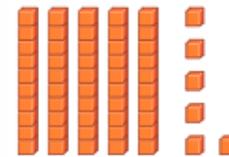pet store have more of?**

Fish and More! Pet Store
Name
Clownfish

Fish and More! Pet Store
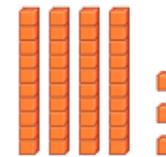Name
Goldfish

You can compare the numbers.

56   43

56 is greater than 43

56 > 43

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

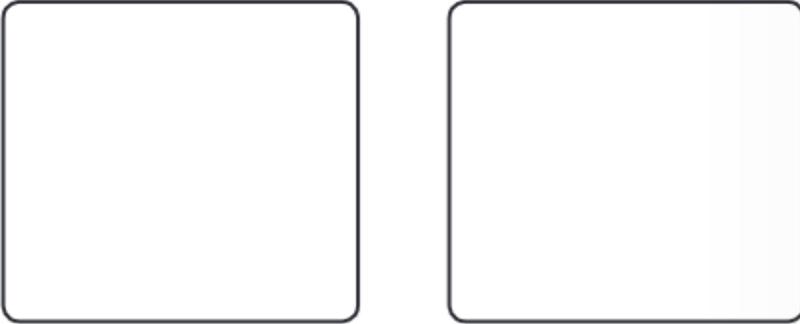How can you compare the numbers? Use >, <, or =.
Explain your thinking.

31 ◯ 13

Name_____

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

1. less than

> < =

2. equal to

> < =

3. greater than

> < =

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

4.

[ ]   O   [ ]

63   61

5. **Error Analysis** Benny has 72 trading cards. Jordyn has 76 trading cards. Benny says they have the same number of cards. How do you respond to Benny?

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

6. 39 O 27

7. 88 O 88

8. 48 O 49

9. 57 O 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?
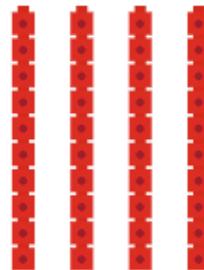
Unit Review

Name_____

Vocabulary Review

Use the vocabulary to complete each sentence.

compare	equal to
greater than	ten
less than	

1. The = sign means _____.

2. The < sign means _____.

3. A group of 10 ones is 1 _____.

4. To look at numbers and see which is greater is to

_____.

5. The > sign means _____.

Review

6. Look at the cubes.
   Complete the sentence.

_____ tens and 0 ones is _____ .

7. What is another way to show the number 18?

   A. 1 ten and 1 one
   B. 1 ten and 8 ones
   C. 8 tens and 1 one

8. Look at the number.

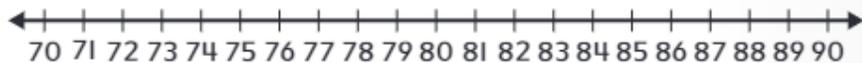   **75**

   Complete the sentence.

   _____ tens and _____ ones is _____ .

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

	True	False
17 = 17		
39 < 93		
53 > 81		

منتديات صقر الجنوب التعليمية والمنهاج الاماراتى

10. Use the number line.

70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90

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.		

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

26 ◯ 29

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

51 ◯ 51

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

63 ◯ 48

Performance Task

I. 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?

Fluency Practice

Name_____

Fluency Strategy

You can count on to help you add.

$4 + 2 = ?$

■■■■ + ■■

4   5   6

So, $4 + 2 = 6$.

1. How can you draw to show how to add 7 + 1?
    Write the number.

    $7 + 1 = $____

Fluency Flash

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

2. ■■■ + ■■   3. ■■■■■ + ■

   3   ____   5   ____

   $3 + 2 = $____ $5 + 1 = $____

Fluency Check

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

4. $4 + $____$ = 5$ 6. $7 + $____$ = 10$

5. $10 = 1 + $____   7. $5 = 5 + $____

What is the sum? Count on to add.

8. $6 + 1 = $____   11. $3 + 2 = $____

9. $8 + 2 = $____   12. $7 + 1 = $____

10. $5 + 2 = $____   13. $1 + 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?

Hi, I'm C.J.

I want to be a statistician. I asked my friends to pick their favorite sport. Most picked soccer. I want to know how many kids chose other favorite sports. I can use addition to crunch the numbers!

Missing Numbers in Shapes

Look at each puzzle. Find the missing numbers.

Puzzle 1

$$\triangle + \triangle = 10$$

Puzzle 2

$$\square + \square = 6$$

Puzzle 3

□	○

= 10

□	△

= 5

8   7

Puzzle 4

○	○

= 12

△	◇

= 9

8   ___

Relate Counting to Addition

?

Be Curious

What do you notice?
What do you wonder?

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?

You can count.
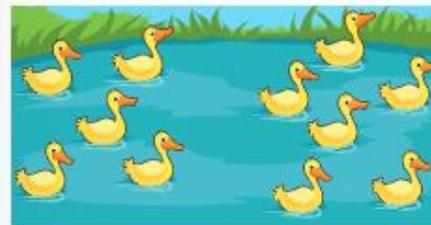
1 2 3 4 5   6 7 8

You can **add**.

5   +   3   = 8

There are 8 frogs.

One way to find a **sum** is to add the **addends**.
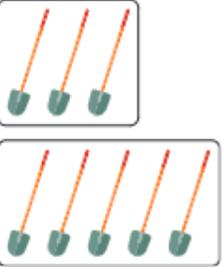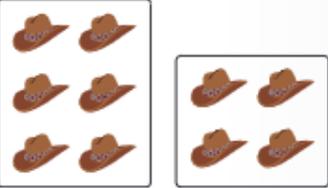
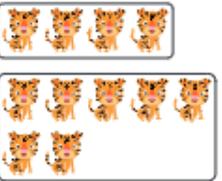## Work Together

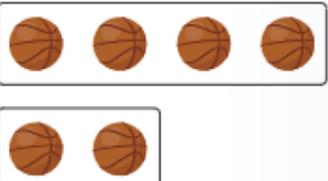How many ducks? Explain how you can add.

_____ ducks

On My Own

Name _____

How many? Write the number.
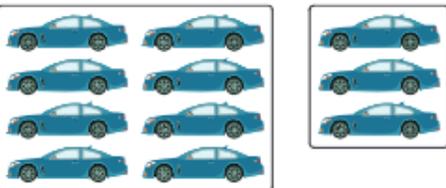
1.

_____ shovels

2.

_____ hats

3.

_____ tigers

4.

_____ basketballs

How many? Write numbers to match the picture.

5.

_____ + _____ = _____ cars

6. How many books? Write numbers to match the picture.

_____ + _____ = _____ books

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?

منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

Count On to Add

Be Curious

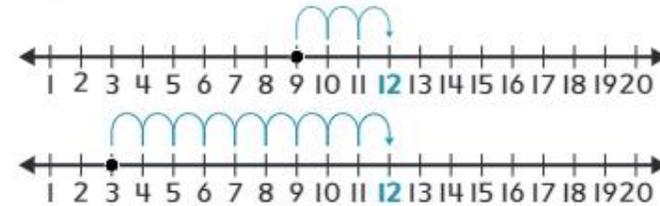### What question could you ask?

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.

$9 + 3 = 12$

1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15 16 17 18 19 20

1 2 3 4 5 6 7 8 9 10 11 **12** 13 14 15 16 17 18 19 20
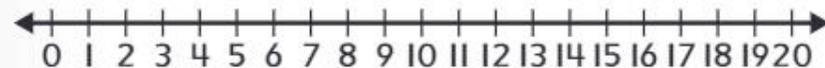
Counting on is quicker when you start with the greater addend.

Math is... Choosing Tools

What other tools can you use to find a sum?

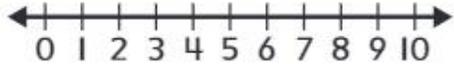## Work Together
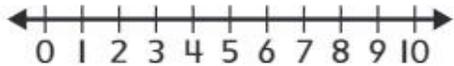
What is the sum? Use the number line.

$4 + 13 =$ _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

On My Own

Name _____

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

1. 4 + 3 = _____

0 1 2 3 4 5 6 7 8 9 10

2. 4 + 5 = _____

0 1 2 3 4 5 6 7 8 9 10

3. 8 + 7 = _____

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

4. 16 + 3 = _____

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

5. 3 + 14 = _____

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
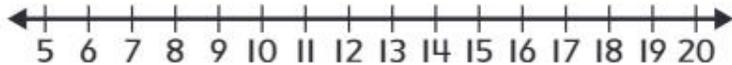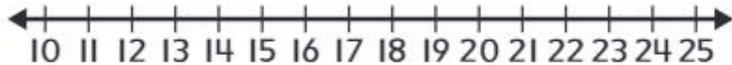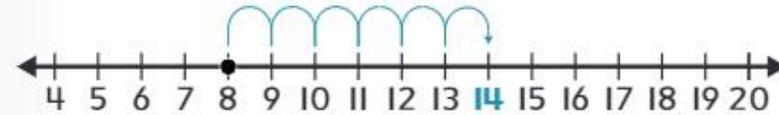
6. In one class, 2 students like baseball. In another class, 9 students like baseball. How many students in both classes like baseball?

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
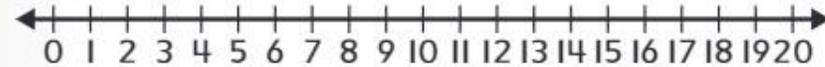
_____ students

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

4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

_____ + _____ = _____

⊘ 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?

منتديات صقر الجنوب التعليمية - المنهاج الإماراتي

Be Curious
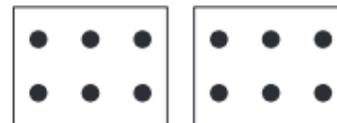
**What do you notice?
What do you wonder?**

Math is... Mindset

What helps you want to do your best work?
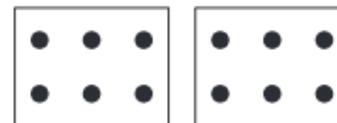
Learn

How many dots are there?

You can use **doubles** to add.

There are 6 dots on each card.
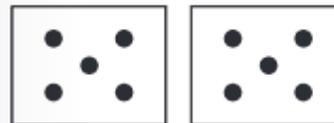
Both addends are 6.

$$6 + 6 = 12$$

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.

1.

_____ + _____ = _____

2.

_____ + _____ = _____

What is the sum?

3. $2 + 2 =$ _____

4. $7 + 7 =$ _____

5. $10 + 10 =$ _____

6. $6 + 6 =$ _____

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?

Near Doubles

Be Curious

Tell me everything you can.

Learn

How many cubes are there?

You can use doubles to help you add.

$3 + 4 = ?$

Add $3 + 3 = 6$.

Then add 1 more.

$3 + 4 = 7$

Math is... Patterns

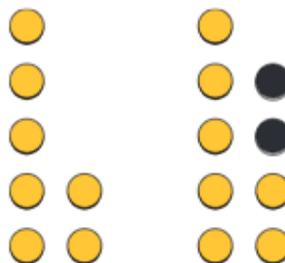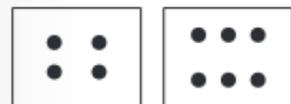What do you notice when you add 1 or 2 to a double?

$7 + 9 = ?$

Add $7 + 7 = 14$.

Then add 2 more.

$7 + 9 = 16$

Work Together

Use doubles to add. Explain your thinking.

