



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

Monday
January 4, 2020

Name:

Learning from Dinosaur Fossils

by ReadWorks

Dinosaurs are a group of reptiles that lived long ago. The first dinosaurs walked the earth about 245 million years ago. For millions of years, they lived and thrived. Then, about 66 million years ago, the dinosaurs were wiped out when a huge event destroyed much of life on Earth. But scientists today are still able to learn about these interesting animals. They learn about them by studying what remains of the dinosaurs - fossils.



Fossil of a fern

A fossil is any evidence of life from long ago that is at least 10,000 years old. A fossil can be what's left of the bones or teeth of an animal. It can also be a footprint left behind by an animal. But fossils are not just remains of animals. They can also be remains of plants, like the impression of a fern left in a rock.



Fossilized dinosaur skeleton at a museum

Have you ever seen a picture of a dinosaur skeleton in a museum? The dinosaur bones you can see in a museum are actually fossils. But how did these fossils form from the dinosaur's bones? This happened over millions of years, through a process called fossilization. When the dinosaur those fossils came from died, it may have been buried by sediments like sand and silt. As the dinosaur's body rotted, these sediments protected the bones from rotting. After many years, only the hard parts of the body were left behind. Over millions of years, the water in the rocks nearby surrounded those hard parts. Over time, the minerals in the water replaced the hard parts. So after millions of years, what was left was a solid rock copy of the dinosaur's bones - the fossils.



National Park Service

Paleontologist working to unearth a fossil

Scientists called paleontologists study dinosaur fossils to learn more about dinosaurs. They can learn about how dinosaurs lived, moved, ate, grew, and more by studying fossils. For example, they can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate. They can study fossilized footprints to learn about how quickly a kind of dinosaur may have moved. And they can draw conclusions about how some dinosaurs behaved by studying some fossilized dinosaur eggs and nests.

Name: Date:

1. Dinosaurs are a group of reptiles that lived long ago. When did they first walk the earth?

- A. 66 million years ago
- B. 100 million years ago
- C. 245 million years ago
- D. 45 million years ago

2. What does the text describe?

- A. how scientists find and store fossils
- B. the process by which fossils form
- C. the huge event which destroyed much of life on Earth
- D. the ecosystems in which dinosaurs lived

3. Read the following sentences from the text.

Scientists called paleontologists study dinosaur fossils to learn more about dinosaurs. They can learn about how dinosaurs lived, moved, ate, grew, and more by studying fossils. For example, they can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate. They can study fossilized footprints to learn about how quickly a kind of dinosaur may have moved.

Which conclusion does this information best support?

- A. Fossils can help us learn what living things from long ago were like.
- B. Fossils can help us understand how living things are currently changing.
- C. Fossils can help us come up with cures to diseases different living things face.
- D. Fossils can help us predict when there will be another huge event that will change earth.

4. Based on the text, what can be concluded about the area in which a fossil is found?
- A. It has stayed the same throughout the years.
 - B. It has harmed animals that get close to the area.
 - C. It has erased all signs of living things from long ago.
 - D. It has changed throughout the years.
5. What is the main idea of this text?
- A. About 66 million years ago, dinosaurs were wiped out when a huge event destroyed much of life on Earth.
 - B. Dinosaur fossils, or remains, formed over millions of years and can help scientists learn about these animals.
 - C. Scientists can look at the shapes and sizes of a dinosaur's teeth to see what kinds of food it most likely ate.
 - D. A fossil can be what's left of the bones or teeth of an animal, or it can also be a footprint left behind by an animal.

3. Now, it's your turn to solve vertically! Draw your disks first.

Tens	Ones
□	
2	5
1	7

T	O

4. Try solving vertically again! Make sure to draw your place value disks first.

Tens	Ones
□	
1	8
2	3

T	O

5. Try solving vertically again! Make sure to draw your place value disks first.

Tens	Ones
□	
3	2
2	9

T	O

1.) $34 + 18 =$ _____

hundreds	tens	ones

2.) $134 + 18 =$ _____

hundreds	tens	ones

3.) $114 + 37 =$ _____

hundreds	tens	ones

4.) $158 + 26 =$ _____

hundreds	tens	ones

5.) $163 + 29 =$ _____

hundreds	tens	ones

6.) $48 + 147 =$ _____

hundreds	tens	ones

Exit Ticket

Solve the following problems using your place value chart and place value disks. After you solve the problems, add your answer to the Google Form.

