Barnard College	Columbia University	New York University
Ms. Park	Ms. Hildebrand	Ms. Severino

Monday
December 14, 2020

Name:

Lesson 11

Objective: Represent subtraction with and without the decomposition of 1 ten as 10 ones with manipulatives.

Name: _____

15 - 1	10 - 0	5 - 1	18 - 1	7 - 0
5 - 2	0 - 0	1 - 0	2 - 0	4 - 0
5 - 1	4 - 2	19 - 0	2 - 2	17 - 2
2 - 0	6 - 0	1 - 1	3 - 1	4 - 1
17 - 2	18 - 0	4 - 1	17 - 2	19 - 0
19 - 1	4 - 2	13 - 1	11 - 0	5 - 1

Warm up:

1.) **77 -22 = _____**

Hundreds	Tens	Ones

H	T	O

2.) **88 - 33 = _____**

Hundreds	Tens	Ones

H	T	O

3.) **166 - 44 = _____**

Hundreds	Tens	Ones

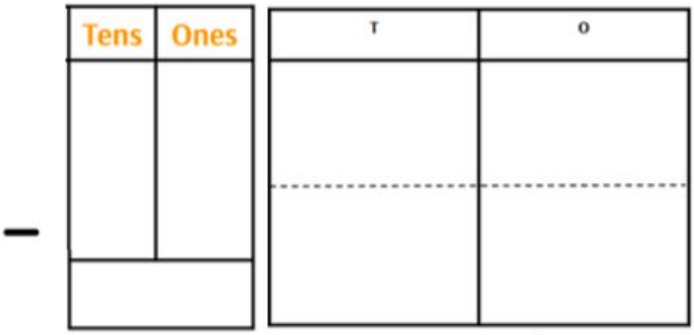
H	T	O

Learning Target: I can represent subtraction with and without the decomposition of 1 ten as 10 ones with manipulatives.

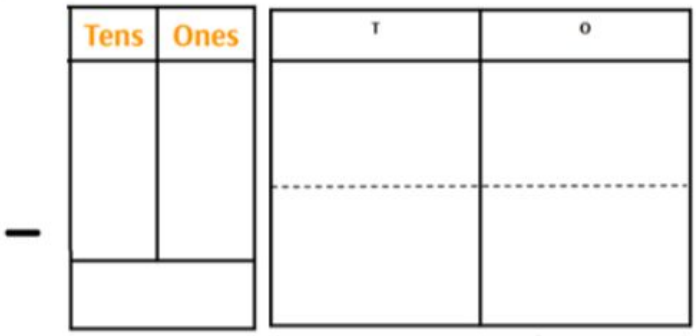
M4 L 11

Concept development:

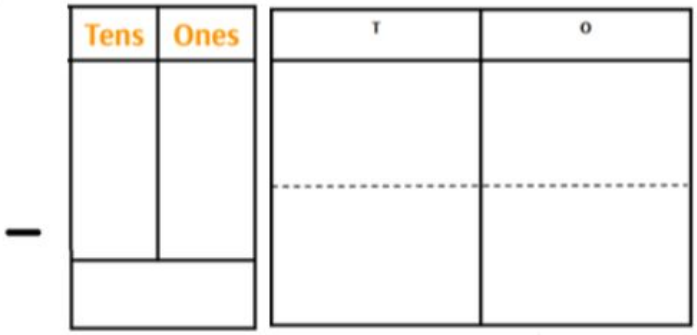
4.) 17 - 7 = _____



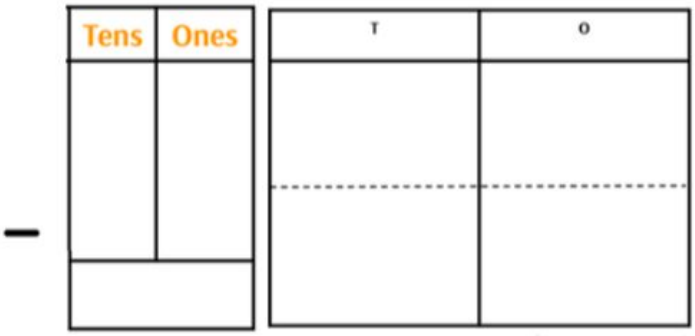
5.) 17 - 8 = _____



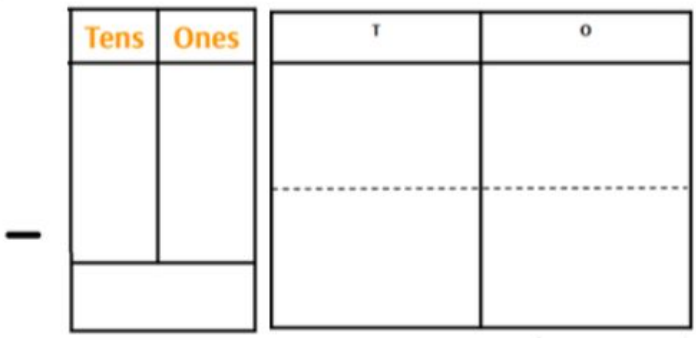
6.) 35 - 5 = _____



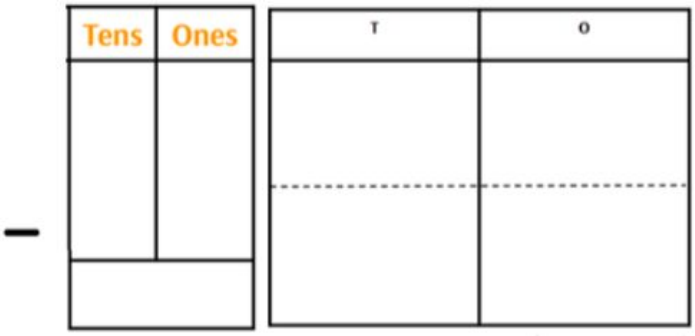
7.) 35 - 6 = _____



8.) 124 - 4 = _____



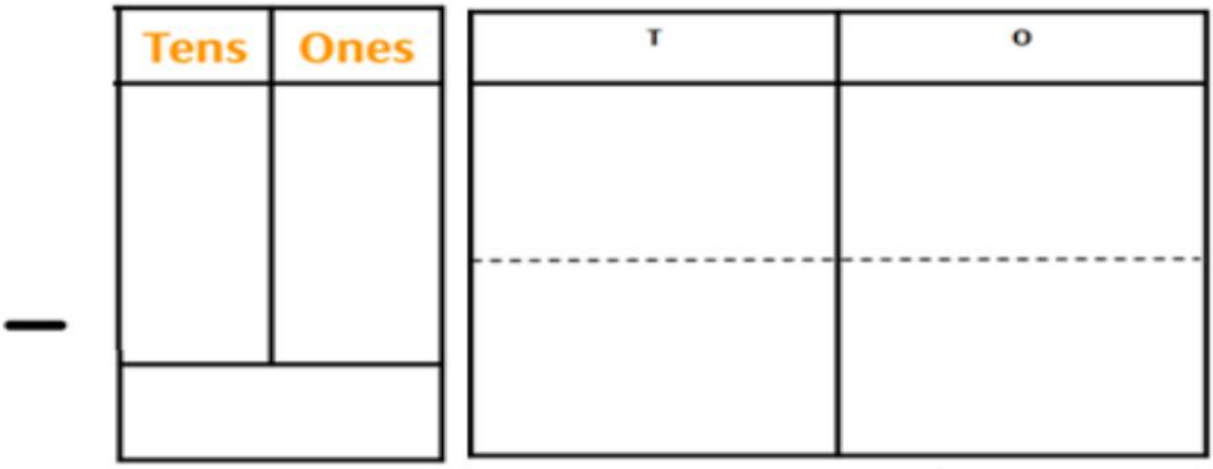
9.) 124 - 5 = _____



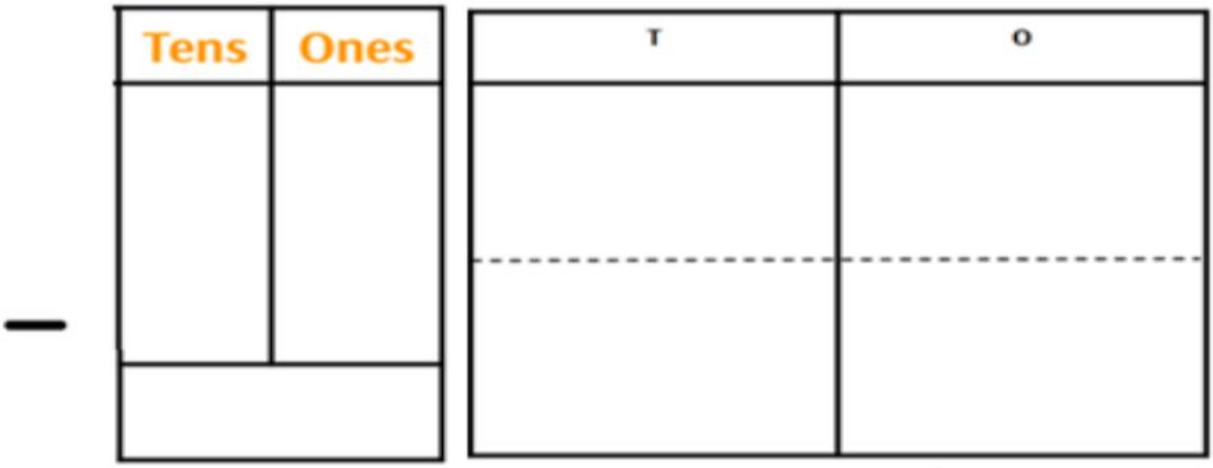
Learning Target: I can represent subtraction with and without the decomposition of 1 ten as 10 ones with manipulatives.

M4 L 11

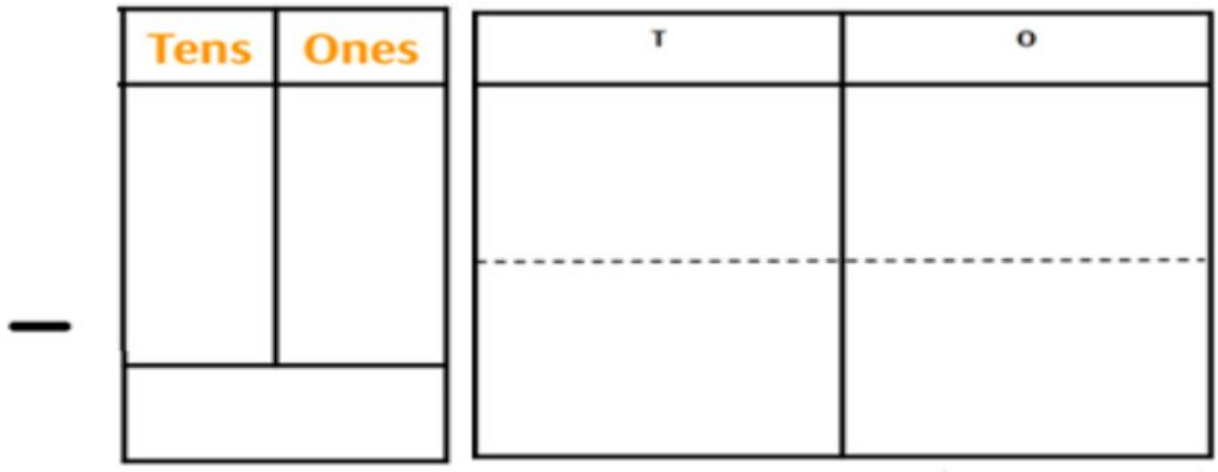
10.) **35 - 9 = _____**



11.) **46 - 18 = _____**



12.) **46 – 12 = _____**



Name _____ Date _____

1. Solve using mental math.

   a. 8 – 7 = _____ 38 – 7 = _____ 38 – 8 = _____ 38 – 9 = _____

   b. 7 – 6 = _____ 87 – 6 = _____ 87 – 7 = _____ 87 – 8 = _____

2. Solve using your place value chart and place value disks. Unbundle a ten if needed. Think about which problems you can solve mentally, too!