$4 + 6 = $ _____

On My Own

Name _____

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

1. 4 + 3 = _____

2. 6 + 7 = _____

3. 5 + 6 = _____

4. 7 + 8 = _____

5. 3 + 5 = _____

6. 5 + 7 = _____

7. 7 + 9 = _____

8. 4 + 6 = _____

9. STEM Connection C.J. collects data about players on two teams.

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.

_____ + _____ = _____

🔄 Reflect

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

Math is... Mindset

How have you shown that you respect your classmates?

منتديات صقر الجنوب التعليمية - المنهاج الإماراتي

Make a 10 to Add

? Be Curious

What do you notice?
What do you wonder?

Learn

Zoe   Max
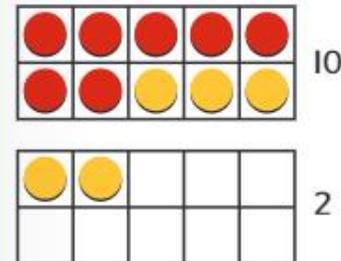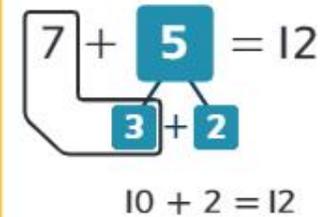
Zoe has 7 markers.

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.	Another way is to use number bonds.
10	$7 + 5 = 12$
2	$3 + 2$
$10 + 2 = 12$	$10 + 2 = 12$

You can make a 10 to add.

Math is... **Connections**

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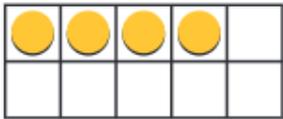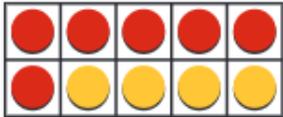
Work Together

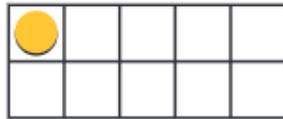How can you make a 10 to add $3 + 8$? Show your thinking.

On My Own
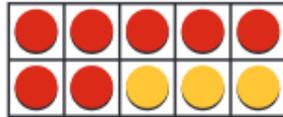
Name _____

What is the sum?

1. $6 + 8 =$ _____

2. $7 + 4 =$ _____

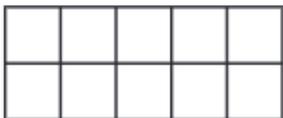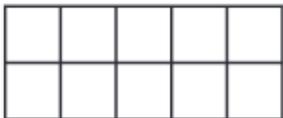**What is the sum? Show how to make a 10 to add.**

3. $7 + 8 =$ _____

4. $9 + 4 =$ _____

5. $8 + 5 =$ _____

$8 +$ **5**

$\bigcirc + \bigcirc$

6. $7 + 9 =$ _____
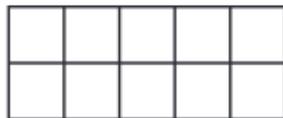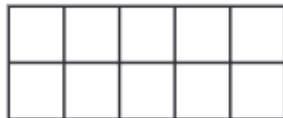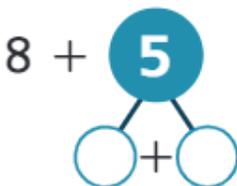
7 $+ 9$

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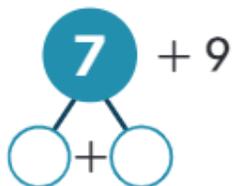
7. Beth has 6 baseballs. She finds 9 more baseballs. How many baseballs does she have? Draw to show your thinking.

_____ baseballs

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

$\square +$ $\bigcirc$
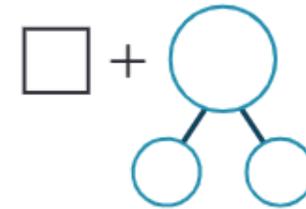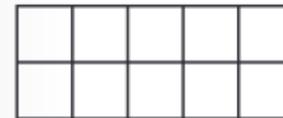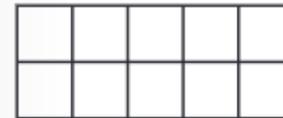
Reflect

How can making a 10 help you add?

Math is... Mindset

How did you feel about learning math today?

منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

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   Linda

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.

5 6 7 8 9 10 11 12 13 14 15

You can use doubles.

6 + 8 = 14

You can make a 10.

6 + 8 = 14
4 + 2
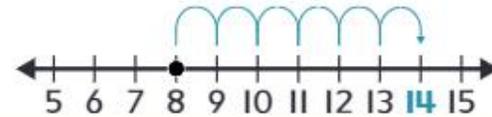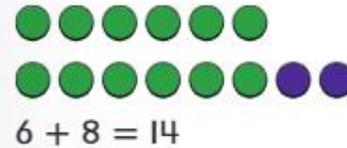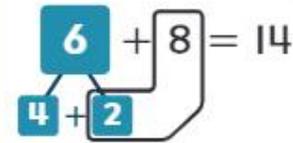
You can add two numbers in different ways.

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
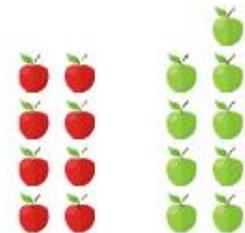
On My Own

Name _____

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

1. $6 + 7 =$ _____

2. $8 + 9 =$ _____

3. $4 + 7 =$ _____

4. $7 + 7 =$ _____

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

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

$$8 + 4 = 11$$

3   1
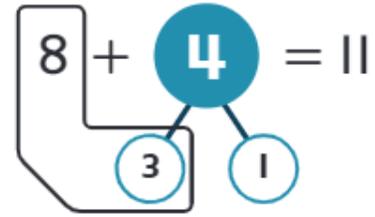
7. **Extend Your Thinking** Explain why you chose your strategy for exercise 1.

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?

Learn

Maya   Joe
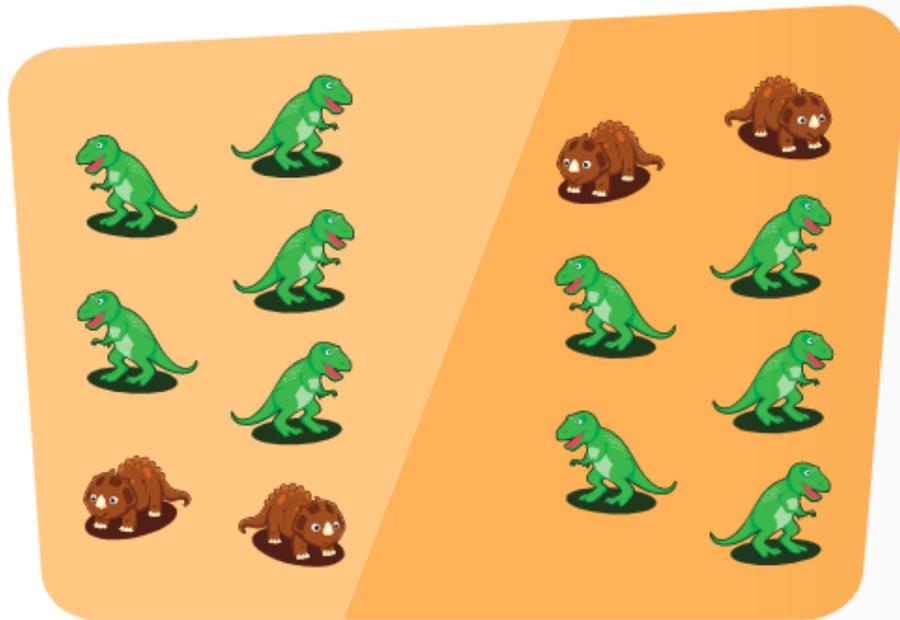
Maya has 7 toy cars.

Joe has 4 toy cars.

How many toy cars do they have in all?
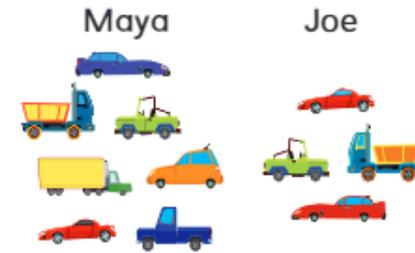
You can add 7 and 4 in any order.

$$7 + 4 = 11$$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

$$4 + 7 = 11$$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
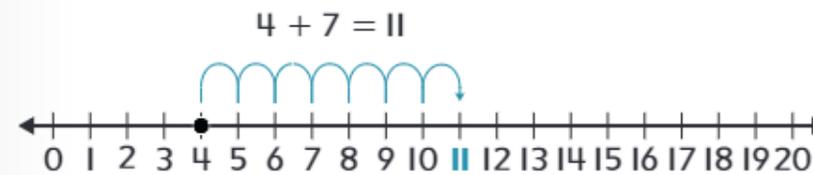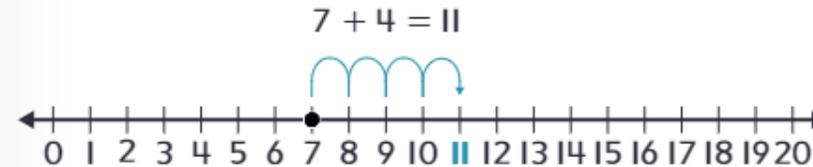
You can add two addends in any order. The sum is the same.

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.
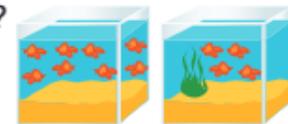
Name _____

What is the sum?

1. $5 + 3 =$ _____

   $3 + 5 =$ _____

2. $1 + 9 =$ _____

   $9 + 1 =$ _____

3. $6 + 7 =$ _____

   $7 + 6 =$ _____

4. $2 + 4 =$ _____

   $4 + 2 =$ _____

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 $8 + 1$ 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.

   _____ $+$ _____ $=$ _____

   _____ $+$ _____ $=$ _____

8. **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

CHERYL TOBEY
MATH
PROBES

Name_____

Solve the problem.

1. 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.

2. 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.

   4   9   12   13   14   19

   Tell or show why.

Reflect On Your Learning

Add Three Numbers

? Be Curious

Tell me everything you can.

Learn

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

How many bags do they fill?

$4 + 6 + 4$
0 1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 16 17 18 19 20

$6 + 4 + 4$
0 1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 16 17 18 19 20

$4 + 4 + 6$
0 1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 16 17 18 19 20
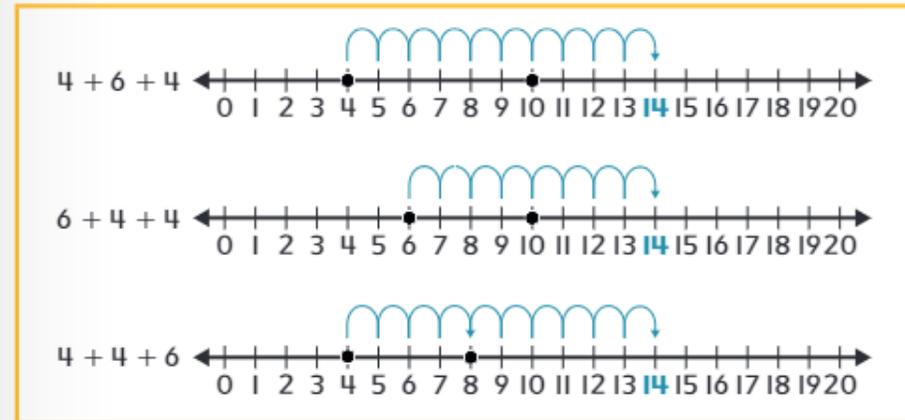
You can add three addends in any order. The sum is the same.