1. $36 + 27$

hundreds	tens	ones

2. $44 + 38$

hundreds	tens	ones



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Tuesday
January 5, 2020

“Other Types of Fossils”



This is a spider stuck in sap. It is a fossil.

1.	Some fossils come from animals that got stuck and preserved . Preserved means their bodies were saved—sometimes even the hair and skin! They were saved because they were covered with something.
2.	<p>Sticky Sap Some fossils come from animals that got covered in sap. Sap comes out of trees. It is runny and sticky. An insect could land in the sap and get stuck. Its body could get covered. The sap could harden with the insect inside. It could become a fossil.</p>
3.	<p>Chilly Ice Some fossils are animals that got covered in ice. Long ago, some parts of the earth got very cold. Some animals froze to death. Their bodies could get covered with snow and ice. They could become fossils.</p>
4.	<p>Tricky Tar Some fossils are animals that got covered in tar. Oil mixed with sand makes tar. Tar is thick and sticky. Animals could walk into the tar. They could get trapped. A trapped animal would die. It could get covered in the tar. It could become a fossil.</p>

Written by EL Education for Instructional Purposes. 390L

EL Education | Language Arts Curriculum

“Other Types of Fossils”: Selected Response Questions

Name: _____ **Date:** _____

RI.2.1, RI.2.2, RI.2.4, RI.2.5, RI.2.6, L.2.4a

Directions: Read each question. Choose the **best** answer.

1. Reread Paragraph 1 to find the meaning of the word **preserved**. Circle the answer that tells the meaning of the word **preserved**. (RI.2.4, L.2.4a)
 - A. when something is stuck
 - B. when something is saved
 - C. when something is covered

2. Reread Paragraph 2. What can happen to insects that land in sap? (RI.2.1)
 - A. They can get stuck.
 - B. They can get very hot.
 - C. They can get eaten.

3. Where does sap come from? (RI.2.1)
 - A. cold weather
 - B. oil and sand
 - C. trees

4. What is the main idea of the section “Sticky Sap”? (RI.2.2)
 - A. Fossils can be preserved in ice.
 - B. Fossils can be preserved in sap.
 - C. Fossils can be preserved in trees.

Note-Taking Guide



main idea



connection

underline

key detail



surprising detail



**unfamiliar word,
phrase, or content**



"I understand"

Reading A-Z



Greater vasa parrots live on a diet of fruit, nuts, berries, and seeds.

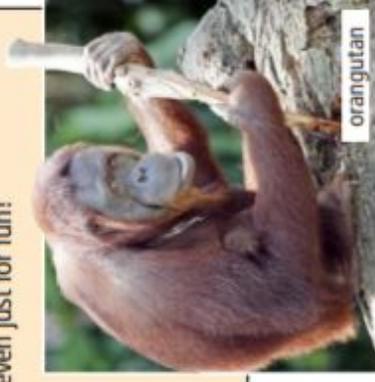
Handy Parrots

Few animals can use tools. In 2015, English scientists watched greater vasa parrots in a lab doing just that. The parrots used small rocks or fruit pits to grind seashells and eat them. The calcium in seashells helps the parrots form the shells of the eggs they lay.

The scientists watched ten parrots over eight months. Out of the ten parrots, five used the tools to grind the seashells.

Do You Know?

Some animals, including orangutans, octopuses, and seagulls, use tools such as sticks, rocks, and coconut shells for many reasons. They may use tools for grooming, self-defense, building shelters, and even just for fun!



orangutan

Humans have used tools to grind food for 30,000 years. However, this is the first time another animal has been seen using tools to grind food. The next step will be to see if the parrots use tools in the wild, too.

Where Greater Vasa Parrots Live



Greater vasa parrots live in Madagascar and nearby islands.