   a. 28 – 7 = _____ 28 – 9 = _____

   b. 25 – 5 = _____ 25 – 6 = _____

   c. 30 – 5 = _____ 33 – 5 = _____

   d. 47 – 22 = _____ 41 – 22 = _____

   e. 44 – 16 = _____ 44 – 26 = _____

   f. 70 – 28 = _____ 80 – 28 = _____

Name _____ Date _____

1. Solve using mental math.

   a. 6 – 5 = _____ 26 – 5 = _____ 26 – 6 = _____ 26 – 7 = _____

   b. 8 – 7 = _____ 58 – 7 = _____ 58 – 8 = _____ 58 – 9 = _____

2. Solve using your place value chart and place value disks. Unbundle a ten, if needed. Think about which problems you can solve mentally, too!

   a. 36 – 5 = _____ 36 – 7 = _____

   b. 37 – 6 = _____ 37 – 8 = _____

   c. 40 – 5 = _____ 41 – 5 = _____

   d. 58 – 32 = _____ 58 – 29 = _____

   e. 60 – 26 = _____ 62 – 26 = _____

   f. 70 – 41 = _____ 80 – 41 = _____

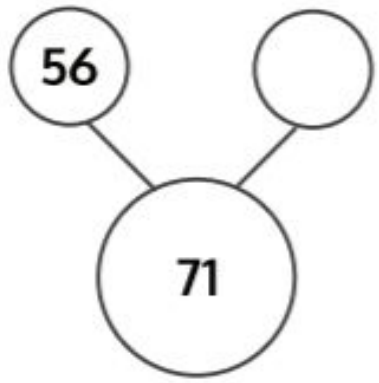
Lesson 11 G:2 M:4	EXIT TICKET

Name:_____ Date:_____

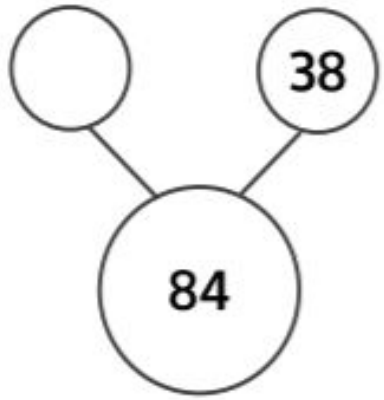
Complete: ☐ Class:_____

1. Solve for the missing part. Use your place value chart and place value disks.

a.



b.



Phonics

Chapter 5

WHY DO WE STUDY FOSSILS?

Paleontologists study fossils because they are important clues. Fossils can help paleontologists learn about ancient plants and animals.

Paleontologists study leaf fossils such as this one. What can paleontologists learn by studying fossils?

Fossil bones can tell paleontologists what an animal may have looked like. The paleontologists can figure out how big an animal was. They may be able to learn how the animal moved.

By studying fossil bones, paleontologists can learn about ancient animals. This paleontologist is working with a bird fossil.

The shapes of fossil teeth tell paleontologists what kinds of foods an animal may have eaten. Animals that eat meat have sharp teeth. Sharp teeth can slice meat the way knives do. Animals that eat plants have flat teeth. Flat teeth can chew and grind leaves.

Meat-eating dinosaurs had very sharp teeth.

Plants and Places

Fossils teach paleontologists about Earth's past. They give clues about what the weather and the land were like long ago. Some plants grow only in warm places. But sometimes fossils of those plants are found in a cold place. That tells us that at one time, the place was much warmer. Sometimes fish fossils are found in dry deserts. What do you think that means?

Sometimes fish fossils are found in dry areas. That tells us that water used to cover these areas.

WHAT?

What is the topic?

SO
WHAT?

What does the author want me to understand about the topic?

AND WHAT?

Name:_____ Date:_____

College:_____ Class of:_____

Shelby picks 35 oranges. 5 are rotten. How many of Shelby's oranges are not rotten?

Answer: _____

Equation that matches your work: Number Sentence

Sentence that matches the story: Word Sentence

Barnard College	Columbia University	New York University
Ms. Park	Ms. Hildebrand	Ms. Severino

Tuesday
December 15, 2020

Lesson 12

Objective: Relate manipulative representations to a written method.

Name: _____

12 - 1	8 - 1	5 - 2	16 - 1	6 - 1
15 - 0	13 - 1	11 - 1	3 - 1	20 - 1
12 - 2	6 - 1	0 - 0	15 - 1	18 - 1
10 - 2	13 - 1	14 - 0	2 - 1	13 - 0
3 - 0	5 - 2	8 - 1	8 - 0	2 - 0
1 - 0	2 - 1	17 - 0	5 - 0	12 - 0

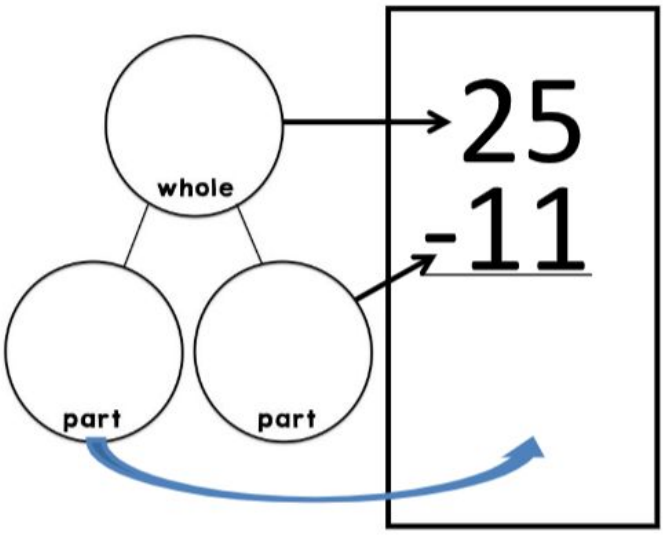
Learning Target: I can Relate manipulative representations to a written method. M4 L12

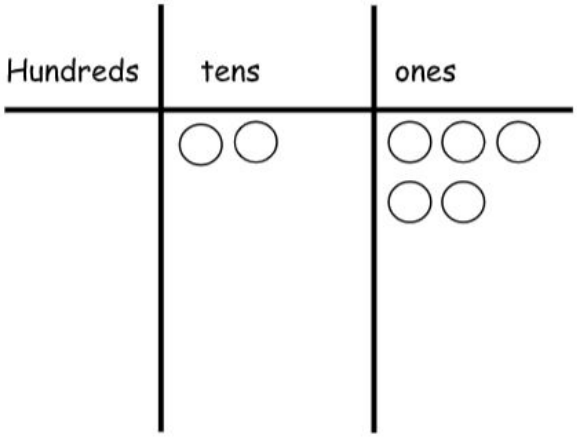
Name:_____

Directions: Please go along with the teacher! Listen before filling in each part

1.) 25-11=

The bigger number is a subtraction sentence is the WHOLE! For addition the answer is the WHOLE!