Math is... Quantities

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

💬 Work Together

Tim has 9 beads. Leah has 1 bead. Sye has 1 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.

$2 + 5 + 2 =$ _____

2.

$7 + 3 + 3 =$ _____

What is the sum?

3. $4 + 1 + 6 =$ _____   4. $1 + 2 + 9 =$ _____

5. $4 + 8 + 2 =$ _____   6. $8 + 6 + 6 =$ _____

7. **Error Analysis** Rainn has 8 brown leaves, 7 orange leaves, and 1 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?

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.

$$3 + 6 = 9$$

$+1 +2+3+4+5+6$
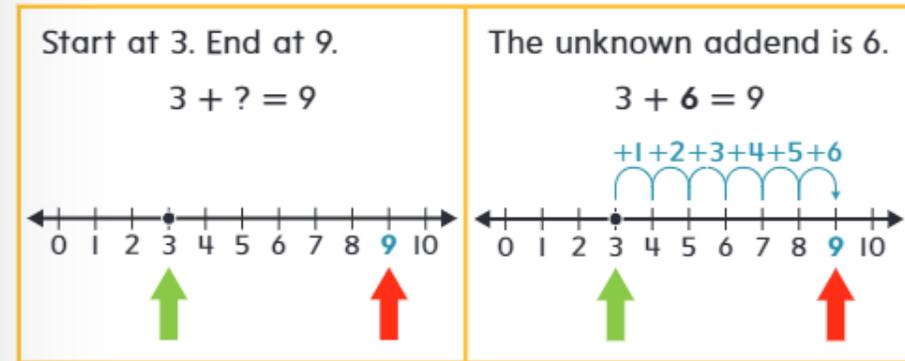
You can use one addend and the sum to find an unknown addend.

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 12 crayons.

How many crayons does Jack give her?

_____ crayons

On My Own

Name _____

What is the unknown addend?

1. $5 + \underline{\hspace{1cm}} = 8$

2. $6 + \underline{\hspace{1cm}} = 16$

3. $\underline{\hspace{1cm}} + 8 = 17$

4. $\underline{\hspace{1cm}} + 6 = 12$

5. $8 + \underline{\hspace{1cm}} = 12$

6. $\underline{\hspace{1cm}} + 9 = 18$

7. $10 + \underline{\hspace{1cm}} = 20$

8. $\underline{\hspace{1cm}} + 3 = 7$

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.

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

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?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

Understand the Equal Sign

? Be Curious

What do you notice?
What do you wonder?

Learn

Kara has 6 blue cubes and 6 red cubes.

Hans has 4 blue cubes and 8 red cubes.

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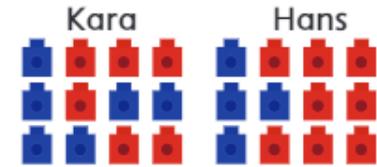
How can you show that Kara and Hans have an equal number of cubes?

$$6 + 6 = 4 + 8$$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

$$12 = 12$$
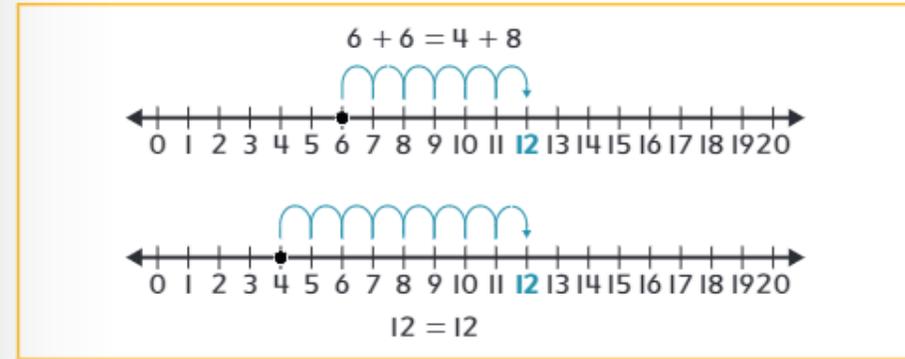
The **equal sign (=)** means the amounts on both sides are equal.

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.

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

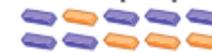3 + _____ = _____

Tom has 5 orange marbles and 6 blue marbles.

_____ + 6 = _____

2. Nick has 6 red cars and 4 yellow cars.

_____ + 4 = _____

Sue has 5 red cars and 5 yellow cars.

5 + _____ = _____

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

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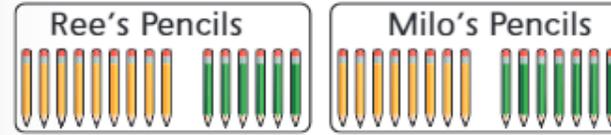
How can you show Milo that he has the same number of pencils as Ree?

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?

منتديات صقر الجنوب التعليمية - المنهاج الإماراتي

True Addition Equations

Be Curious

Is it always true?

$2 + 3 = 4 + 1$

Learn

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

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

$8 + 7 \stackrel{?}{=} 11 + 4$

7 8 9 10 11 12 13 14 **15** 16

7 8 9 10 11 12 13 14 **15** 16
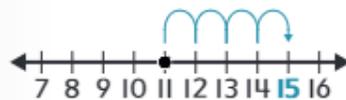
This equation is true.

$7 + 2 \stackrel{?}{=} 4 + 3$

$7 + 2 = 9$

$4 + 3 = 7$
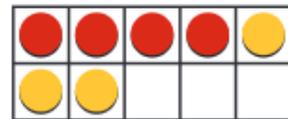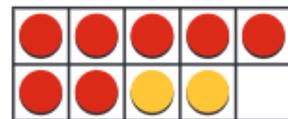
This equation is false.

An equation is true when the amounts on both sides are equal.

Work Together

Is this equation true or false? Explain.

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

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.

    $7 + 6 =$ _____ $+$ _____

    $7 + 6 =$ _____ $+$ _____

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	

1. 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

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

5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
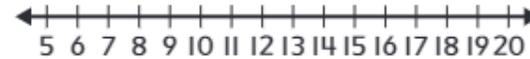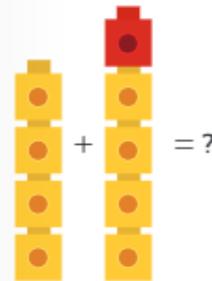
A. 11   B. 13

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?

$+ \quad = ?$

A. $2 + 2 = 4$ B. $3 + 3 = 6$

C. $1 + 1 = 2$ D. $4 + 4 = 8$

منتديات صقر الجنوب التعليمية – المنهاج الإماراتي

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. $6 + 15 = 9$

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

11. Choose the missing number in each number sentence.

	0	1	2	3
$12 + ? = 15$				
$8 = 7 + ?$				
$16 = 14 + ?$				
$? + 11 = 11$				

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.

🕐 Reflect

What strategies can I use to add?

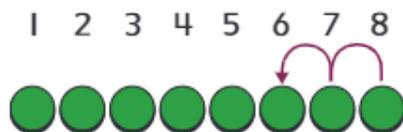منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

Unit 4

Fluency Practice

Name _____

Fluency Strategy

You can count back to help you subtract.

$8 - 2 = ?$

1 2 3 4 5 6 7 8

So, $8 - 2 = 6$.

1. How can you draw counters and a jump or jumps to show $5 - 1$? Write the number.

   $5 - 1 = $ ___

Fluency Flash

How can you count back to subtract?
Write the number.
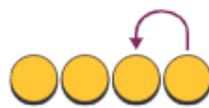
2.

$7 - 2 = $ ___

3.

$4 - 1 = $ ___

Fluency Check

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

4. $8 + $ ___ $= 10$

5. $10 = 5 + $ ___

6. $10 = $ ___ $+ 6$

7. $1 + $ ___ $= 10$

What is the sum or difference? Write the number.

8. $8 - 1 = $ ___

9. $4 + 1 = $ ___

10. $4 + 2 = $ ___

11. $6 - 2 = $ ___

12. $5 + 2 = $ ___

13. $4 - 2 = $ ___

14. $9 - 1 = $ ___

15. $6 + 1 = $ ___

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?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

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!

STEM video | GO ONLINE

Take the Last Counter

Rules

1. Place 1 counter on each of the 7 circles.

2. Player A goes first.
   Player A must take away
   1 or 2 counters from the circles, starting from the top.

3. Player B must now take away
   1 or 2 counters from those that are left, from the top.

4. Play continues with each player taking turns to take away
   1 or 2 counters from the circles.

5. The player to take away the last counter wins.

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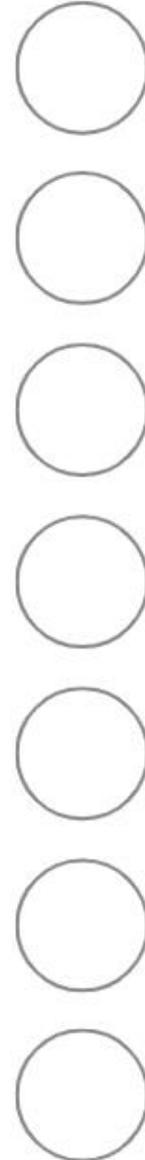
Relate Counting to Subtraction

Be Curious

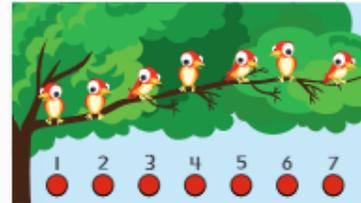**What do you notice?**
What do you wonder?

Learn

7 birds are in a tree.
2 fly away.

How many birds are left?

You can count back to **subtract**.

7 birds are in a tree.	2 birds fly away.
1 2 3 4 5 6 7	1 2 3 4 5 6 7
	$7 - 2 = 5$
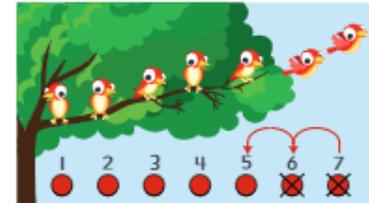
One way to subtract is to count back from the **total** to find the **difference**.

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

Name _____

How many are left? Solve the equation.

1.

$9 - 2 =$ _____

2.

$10 - 4 =$ _____

3.

$11 - 2 =$ _____

What equation matches the picture?
Complete the equation.

4.

$12 -$ _____ $=$ _____

5.
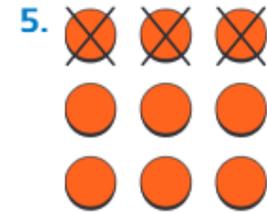
_____ $-$ _____ $= 6$

6. **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

Learn

There are 12 bottles.
Bo knocks down 5 bottles.
How many bottles are still standing?
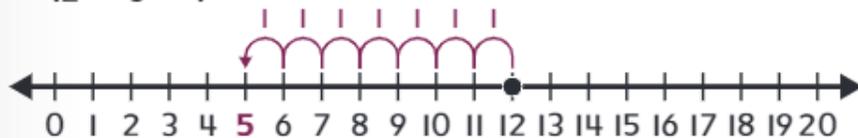
A number line can help you count back to subtract.