Main Idea and Details E-Chart

Name _____

Main Idea:

Detail: _____

Detail: _____

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.) $17 - 8 =$ _____

Tens	Ones	T	O

Tens	Ones	T	O

6.) $35 - 5 =$ _____

7.) $35 - 6 =$ _____

Tens	Ones	T	O

Tens	Ones	T	O

8.) $124 - 4 =$ _____

9.) $124 - 5 =$ _____

Tens	Ones	T	O

Tens	Ones	T	O

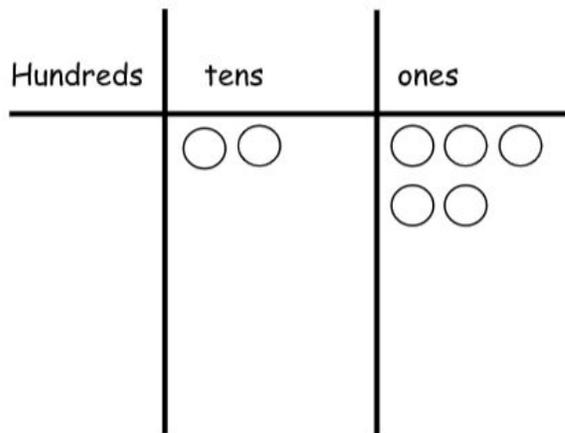
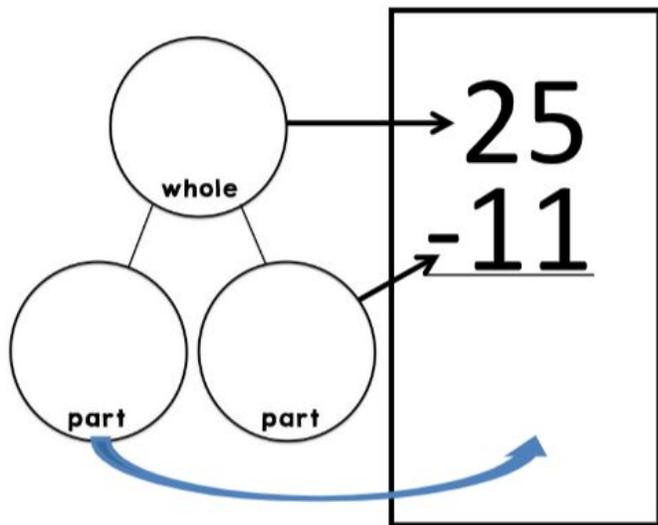
Learning Target: I can Relate manipulative representations to a written method. M4 L12

Name: _____

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

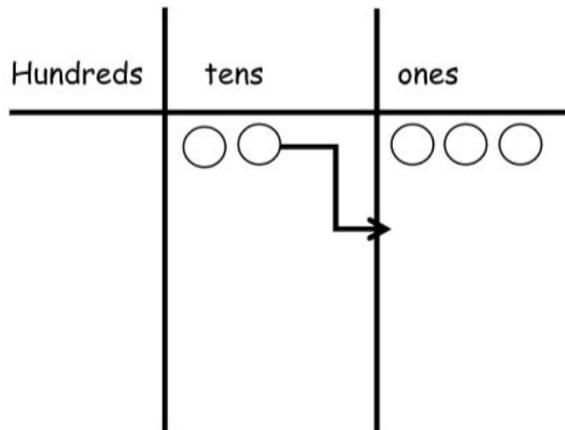
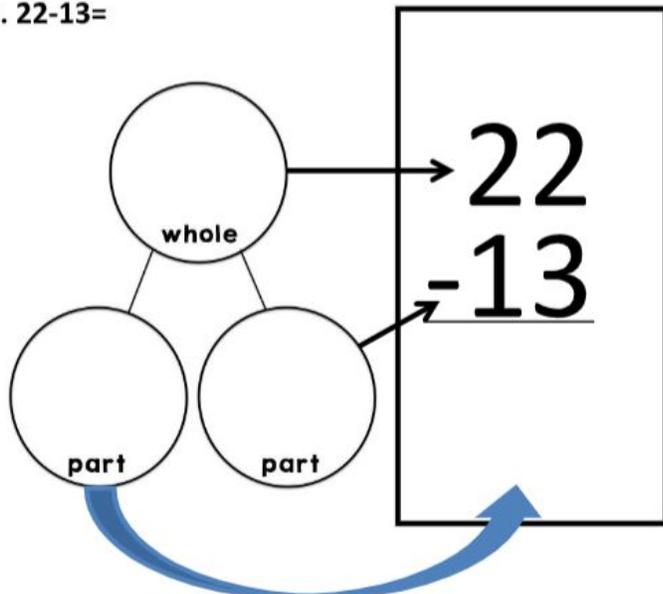
1.) $25 - 11 =$