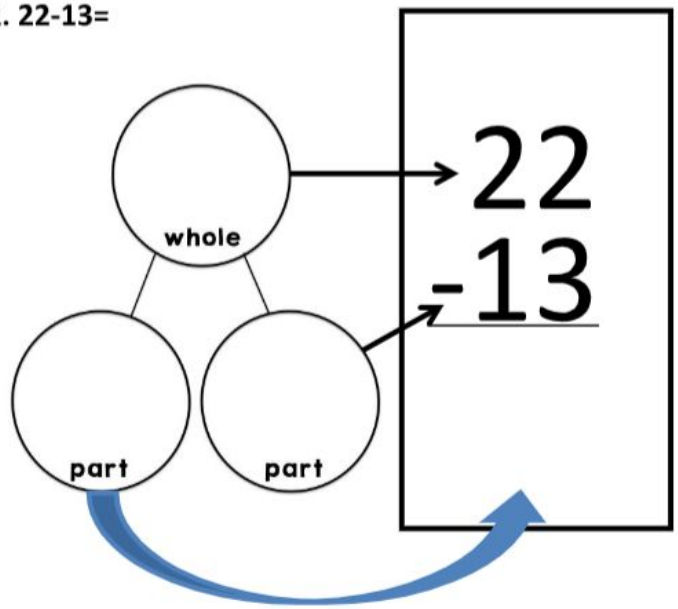


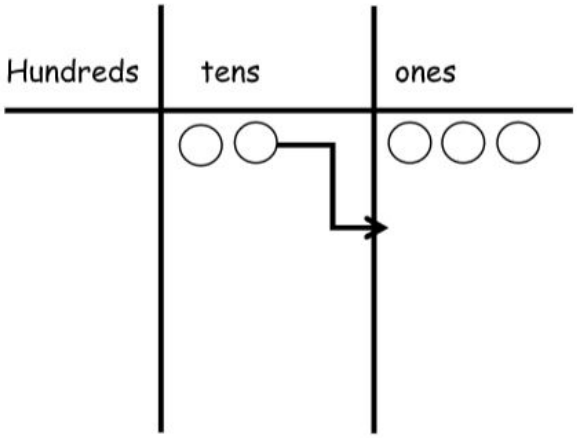


Did we need to unbundle (decompose) the WHOLE to subtract? _____

---

2. 22-13=

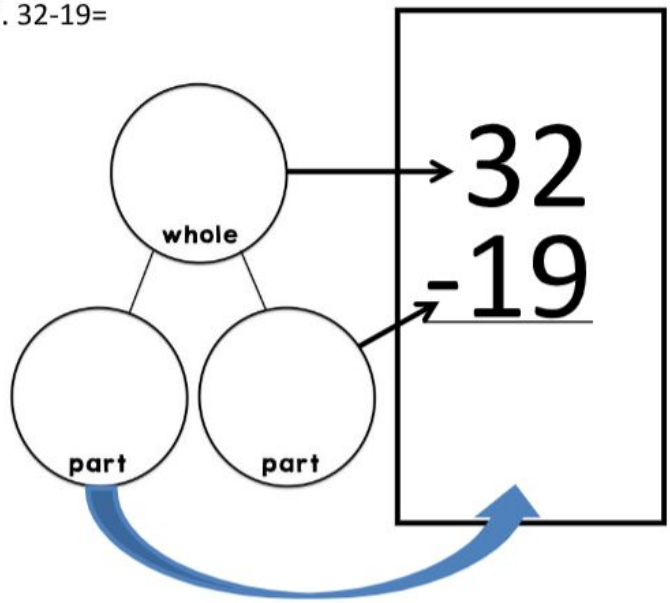




Did we need to unbundle (decompose) the WHOLE to subtract? _____

Learning Target: I can Relate manipulative representations to a written method. M4 L12

3. 32-19=



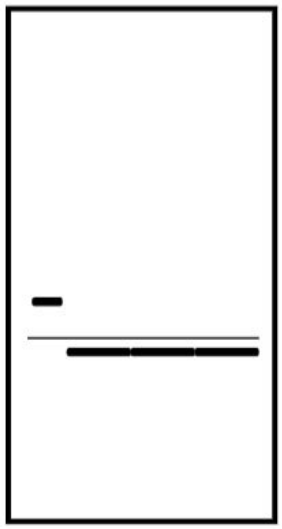
Hundreds	tens	ones

Did we need to unbundle (decompose) the WHOLE to subtract? _____

4. 46-28=

Look at the numbers on top, do we need to unbundle (decompose) the WHOLE to subtract?

_____



Hundreds	tens	ones

5. 32-19=

Look at the numbers on top, do we need to unbundle (decompose) the WHOLE to subtract?

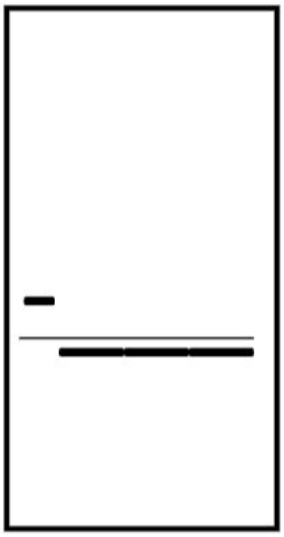
_____

Hundreds	tens	ones

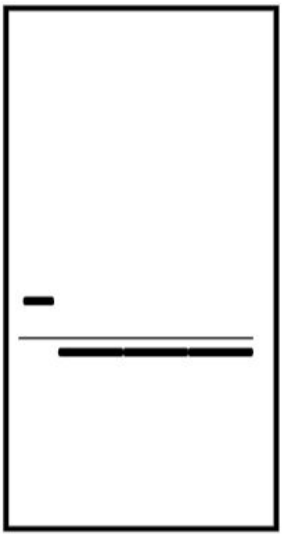
Name _____ Date _____

1. Show how you would solve:

a.) 44 – 26 =



b. 23 – 19 =



Hundreds	tens	ones

Hundreds	tens	ones

Lesson 12 G:2 M:4	Ready? Subtract! ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Write the number of tens and ones below the place value chart.