▶ **One Way** Start at 12.
Count back **by** 5.
$12 - 5 = 7$
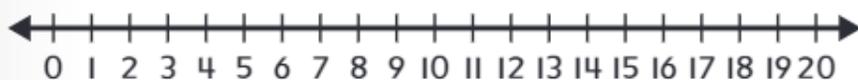
Math is... Quantities

Why do you start at 12?

0 1 2 3 4 5 6 **7** 8 9 10 11 12 13 14 15 16 17 18 19 20

▶ **Another Way** Start at 12.
Count back **to** 5.
$12 - 5 = 7$

0 1 2 3 4 **5** 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

You can count back to subtract.

Work Together

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

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
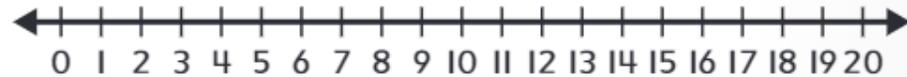
On My Own

Name _____

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

1. $9 - 3 =$ _____

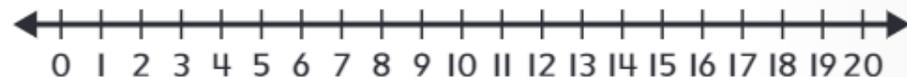0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

2. $11 - 4 =$ _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

3. $12 - 7 =$ _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

4. $14 - 8 =$ _____

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
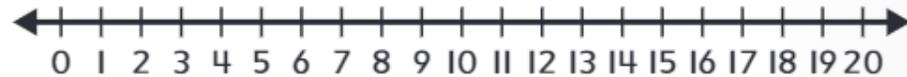
What is the difference?

5. $13 - 9 =$ _____   **6.** $19 - 6 =$ _____

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

8. Extend Your Thinking Tell or show how to use a number line to subtract $13 - 8$.

Reflect

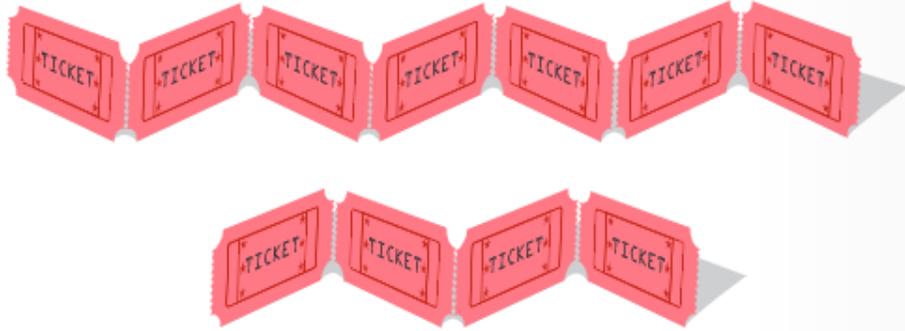How do number lines help you subtract?

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?

Math is... **Mindset**

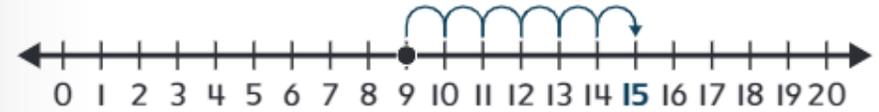How can your strengths help you learn today?

Learn

How can you subtract 15 − 9?

You can count on to subtract.

Start at 9. Count on to 15.

$$15 - 9 = 6$$

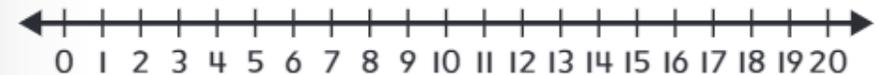0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** 16 17 18 19 20

Math is... **Connections**

What other operation could you use?

Work Together

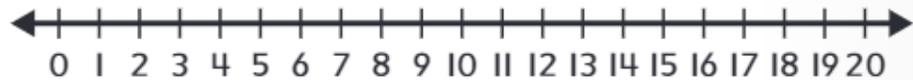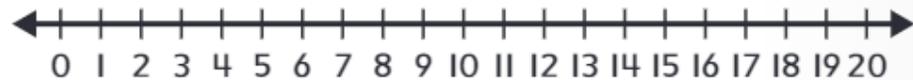How can you count on to subtract 12 − 7?
Use the number line.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

On My Own

Name _____

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

1. $9 - 6 =$ _____

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```
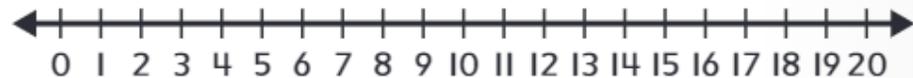
2. $13 - 8 =$ _____

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```

3. $11 - 5 =$ _____

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```

4. $14 - 9 =$ _____

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```

5. $16 - 7 =$ _____

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```
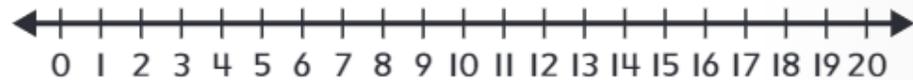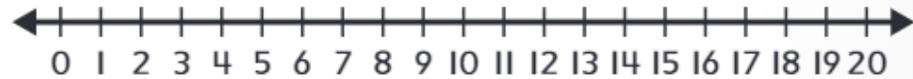
What is the difference?

6. $12 - 9 =$ _____

7. $14 - 7 =$ _____

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

_____ action figures

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

```
←+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+—+→
  0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20
```
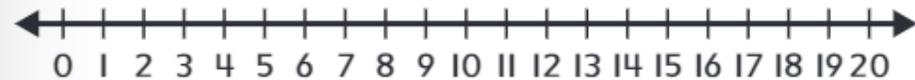
🔄 Reflect

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

Math is... Mindset

How did your strengths help you learn today?

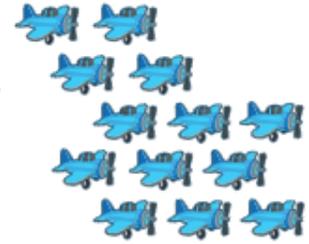# Make a 10 to Subtract

Be Curious

Tell me everything you can.

Math is... **Mindset**

How can different ideas help you learn better?

Learn

Ray has 13 toy planes. He gives 5 to Cia.
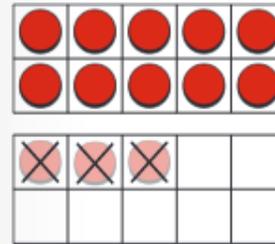
How many toy planes does Ray have left?

You can make a 10 to subtract.

$13 - 5 = ?$

Break apart 5 to make a 10.

$5 = 3 + 2$
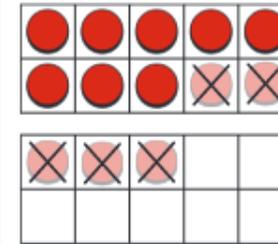
$13 - 3 = 10$

$13 - 3 = 10$

Then subtract 2.

$10 - 2 = 8$

Ray has 8 toy planes.

Math is... **Thinking**

What do the 3 and 2 represent?

One way to subtract is to make a 10.

Work Together

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

On My Own

Name_____

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

1. $15 - 8 =$ _____

2. $14 - 6 =$ _____

3. $12 - 8 =$ _____

4. $11 - 4 =$ _____

What is the difference?

5. $16 - 7 =$ _____

6. $13 - 8 =$ _____

7. **Error Analysis** Jorge uses ten-frames to subtract $12 - 5$. How can you help him find the difference?
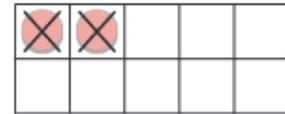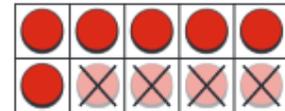
$12 - 2 = 10$

$10 - 4 = 6$

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?

Use Near Doubles to Subtract

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?

Learn

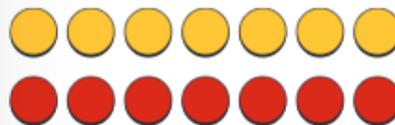Jana has 14 crayons. She gives 6 crayons to her friend.

How many crayons does Jana have left?

You can use doubles to help you subtract.
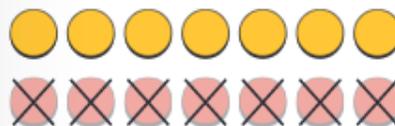
Doubles	Near Doubles
$7 + 7 = 14$	$8 + 6 = 14$
So, $14 - 7 = 7$.	So, $14 - 6 = 8$.

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.

On My Own

Name _____

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

1. $12 - 6 =$ _____

2. $8 - 4 =$ _____
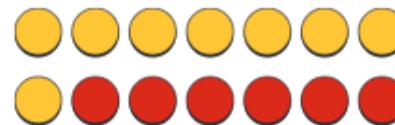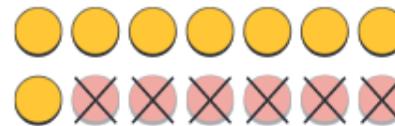
3. $18 - 9 =$ _____

4. $10 - 5 =$ _____

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

5. $12 - 7 =$ _____

6. $11 - 5 =$ _____

7. **STEM Connection** Jordan sees 12 dolphins at the zoo. 6 dolphins are swimming and the rest are sleeping. How many dolphins are sleeping?

_____ 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?

Use Addition to Subtract

? Be Curious

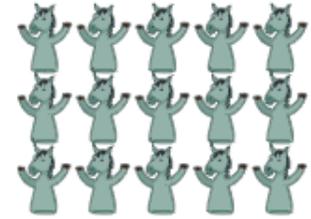### What do you notice?
What do you wonder?

Learn

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.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 **15** 16 17 18 19 20

$7 + 8 = 15$, 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.

On My Own

Name_____

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

1. $8 + 7 = 15$, so

$15 - 8 = $ _____.

2. $3 + 6 = 9$, so

$9 - 3 = $ _____.

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

3. $11 - 5 = $ _____

4. $15 - 8 = $ _____

5. $9 - 4 = $ _____

6. $12 - 6 = $ _____

7. $13 - 9 = $ _____

8. $14 - 5 = $ _____

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?

منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

Showing Problems with Equations

MATH PROBES
CHERYL TOBEY

Name _____

1. Mari has 11 flowers. Her friend gives her 6 more flowers. How many flowers does Mari have now?
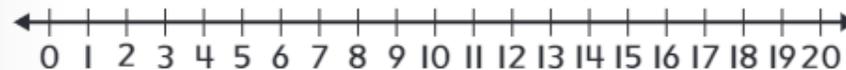
   Show the problem using the ten-frames.

   [ten-frame grids]

   Circle the equation that shows the problem.

   $11 + 6 =$ _____   OR $11 - 6 =$ _____

   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.

   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

   Circle the equation that shows the problem.

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

   Tell or show why you chose that equation.
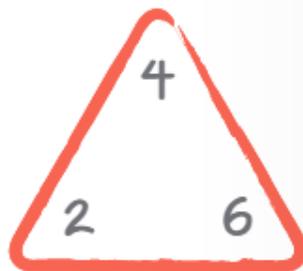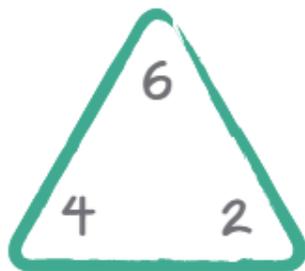
Reflect On Your Learning

Use Fact Families to Subtract

Be Curious

How are they the same?
How are they different?