Record your final answer in the algorithm.

SHOW YOUR WORK

hundreds	tens	ones
	(10)	(1) (1) (1)

$$\begin{array}{r} {\scriptstyle 2\ 11} \\ 3\not{1}\not{1} \\ -\ 18 \\ \hline \end{array}$$

_____ tens _____ ones

Phonics

Definition- What does it mean?

Use the word in a sentence.

trace fossil

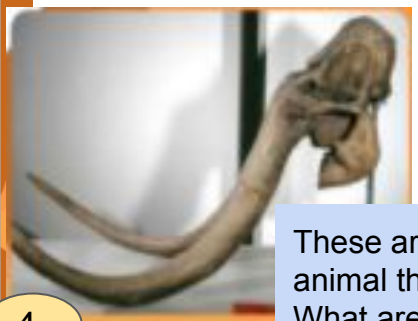
Image

Non-example.

Chapter 1

WHAT IS A FOSSIL?

Fossils are the hardened remains of plants and animals. Remains are parts left behind after plants or animals die. All fossils are old. Fossils are the traces and remains of plants and animals that lived more than ten thousand years ago.



These are the remains of an animal that lived long ago. What are remains?

There are many different kinds of fossils. Dinosaur bones are fossils. Dinosaur teeth are fossils too. Claws, eggs, and nests can be fossils. So can leaves, flower petals, and plant stems.

These fossil bones are from an animal called a saber-toothed tiger. Bones are only one kind of fossil.

Shells from ancient clams and snails are fossils. *Ancient* means “very old”. The body parts of insects also can become fossils. Have you ever seen an insect that has turned into a fossil?

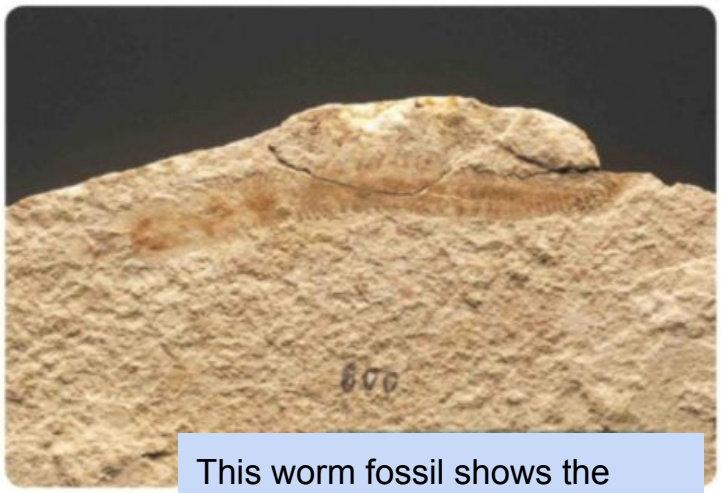
Clams are animals with hard shells. They live underwater.

Tracks and Trails

Ancient footprints are another kind of fossils. Scientists have found many ancient footprints. Some of the footprints are from human beings. Others are from dinosaurs.

A dinosaur made this ancient footprint.

Animal trails can be fossils. Snails and worms make trails in mud. These trails show where an animal went.

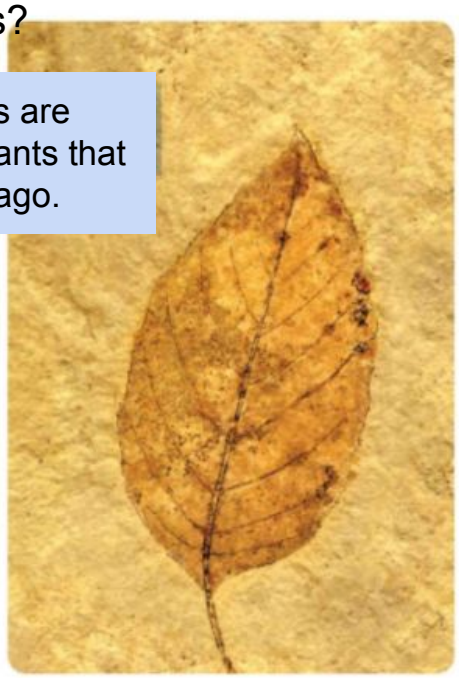


This worm fossil shows the shape of a worm's body. It also shows the trails the worm left on the ground.

8

Bones, tracks, and trails are all signs of life from long ago. And all of them can become fossils. But how do flower petals or dinosaur bones turn into fossils?

Leaf fossils are signs of plants that lived long ago.



9

1. Read the text on page 4, what are remains?
   A. Remains are hardened fossils.
   B. Remains are parts left behind after a plant or animal dies.
   C. Remains are an animal that lived long ago.

2. True or False. Bones, tracks, and trails are all trace fossils.
   A. True
   B. False

3. Read the caption on page 8. What can be learned from this trace fossil?

Name:_____ Date:_____

College:_____ Class of:_____

Barb has a bag of 34 cherries. She eats 17 cherries for a snack. How many cherries does she have left?