> **Math is...** Mindset
>
> What helps you stay focused on your work?

Learn

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.

> **Math is...** Explaining
>
> How are the numbers in the fact triangle related?

Numbers in a fact triangle are related.

Work Together

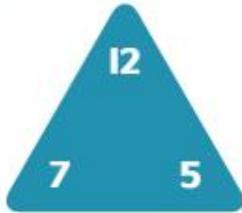How can you use a related fact to complete the equation?

$$15 - ? = 6$$

On My Own

Name _____

Complete the related facts for the fact triangle.

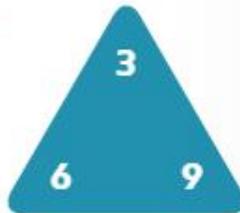1.

Triangle: 12, 7, 5

$7 + \_\_\_ = 12$

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

$12 - \_\_\_ = 5$

$\_\_\_ - 5 = 7$

2.

Triangle: 3, 6, 9

$6 + \_\_\_ = 9$

$3 + 6 = \_\_\_$

$9 - \_\_\_ = 3$

$\_\_\_ - 3 = 6$

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

3.

Triangle: 9, 15, 6

4.
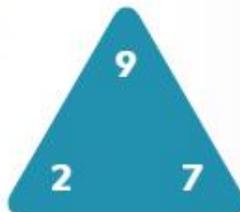
Triangle: 9, 2, 7

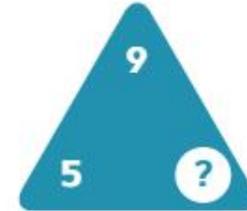**What two facts complete the fact family? Write the two facts.**

5. $6 + 7 = 13$

$7 + 6 = 13$

6. $9 + 2 = 11$

$11 - 9 = 2$

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

Triangle: 9, 5, ?

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

Reflect
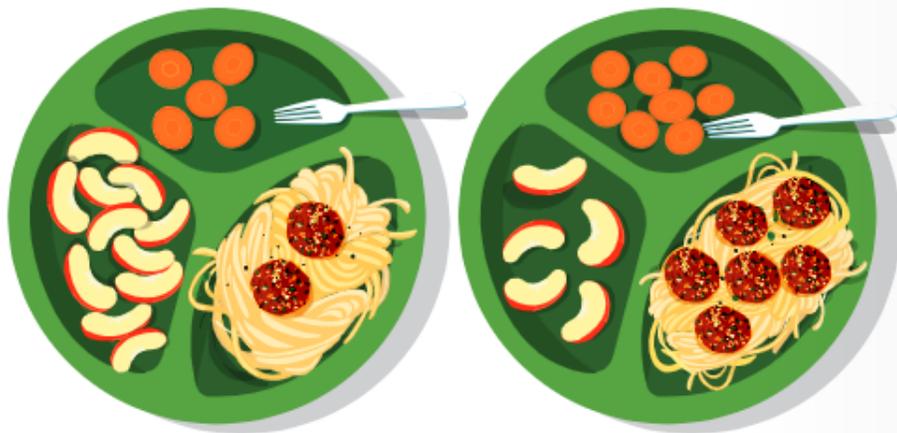
How can you make a fact triangle?

Math is... Mindset

What helped you stay focused on your work?

Find an Unknown Number in a Subtraction Equation

Be Curious

How are they the same?
How are they different?

Math is... **Mindset**

How can you show respect for your classmates?

Learn

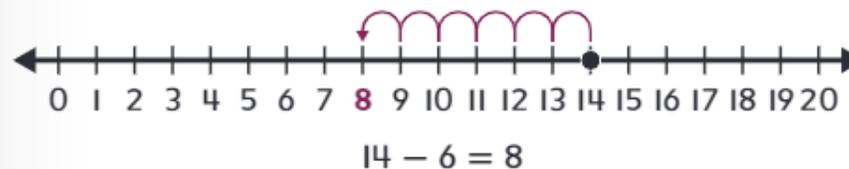Liz had 14 trading cards. She lost some cards. Now she has 8 trading cards.

How many cards did Liz lose?

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

Math is... **Structure**

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

▶ **One Way** is to count back.

0 1 2 3 4 5 6 7 **8** 9 10 11 12 13 14 15 16 17 18 19 20

$$14 - 6 = 8$$

▶ **Another Way** is to think addition.

$$8 + ? = 14$$

0 1 2 3 4 5 6 7 8 9 10 11 12 13 **14** 15 16 17 18 19 20

$$8 + 6 = 14, \text{ so } 14 - 6 = 8.$$
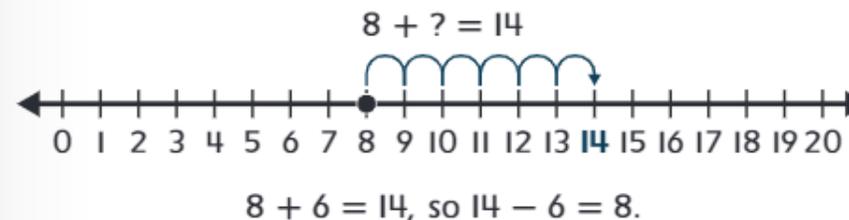
You can use strategies you know to solve equations.

Work Together

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

$$9 = 17 - ?$$

On My Own

Name _____

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

1. $12 - \underline{\hspace{1cm}} = 4$

2. $16 - \underline{\hspace{1cm}} = 7$

3. $6 = 15 - \underline{\hspace{1cm}}$

4. $\underline{\hspace{1cm}} = 11 - 3$

5. $11 - \underline{\hspace{1cm}} = 7$

6. $\underline{\hspace{1cm}} = 20 - 9$

7. Error Analysis Tony uses a number line to solve $15 - ? = 11$. He says the unknown number is 6. Do you agree? Explain.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
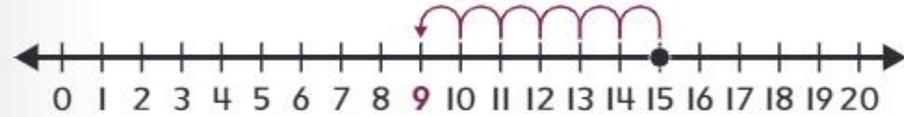
8. Extend Your Thinking Show two ways to solve $12 - ? = 5$. Explain your thinking.

Reflect

How do you choose how to solve subtraction equations?
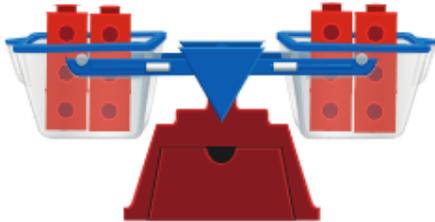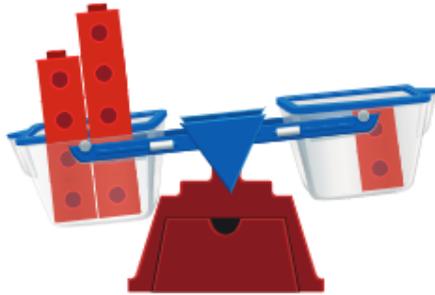
Math is... Mindset
How have you shown respect for your classmates?

True Subtraction Equations

Be Curious

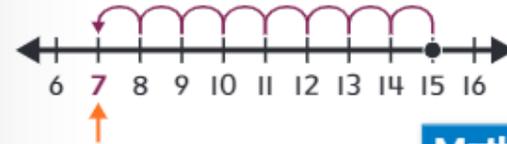### Is it always true?

Math is... Mindset

What do you do to get yourself excited to learn?

Learn

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

You can make two equations.

$15 - 8 = ?$

6 **7** 8 9 10 11 12 13 14 15 16

$15 - 8 = 7$

Math is... Choosing Tools

What is another tool you can use?

$11 - 4 = ?$

6 **7** 8 9 10 11 12 13 14 15 16
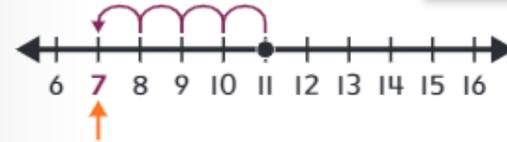
$11 - 4 = 7$

The two equations have the same difference.

$15 - 8 = 11 - 4$

The equation is true.

Work Together

Is this equation true or false? Explain.

$$9 - 4 \overset{?}{=} 11 - 6$$

On My Own

Name _____

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

1. $13 - 4 = 11$

   True   False

2. $15 - 8 = 7$

   True   False

3. $8 - 6 = 7 - 5$

   True   False

4. $16 - 7 = 18 - 9$

   True   False

5. $9 - 4 = 10 - 3$

   True   False

6. $12 - 4 = 15 - 6$

   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. _____ $= 18 - 5$

9. $17 - 6 = 20 -$ _____

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.

11. **Extend Your Thinking** Complete the equation to make it true.

    _____ $- 4 = 17 -$ _____

Reflect

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.

1. subtract

   $5 + 1 = 6$ $\qquad$ $15 - 8 = 7$

2. difference

   $12 - 7 = 5$

3. fact family

$2 + 8 = 10$	$1 + 8 = 9$
$8 + 2 = 10$	$9 + 2 = 11$
$10 - 2 = 8$	$9 - 3 = 6$
$10 - 8 = 2$	$8 + 1 = 9$

4. unknown

   $? - 4 = 2$

5. equal sign

   $-$ $\qquad$ $+$ $\qquad$ $=$

Review

6. Count back to subtract. Write the difference.

   $18 - 4 =$ _____

   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

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. $5 + 9 = 14$ $\qquad$ B. $14 = 13 + 1$

   C. $14 = 4 + 10$ $\qquad$ D. $14 = 7 + 7$

9. Which number makes the equation true?

$17 - ? = 8$

A. 6 B. 8

C. 9 D. 11

10. Which equations are part of the fact family from this fact triangle? Choose all the correct answers.

A. $7 + 7 = 14$ B. $14 - 7 = 7$

C. $5 + 9 = 14$ D. $7 + 14 = 7$

11. 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?

Fluency Practice

Name _____

Fluency Strategy

You can count up to help you subtract.

$7 - 5 = ?$

1 2

So, $7 - 5 = 2$.

1. 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.

$8 - 6 =$ _____

3.

$5 - 4 =$ _____

Fluency Check

What is the sum or difference? Write the number.

4. $9 - 7 =$ _____   9. $8 + 1 =$ _____

5. $5 + 2 =$ _____   10. $6 - 5 =$ _____

6. $4 - 1 =$ _____   11. $7 + 1 =$ _____

7. $7 + 2 =$ _____   12. $6 - 4 =$ _____

8. $6 + 2 =$ _____   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

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?

STEM video | GO ONLINE

IGNITE!

Name _____

Shape Sudoku

Use pattern blocks to complete the puzzles.