Answer: _____

Equation that matches your work: Number Sentence

Sentence that matches the story: Word Sentence

Barnard College	Columbia University	New York University
Ms. Park	Ms. Hildebrand	Ms. Severino

Wednesday
December 16, 2020

Lesson 13

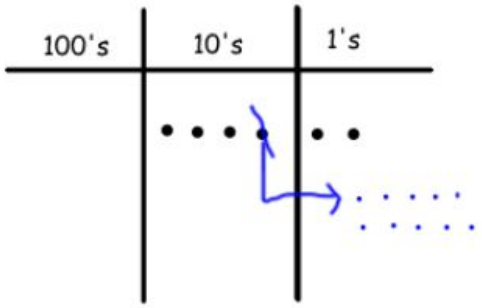
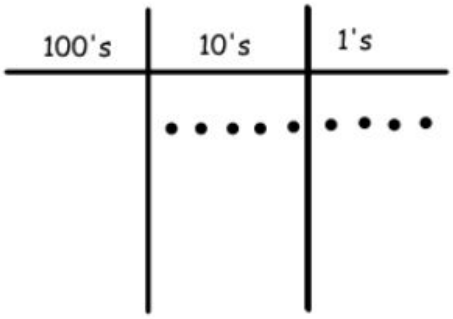
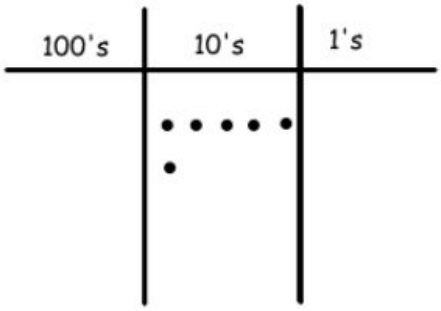
Objective: Use math drawings to represent subtraction with and without decomposition and relate drawings to a written method.

Name: _____

10 - 0	3 - 0	17 - 0	17 - 0	4 - 1
14 - 0	2 - 1	8 - 1	9 - 1	16 - 1
20 - 2	19 - 1	13 - 2	7 - 1	16 - 0
15 - 0	10 - 1	4 - 1	10 - 1	17 - 2
2 - 2	19 - 1	4 - 1	5 - 1	2 - 0
19 - 2	5 - 0	4 - 1	7 - 0	9 - 2

Name _____ Date _____

1. Solve vertically. Use the place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary. The first one has been started for you.

a. 42 - 26 = _____	
b. 54 - 28 = _____	
c. 60 - 17 = _____	

Name _____ Date _____

1. Solve vertically. Draw a place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary.

a. 31 – 19 = _____	b. 46 – 24 = _____
c. 51 – 33 = _____	d. 67 – 49 = _____
e. 66 – 48 = _____	f. 77 – 58 = _____

2. Solve vertically. Draw a place value chart and chips to model each problem. Show how you change 1 ten for 10 ones, when necessary.

a. 31 – 19 = _____	b. 47 – 24 = _____
c. 51 – 39 = _____	d. 67 – 44 = _____
e. 76 – 54 = _____	f. 82 – 59 = _____

Lesson 13 G:2 M:4	Unbundle and Subtract
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1

SHOW YOUR WORK

hundreds	tens	ones

$$\begin{array}{r} 31 \\ -\ 18 \\ \hline \end{array}$$

_____ tens _____ ones

2

SHOW YOUR WORK

hundreds	tens	ones

$$\begin{array}{r} 33 \\ -\ 17 \\ \hline \end{array}$$

EXTRA WORKSPACE

Lesson 13 G:2 M:4	EXIT TICKET

Name:_____ Date:_____

Complete: ☐ Class:_____

1. Solve vertically. Draw a place value chart and disks to model each problem. Show how you change 1 ten for 10 ones, when necessary.

a. 75 – 28 = _____

b. 63 – 35 = _____

Phonics

The process of fossilization…

___

___

...begins when a plant or animal dies…

___

___

...and is covered up by layers of mud or sand.

___

___

How does the process of fossilization begin?

___

___

___

Chapter 2

HOW DO FOSSILS FORM?

Fossils are plant and animal remains that have been naturally preserved. That means that they were saved without help from people. Most remains disappear over time. Other animals eat them or carry them away. Uneaten remains slowly rot. They become soft and fall apart.

These teeth became fossils. What happens to most plant and animal remains?

But sometimes, remains get buried. Then the remains are protected. They do not rot as quickly as remains that are not protected. They are hidden from animals that might eat them. The remains are also safe from water and wind. Water and wind can scatter remains. They can break remains apart.

Rock often surrounds dinosaur bones. Rock protects the bones.

Frozen Fossils

Ice can preserve remains. If ice covers the body of an animal that has died, the frozen body can last for many years. At one time, ice covered much of Earth. Many frozen plants and animals became fossils then.

Buried bones can last for a very long time. These buried dinosaur bones were discovered in China.

This is a fossil hair from an animal called a woolly mammoth. Hair is a soft body part.

Ice preserves plants and animals very well. It can even preserve an animal's soft body parts, such as fur, skin, and muscles. Soft body parts don't usually become fossils. Most soft body parts rot quickly. So scientists are excited when they find fur, skin, or muscle fossils.

A Sticky Pit

Tar pits can preserve remains. Tar pits are pools full of asphalt. Asphalt is black and sticky. It comes from inside Earth. Sometimes animals fall into the asphalt. Then they get stuck. After a while, they die.

This pool of asphalt is at the La Brea Tar Pits. The La Brea Tar Pits are in Los Angeles, California. The animals are statues of creatures that lived long ago.

This saber-toothed tiger fossil was found at the La Brea Tar Pits.

When an animal dies in a tar pit, most of its body rots. But its teeth and bones do not rot. The asphalt preserves these hard body parts. When scientists dig in tar pits, they often find the teeth and bones of animals that lived long ago.

1. The hardened or preserved remains of plants and animals are called...
    a. rocks
    b. fossils
    c. minerals

2. According to the details on page 11, when an animal dies, what often surrounds it to protect it?
    a. dirt
    b. rock
    c. ice

3. Why do scientists get excited when they find fur, skin, or muscle fossils?
    a. Soft body parts don't usually become fossils and most of those parts rot quickly.
    b. Bones can last for a very long time when they are frozen.

4. Tar pits can preserve remains. What happens first when an animal falls into a tar pit?

Name:_____ Date:_____

College:_____ Class of:_____

Mrs. Beachy went shopping with $42. She spent $18. How much money did she have left?

Answer: _____

Equation that matches your work: Number Sentence

Sentence that matches the story: Word Sentence

Barnard College	Columbia University	New York University
Ms. Park	Ms. Hildebrand	Ms. Severino

Thursday
December 17, 2020

Lesson 14

Objective: Represent subtraction with and without the decomposition when there is a three-digit minuend.