Puzzle 1

Puzzle 2

منتديات صقر الجنوب التعليمية للمنهاج الاماراتي
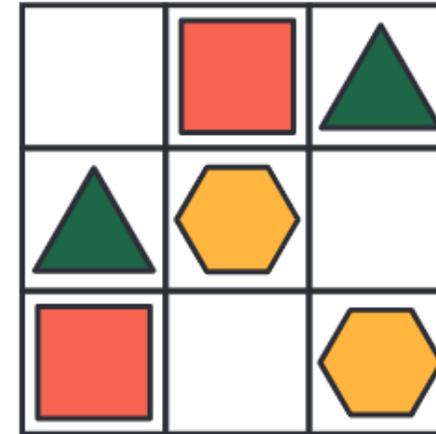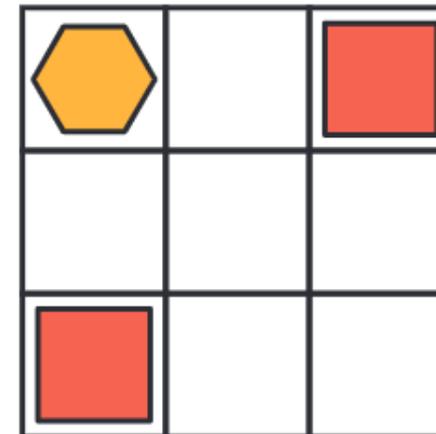
Understand Defining Attributes of Shapes

Be Curious

How are they the same?
How are they different?

YIELD

Learn

How can you describe these shapes?

Some are big and some are small.
They are different colors.

They are all **closed** figures.	They all have 4 straight **sides**. They all have 4 **vertices**.
No openings or gaps	4 straight sides 4 vertices
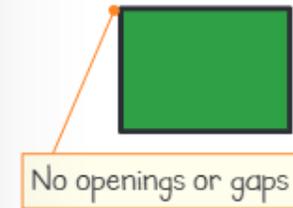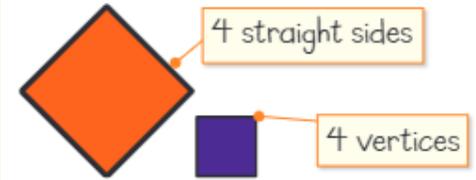
Vertices and straight sides are **defining attributes** of some **2-dimensional shapes**.

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.

1. closed shape

2. shape with 4 vertices

3. rectangle

4. square

---
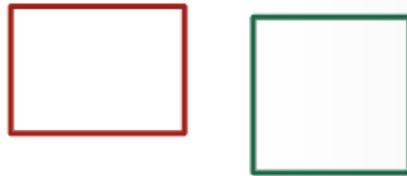
5. Which statement is true for a square? **Choose all the correct answers.**

   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?
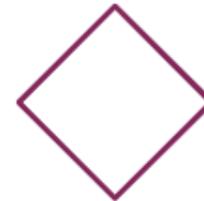
Reflect

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

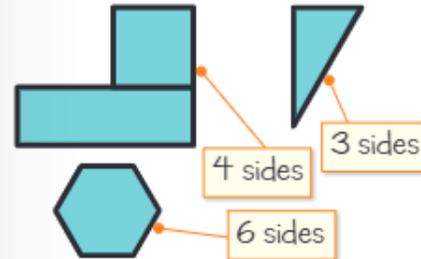Angie says these shapes are all the same.

Do you agree?

All the shapes are blue.
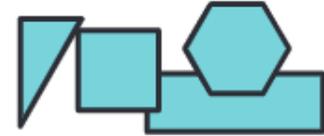
All the shapes are about the same size.

Math is... **Patterns**

How are the shapes alike and different?

The number of sides is not the same.

4 sides

3 sides

6 sides

The number of vertices is not the same.

3 vertices

4 vertices

6 vertices
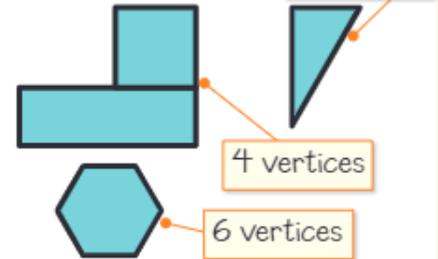
Color and size are not defining attributes of shapes.

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.

1. 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

6. **Error Analysis** Mansur says these figures are *not* the same shape. Do you agree? Tell why or why not.

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?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

2-Dimensional Shape Sort

Name_____

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

Triangle or Rectangle
Other

a.

b.

c.

d.

e.

f.
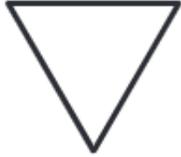
g.

h.

i.

j.

k.

l.

m.

n.

o.

p.

q.

Reflect On Your Learning

منتديات صقر الجنوب التعليمية - النجاح الاماراتي

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.

2.

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

3.

4.

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?

Build New Shapes

Be Curious
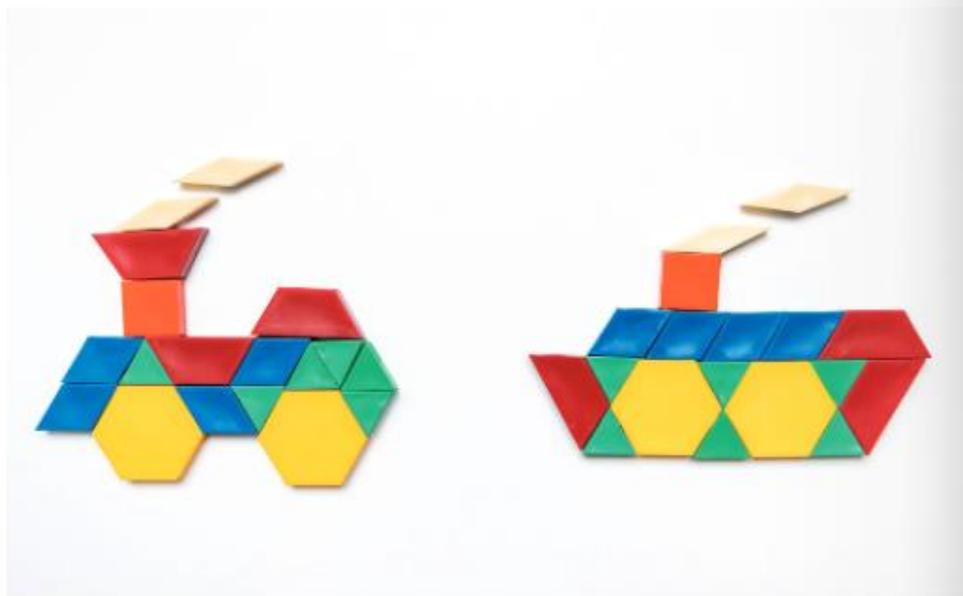
How are they the same?
How are they different?

Learn

How can you use these shapes to make a new shape?
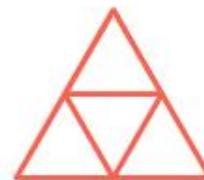
You can use the parts of a shape to make a new shape.

You can take apart the shape.

Then use the parts to make a new shape.
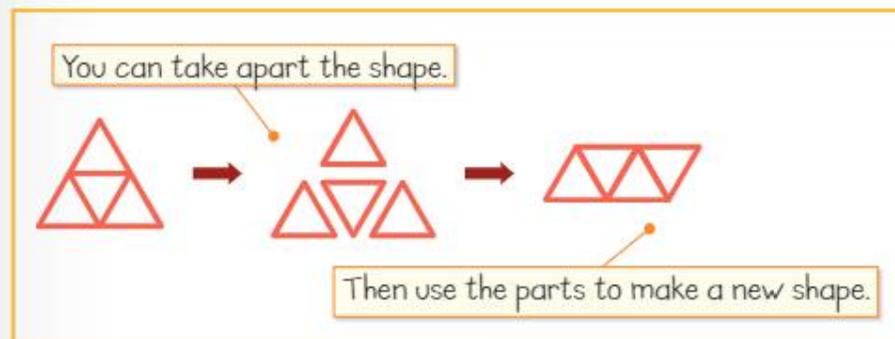
The new shape looks different, but it has the same parts.

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.

On My Own

Name _____

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

1.

Yes   No

2.
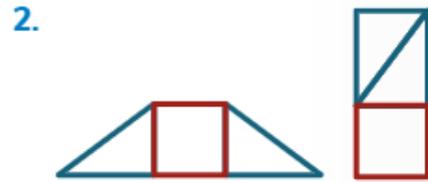
Yes   No

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

3.

4.
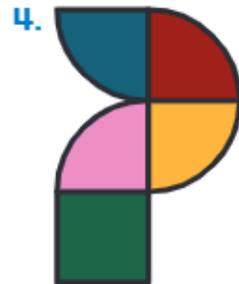
5. How can you use the parts of this shape to make a hexagon? Draw to show your thinking.

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

house   tree

Reflect

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

Math is... Mindset

Why were you confident about math today?

Understand Attributes of Solids

Be Curious

What do you notice?
What do you wonder?

Learn

How can you describe these shapes?

They are 3-dimensional shapes.
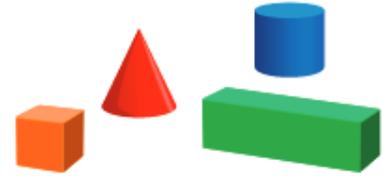
They have 3 dimensions.

1   2   3
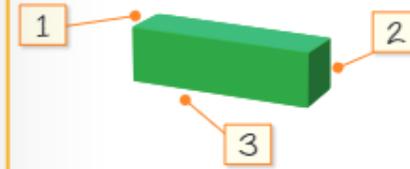
Some have faces and edges. Some have vertices.
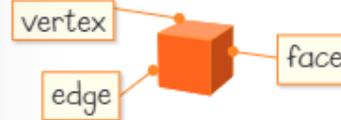
vertex
edge
face

Some have bases.

base

A cone has an apex.

apex

You can describe **3-dimensional shapes** by the defining attributes they always have.

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

Work Together

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

On My Own

Name _____

Circle all the correct answers for the question.

1. Which are cubes?
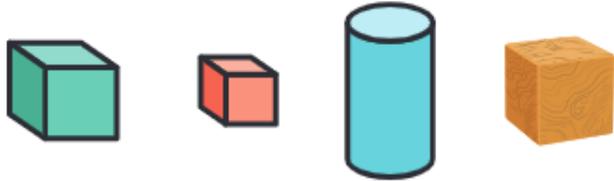
2. Which are cylinders?

3. Which are cones?

4. Which are rectangular prisms?

5. **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

7. **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?

منتديات صقر الجنوب التعليمية – المنهاج الاماراتي

Build New Solids

Be Curious

**What do you notice?
What do you wonder?**

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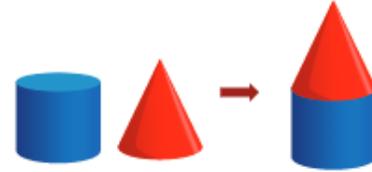
You can combine 3-dimensional shapes to make new 3-dimensional shapes.

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.
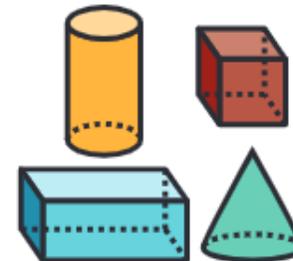
On My Own

Name_____

Circle the shapes that make up the object.

1.

2.
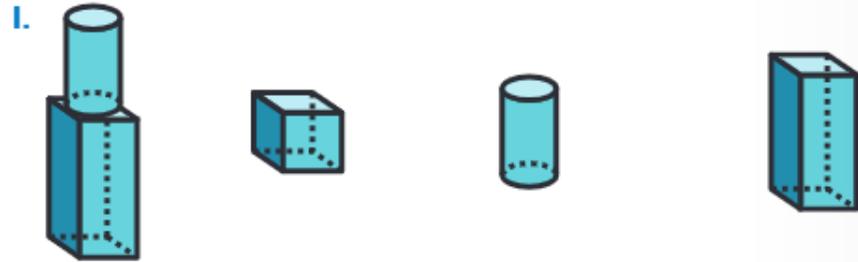
Use the parts of the object to make a new object. Draw or describe your object.