Name: _____

6 - 1	16 - 2	1 - 0	19 - 0	17 - 2
5 - 2	19 - 2	7 - 1	4 - 1	6 - 1
19 - 0	5 - 0	17 - 1	2 - 1	18 - 1
8 - 2	14 - 1	1 - 0	15 - 1	17 - 1
13 - 1	13 - 1	1 - 0	9 - 0	2 - 0
15 - 0	7 - 1	11 - 1	1 - 0	14 - 2

Name _____ Date _____

1. Solve by writing the problem vertically. Check your result by drawing chips on the place value chart. Change 1 ten for 10 ones, when needed.

a. 134 – 23= _____

hundreds	tens	ones

b. 140 – 12 = _____

hundreds	tens	ones

c. 121 – 14 = _____

hundreds	tens	ones

d. 161 – 26 = _____

hundreds	tens	ones

e. 187 – 49 = _____

hundreds	tens	ones

2. Solve the following problems vertically without a place value chart.

a. 63 – 28 = _____	b. 163 – 28 = _____

Name _____ Date _____

1. Solve by writing the problem vertically. Check your result by drawing chips on the place value chart. Change 1 ten for 10 ones, when needed.

a. 156 – 42 = _____

hundreds	tens	ones

b. 150 – 36 = _____

hundreds	tens	ones

c. 163 – 45 = _____

hundreds	tens	ones

Lesson 14 G:2 M:4	Super Subtraction
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Mr. Sawicki has a bag of 34 cherries. He eats 17 cherries for a snack.

How many cherries does he have left?

YOUR DRAWING

hundreds	tens	ones

YOUR NUMBER SENTENCE

YOUR WORD SENTENCE

2

hundreds	tens	ones

$$\begin{array}{r} 137 \\ -\ 28 \\ \hline \end{array}$$

EXTRA WORKSPACE

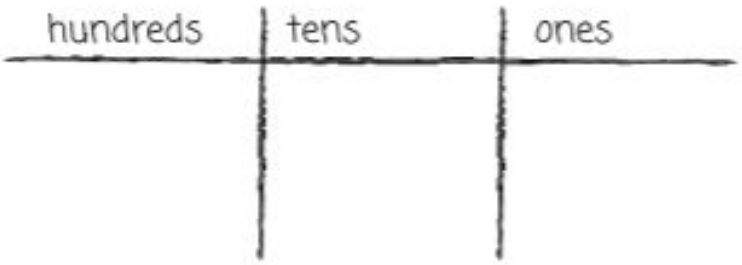
Lesson 14 G:2 M:4	EXIT TICKET

Name:_____ **Date:**_____

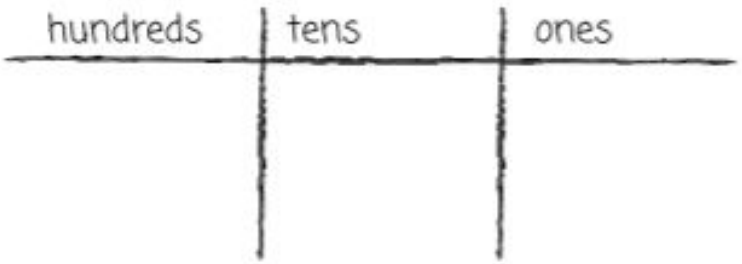
Complete: ☐ **Class:**_____

Solve by writing the problem vertically. Check your result by drawing disks on the place value chart. Change 1 ten for 10 ones, when needed.

1. 145 – 28 = _____



2. 151 – 39 = _____



Phonics

"What are the steps of fossilization?"

Draw a picture and write a sentence about Step 1:

"What are the steps of fossilization?"

Draw a picture and write a sentence about Step 2:

Becoming a Fossil

Some 200 million years ago, a shallow ocean covered what is now California. A fish living in the ocean died and sank to the bottom. Before another animal had a chance to eat it, the fish was covered by a thin layer of sand. Over time, layers of sand and mud piled on top of the fish's body, burying it deep under the ocean floor. The skin and soft parts of the fish decayed, leaving only the skeleton behind.

To become a fossil, a fish would have to be quickly buried before any other marine animals tried to eat it.

Chapter 2

HOW DO FOSSILS FORM?

Fossils are plant and animal remains that have been naturally preserved. That means that they were saved without help from people. Most remains disappear over time. Other animals eat them or carry them away. Uneaten remains slowly rot. They become soft and fall apart.

These teeth became fossils. What happens to most plant and animal remains?

10

But sometimes, remains get buried. Then the remains are protected. They do not rot as quickly as remains that are not protected. They are hidden from animals that might eat them. The remains are also safe from water and wind. Water and wind can scatter remains. They can break remains apart.

Rock often surrounds dinosaur bones. Rock protects the bones.

11

According to the text, why is step #2 so important in the process of fossilization?

It is important for fossils to become covered or buried because

Name:_____ Date:_____

College:_____ Class of:_____

The total length of a red string and a purple string is 73 cm. The red string is 18 cm long. How long is the purple string?

Answer: _____

Equation that matches your work: Number Sentence

Sentence that matches the story: Word Sentence

Barnard College	Columbia University	New York University
Ms. Park	Ms. Hildebrand	Ms. Severino

Friday
December 18, 2020

Lesson 15

Objective: Represent subtraction with and without the decomposition when there is a three-digit minuend.

Name: _____

18 - 1	15 - 2	6 - 1	6 - 0	9 - 1
3 - 0	10 - 0	15 - 0	1 - 0	18 - 0
17 - 1	8 - 2	11 - 1	19 - 1	15 - 1
4 - 1	13 - 1	6 - 1	19 - 0	13 - 1
8 - 0	16 - 1	10 - 0	18 - 1	19 - 1
1 - 1	19 - 2	2 - 0	20 - 1	15 - 0

Name _____ Date _____

1. Solve each problem using vertical form. Show the subtraction on the place value chart with chips. Exchange 1 ten for 10 ones, when necessary.

a. 173 - 42

hundreds	tens	ones

b. 173 - 38

hundreds	tens	ones

c. 170 - 44

hundreds	tens	ones

d. 150 – 19

hundreds	tens	ones

e. 186 – 57

hundreds	tens	ones

2. Solve the following problems without using a place value chart.

a. 73 – 56	b. 170 – 53

Name _____ Date _____

1. Solve each problem using vertical form. Show the subtraction on the place value chart with chips. Exchange 1 ten for 10 ones, when necessary.

a. 153 – 31

hundreds	tens	ones

b. 153 – 38

hundreds	tens	ones

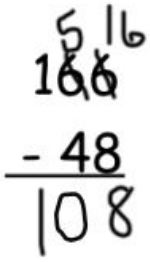
c. 160 – 37

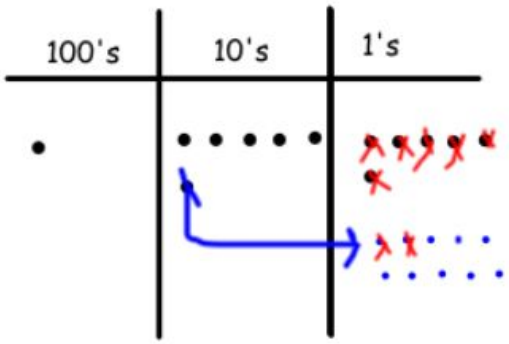
hundreds	tens	ones

d. 182 – 59

hundreds	tens	ones

2. Lisa solved 166 – 48 vertically and on her place value chart. Explain what Lisa did correctly and what she needs to fix.





a. Lisa correctly _____

_____

b. Lisa needs to fix _____

_____

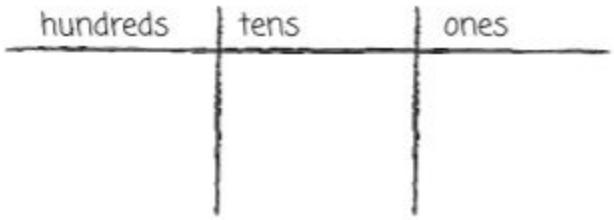
Lesson 15 G:2 M:4	EXIT TICKET

Name:_____ Date:_____

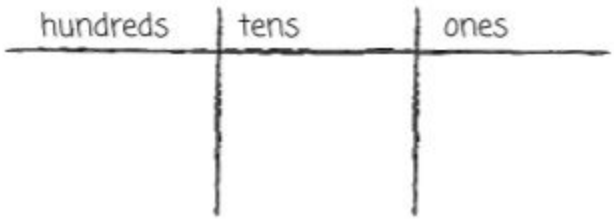
Complete: ☐ Class:_____

Solve using vertical form. Show the subtraction on a place value chart with disks. Exchange 1 ten for 10 ones, when necessary.

1. 164 – 49

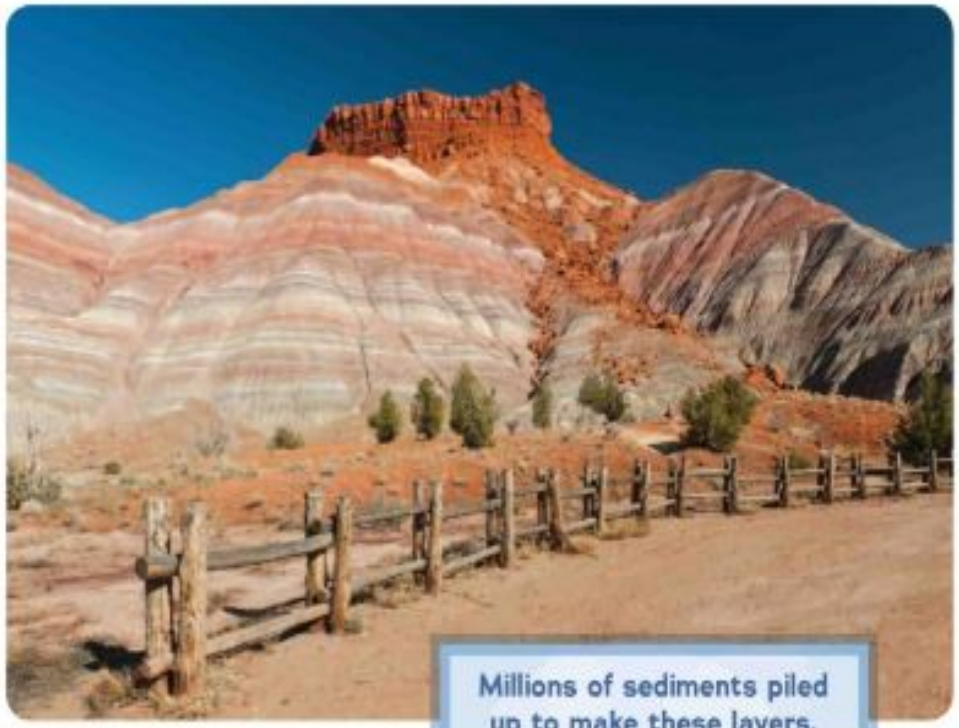


2. 181 – 73



Buried under a Blanket of Bits

Sediments can preserve remains. Sediments are bits of mud, sand, stone, shell, or bone. Sediments cover plant and animal remains like a blanket. Most fossils are remains that were buried by sediments.



Millions of sediments piled up to make these layers.

This fossil was found at Fossil Butte National Monument. It is in Wyoming. Many people look for fossils in the layers there.

A blanket of sediments is called a layer. Some sediment layers are thin. Some sediment layers are thick. Layers can stack up on top of one another. Stacked sediment layers can be thousands of feet deep. Sediment layers can form on land or under water.

A deep stack of sediment layers is very heavy. The weight pushes the sediments together. Over time, chemicals in the sediments make them stick together. Then the sediments harden into rock. Rock that is made this way is called sedimentary rock. Fossils are often found in sedimentary rock.

Fossils are inside this sedimentary rock.

If remains are inside layers of sediments, they turn into rock along with the sediments. When plant or animal remains turn into rock, they become fossils.

This is a bird fossil. It is made out of rock.

1. Most fossils are remains that were buried by...
    a. layers
    b. sediment
    c. Rock

2. Which is NOT an example of sediments?
    a. tar
    b. stone/shell
    c. bones
    d. mud/sand

3. What is the main idea of the first paragraph?
    a. sediments form a blanket
    b. sediments can preserve remains
    c. sediments harden into rock.