3.

4.
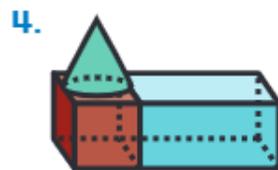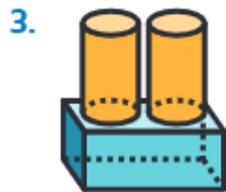
5. **Error Analysis** Chi wants to make a new object using Ben's shapes. Does Chi's object use the same shapes as Ben's? Explain.

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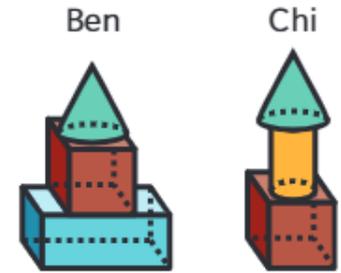
6. **Extend Your Thinking** Brett has 3 cubes. He says there is only one way to make a new shape with them. Do you agree? Explain.

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

1. 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.

6. Color, size, vertices, and sides are some _____ of shapes.

7. Only the _____ of a shape help us name it.

Review

8. 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?

    You can use Shape ___ and Shape ___ .

11. How many edges does the shape have?
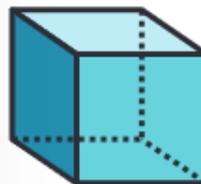
    A. 4   **B.** 6   **C.** 12   **D.** 18

12. Which shapes have 0 vertices? Choose all the correct answers.

A. rectangular prism   **B.** cube

C. cylinder   **D.** sphere

13. Which other shapes can you make from this one? Choose all the correct answers.

A.   **B.**

C.   **D.**

14. Can you use the parts of Shape 1 to make Shape 2? Circle Yes or No.

1   2
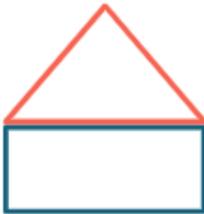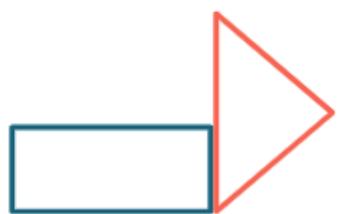
Yes   No

Performance Task

Automotive engineers use these shapes in car designs.
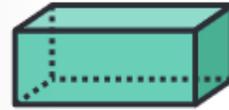
Part A: What are the names of the shapes in the group?

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.

🌀 Reflect

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

Unit 6

Fluency Practice

Name _____

Fluency Strategy

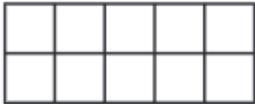You can use a ten-frame to help add to 10.
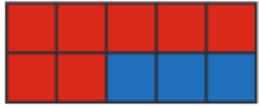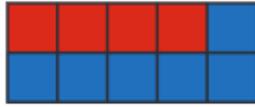
$7 + 3 = 10$ $4 + 6 = 10$

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

What is the sum? Write the number.

$5 + 5 =$ _____

Fluency Flash

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

2.

$2 + 8 =$ _____

3.

$9 + 1 =$ _____

Fluency Check

What is the sum or difference? Write the number.

4. $3 + 7 =$ _____

5. $8 - 6 =$ _____

6. $6 + 4 =$ _____

7. $5 - 4 =$ _____

8. $1 + 9 =$ _____

9. $7 - 1 =$ _____

10. $9 - 8 =$ _____

11. $2 + 8 =$ _____

12. $6 - 1 =$ _____

13. $7 - 2 =$ _____

Fluency Talk

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

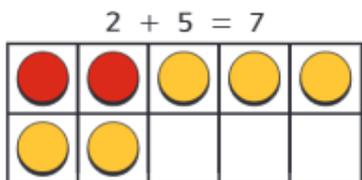How can you count up to subtract $9 - 7$? Show and explain your work.

تدريبات صقر الخليج التعليمية - المنهاج الاماراتي
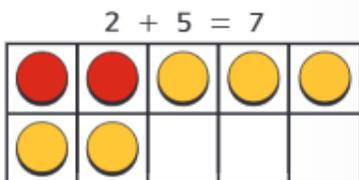
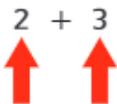# Glossary/Glosario

Aa

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

$$2 + 5 = 7$$

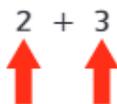**sumar (adición)** Unir conjuntos para hallar el total o la suma.

$$2 + 5 = 7$$

addend Any numbers or quantities being added together.

$$2 + 3$$

2 is an addend and 3 is an addend

sumando Números o cantidades que se suman.

$$2 + 3$$

2 es un sumando y 3 es un sumando

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

minute hand
hour hand

reloj analógico Reloj que tiene manecilla horaria y minutero.

minutero
manecilla horaria

Cc

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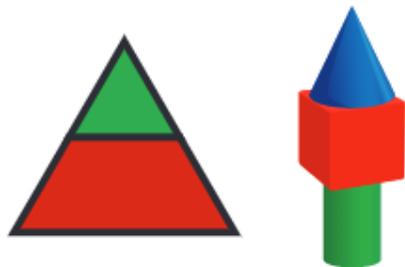
column A column goes up and down on a number chart.

**columna** Una columna sube y baja en una tabla numérica.

compare To look at objects, shapes, or numbers and see how they are alike or different.

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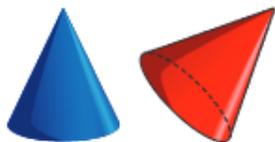
English	Spanish/Español

composite shape A figure made up of two or more shapes.
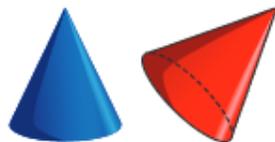
figura compuesta Figura formada por dos o más figuras.
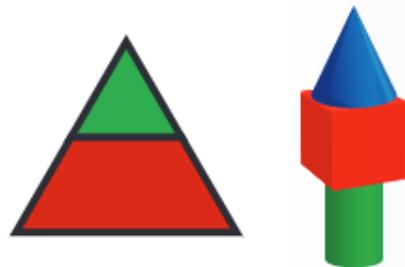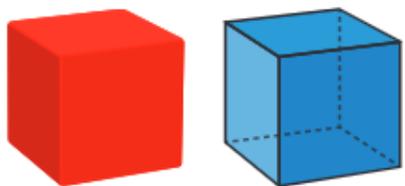
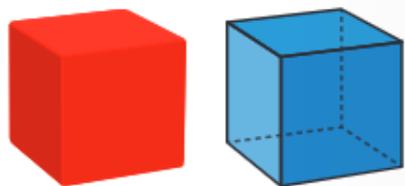**cone** A 3-dimensional shape with 1 round base and 1 apex.

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.

datos Números o símbolos que se reúnen para mostrar información.

Name	Number of Pets
Mary	3
James	1
Alonzo	4

Nombre	Número de mascotas
Mary	3
James	1
Alonzo	4

difference Subtracting one number from another number gives the difference.

$$3 - 1 = 2$$

The difference is 2.

diferencia Restando un número de otro número da la diferencia.
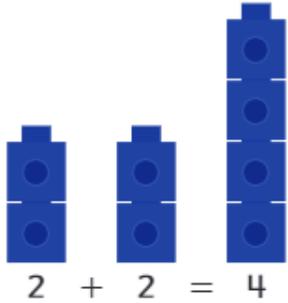
$$3 - 1 = 2$$

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.
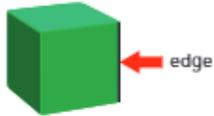
dígito Símbolo usado para escribir números. Los diez dígitos son: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

English	Spanish/Español

doubles Two addends that are the same number.

dobles Dos sumandos que son el mismo número.

$$2 + 2 = 4$$

$$2 + 2 = 4$$

edge The line where two sides or faces meet.
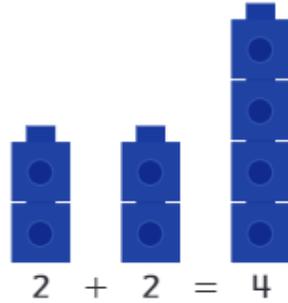
borde Línea donde dos lados o caras se unen.

← edge

← borde

equal shares Each share is the same size.

Example: This muffin is cut into 2 equal shares.
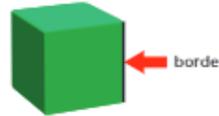
partes iguales Cada una de las partes tiene el mismo tamaño.

Ejemplo: Este pastelillo está cortado en 2 partes iguales.

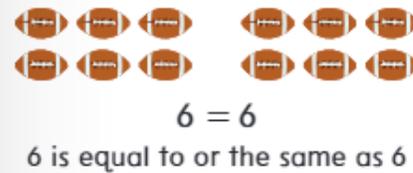| English	Spanish/Español

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

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

$$2 + 4 = 6$$

$$2 + 4 = 6$$

↑

equal sign

↑

signo igual

equal to (=)

igual a (=)

$$6 = 6$$

6 is equal to or the same as 6

$$6 = 6$$

6 es igual o lo mismo que 6

equation A number sentence that includes an equal sign.
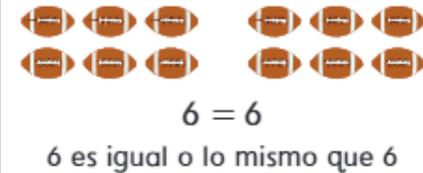
ecuación Una oración numérica que incluye el signo igual.

$$5 + 7 = 12$$

$$5 + 7 = 12$$

Ff

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.

← face

← cara
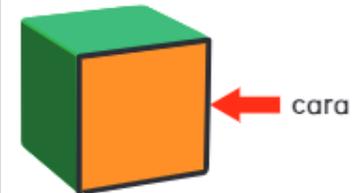
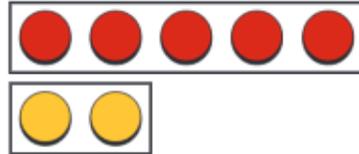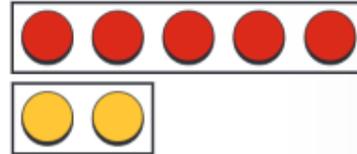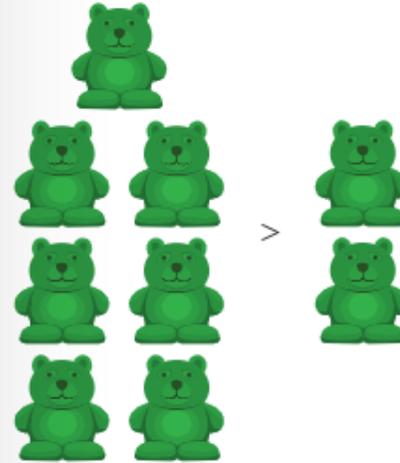| English	Spanish/Español
fact family Addition and subtraction sentences that use the same numbers. Sometimes called *related facts*. 6 + 7 = 13 13 − 7 = 6 7 + 6 = 13 13 − 6 = 7	**familia de operaciones** Enunciados de suma y resta que tienen los mismos números. Algunas veces se llaman *operaciones relacionadas*. 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.

English	Spanish/Español

Gg

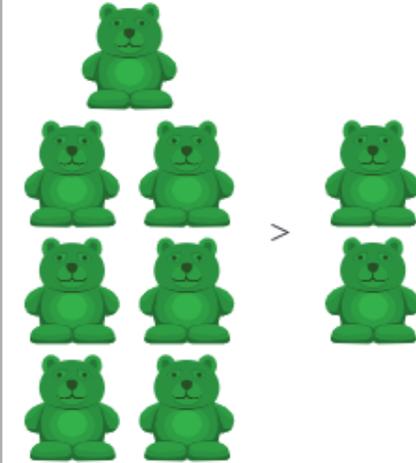| English	Spanish/Español
greater than (>) When an amount is larger than another amount. Example: 7 is greater than 2 or 7 > 2.	**mayor que (>)** Cuand o una cantidad es más grande que otro. Ejemplo: 7 es mayor que 2 o 7 > 2.

Hh

English	Spanish/Español
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.

12:30

12:30

منتديات صقر الجنوب التعليمية - المنهاج الاماراتي

English	Spanish/Español
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. hour hand	**manecilla horaria** Manecilla del reloj que indica la hora. Es la manecilla más corta. manecilla horaria

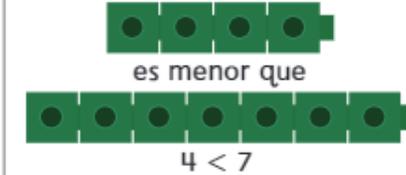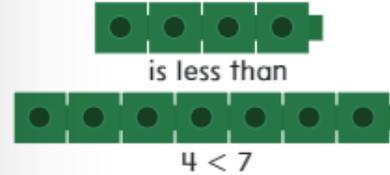| English	Spanish/Español
length How long or how far away something is. length	**longitud** La mayor de las dos dimensiones principales que tienen las cosas o figuras planas. longitud
less than (<) 4 is less than 7. is less than 4 < 7	**menor que (<)** 4 es menor que 7. es menor que 4 < 7

English	Spanish/Español
long (longer, longest) A way to compare the lengths of objects.	**largo (más largo, el más largo)** Forma de comparar la l ongitud de objetos.

long

largo

longer

más largo

longest

el más largo

Mm
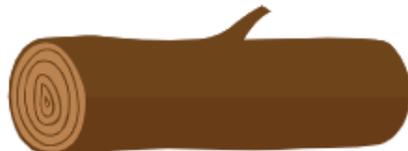
English	Spanish/Español
measure To find the length, height, or weight using standard or nonstandard units.	**medir** Hallar la longitud, estatura o peso mediante unidades estándar o no estándar.

English	Spanish/Español
minus (–) The sign used to show subtraction.	**menos (–)** Signo que indica resta.

5 – 2 = 3

minus sign

5 – 2 = 3

signo menos

English	Spanish/Español
minute A unit used to measure time. I minute = 60 seconds	**minuto** Unidad para medir tiempo. I minuto = 60 segundos
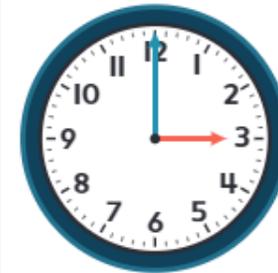
English	Spanish/Español
minute hand The longer hand on a clock that tells the minutes.	**minutero** La manecilla más larga del reloj que indica los minutos.

minute hand

minutero

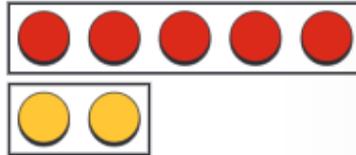| English	Spanish/Español
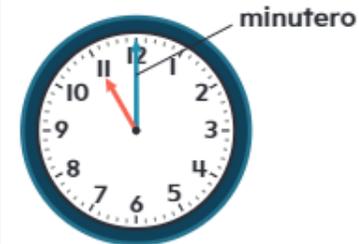
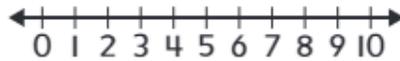**more** A larger or greater amount.
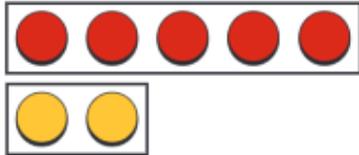
There are more red counters than yellow ones.
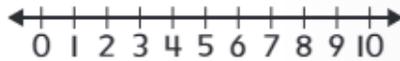
más Una cantidad mayor o más grande.

Hay más fichas rojas que amarillas.

Nn

number line A line with number labels.

0 1 2 3 4 5 6 7 8 9 10

recta numérica Recta con marcas de números.

0 1 2 3 4 5 6 7 8 9 10

Oo

one-fourth One of 4 equal shares.

one-fourth shaded

un cuarto Una de 4 partes iguales.

un cuarto sombreado

---

one-half One of 2 equal shares.

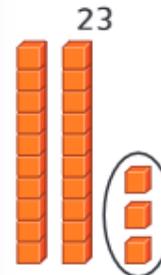

one-half shaded

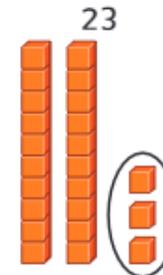**mitad** Una de 2 figuras iguales.

una mitad sombreada

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

23

This number has 3 ones.

unidades Los números en el rango de 0 a 9. Es el valor posicional de un número.

23

Este número tiene 3 unos.

open shape A figure not connected at one or more points.

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.

pattern unit

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

unidad de patrón

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

Favorite Sports						
☆ Soccer	⚽	⚽	⚽			
🏀 Basketball	🏀	🏀	🏀	🏀	🏀	
⚾ Baseball	⚾	⚾	⚾	⚾		

Each picture = 1 vote

gráfica con imágenes Gráfica que tiene diferentes imágenes para ilustrar la información recopilada.

Nuestros Deportes Favorites						
☆ fútbol	⚽	⚽	⚽			
🏀 balón	🏀	🏀	🏀	🏀	🏀	
⚾ béisbol	⚾	⚾	⚾	⚾		

Cada imagen = 1 voto

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.

4 + 5 = 9

plus sign

más (+) Símbolo para mostrar la suma.

4 + 5 = 9

signo más

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.

prisma rectangula Figura tridimensional con 6 caras, 8 esquinas y 12 bordes.
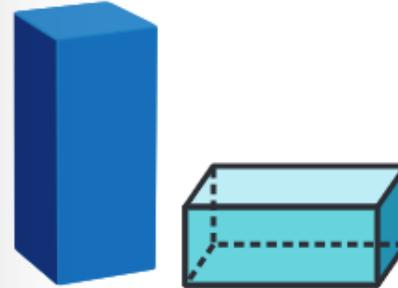
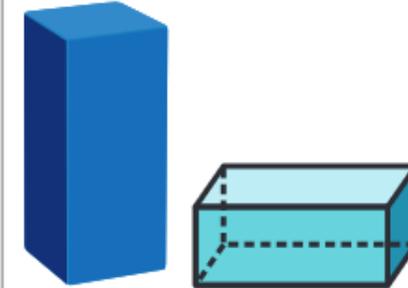**related fact(s)** Basic facts using the same numbers. Sometimes called a *fact family*.

6 + 4 = 10   10 − 6 = 4
4 + 6 = 10   10 − 4 = 6

operaciones relacionadas Operaciones básicas en las cuales se usan los mismos números. También se llaman familias de operaciones.

6 + 4 = 10   10 − 6 = 4
4 + 6 = 10   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.

Ss

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

short

shorter

shortest

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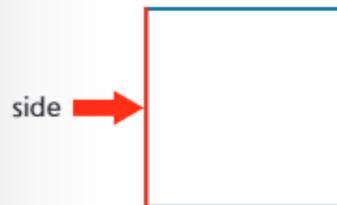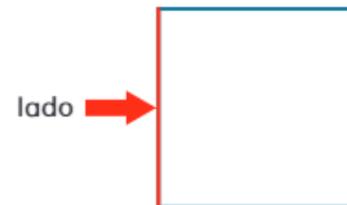
corto

más corto

el más corto

side One of the lines that make up a shape.

side

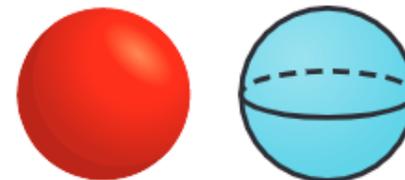**lado** Uno de la lãneas que compone una figura.

lado

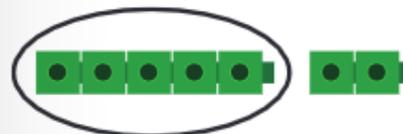**sphere** A solid shape that has the shape of a round ball.

esfera Figura sólida con la forma de una pelota redonda.
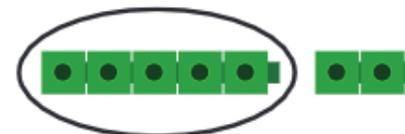
square A rectangle that has 4 equal sides.

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.

$$7 - 2 = 5$$

restar (resta, sustracción) Eliminar, quitar, separar o hallar la diferencia entre dos conjuntos. Lo opuesto de la suma.

$$7 - 2 = 5$$

English	Spanish/Español
sum Adding two or more numbers gives the sum. 2 + 4 = 6 ↑ sum	**suma** Sumando dos o más números da la suma. 2 + 4 = 6 ↑ suma

Tt

English	Spanish/Español
tally mark(s) A mark used to record data collected in a survey.	**marca(s)** Símbolo usado para anotar datos de una encuesta.
teen number A number that is I group of ten and some ones. Example: 12	**números del 11 al 19** Un número formado por una decena y algunas unidades. Ejemplo: 12
ten One group of 10 ones is I ten.	**decena** Un grupo de 10 es una decena.
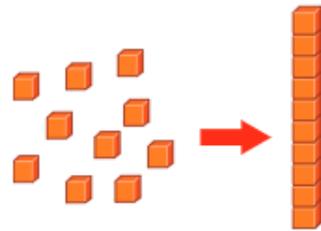
English	Spanish/Español
tens A place value of a number. Example: In the number 23, the 2 is in the tens place. 23 This number has 2 tens.	**decenas** El valor posicional de un número. Ejemplo: En el número 23, el 2 está en el lugar de las decenas. 23 Este número tiene 2 decenos.
triangle A shape with 3 sides.	**trapecio** Figura con 3 lados.
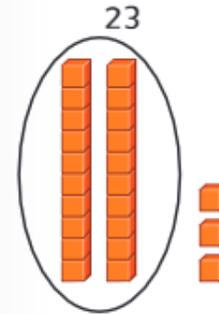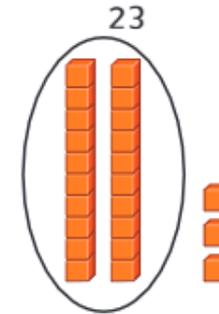
Uu

English	Spanish/Español
unit An object used to measure.	**unidad** Objeto que se usa para medir.

English	Spanish/Español
unknown A missing number in an equation. $9 + ? = 10$	**incógnita** El número que falta en una ecuación. $9 + ? = 10$

Ww
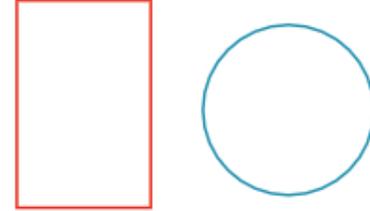
English	Spanish/Español
whole The entire object.	**el todo** El objeto completo.