The bigger number in 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

Name _____

Date _____

1. Show how you would solve:

a.) $44 - 26 =$

$$\begin{array}{r} \\ \underline{ - } \\ \end{array}$$

b.) $23 - 19 =$

$$\begin{array}{r} \\ \underline{ - } \\ \end{array}$$

Hundreds	tens	ones

Hundreds	tens	ones



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Wednesday
January 6, 2020

“Other Types of Fossils”



This is a spider stuck in sap. It is a fossil.

1.	Some fossils come from animals that got stuck and preserved . Preserved means their bodies were saved—sometimes even the hair and skin! They were saved because they were covered with something.
2.	<p>Sticky Sap Some fossils come from animals that got covered in sap. Sap comes out of trees. It is runny and sticky. An insect could land in the sap and get stuck. Its body could get covered. The sap could harden with the insect inside. It could become a fossil.</p>
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4.	<p>Tricky Tar Some fossils are animals that got covered in tar. Oil mixed with sand makes tar. Tar is thick and sticky. Animals could walk into the tar. They could get trapped. A trapped animal would die. It could get covered in the tar. It could become a fossil.</p>

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5. Which section in the article gives information about fossils found in snow? **(RI.2.5)**
- A. Sticky Sap
 - B. Chilly Ice
 - C. Trapped in Tar
6. What is tar made of? **(R.I.2.1)**
- A. ice and snow mixed together
 - B. sap and water mixed together
 - C. sand and oil mixed together
7. What is the meaning of the word **trapped** as it is used in Paragraph 4? **(RI.2.4, L.2.4a)**
- A. stuck
 - B. hungry
 - C. scared
8. Why did the author write "Other Types of Fossils"? **(RI.2.6)**
- A. to explain how different types of fossils are made
 - B. to explain how different types of fossils are destroyed
 - C. to explain how paleontologists learn about fossils
9. What information is learned about the photo from the caption? **(RI.2.5)**
- A. It is a fossil of a spider stuck in sap.
 - B. It is a fossil of a spider stuck in ice.
 - C. It is a fossil of a spider stuck in tar.

Note-Taking Guide



main idea



connection

underline

key detail



surprising detail



**unfamiliar word,
phrase, or content**



"I understand"

**Reading A-Z**



Greater vasa parrots live on a diet of fruit, nuts, berries, and seeds.

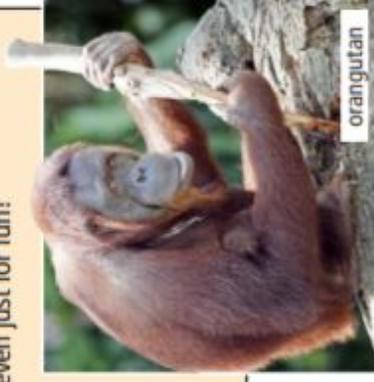
Handy Parrots

Few animals can use tools. In 2015, English scientists watched greater vasa parrots in a lab doing just that. The parrots used small rocks or fruit pits to grind seashells and eat them. The calcium in seashells helps the parrots form the shells of the eggs they lay.

The scientists watched ten parrots over eight months. Out of the ten parrots, five used the tools to grind the seashells.

Do You Know?

Some animals, including orangutans, octopuses, and seagulls, use tools such as sticks, rocks, and coconut shells for many reasons. They may use tools for grooming, self-defense, building shelters, and even just for fun!



orangutan

Humans have used tools to grind food for 30,000 years. However, this is the first time another animal has been seen using tools to grind food. The next step will be to see if the parrots use tools in the wild, too.

Where Greater Vasa Parrots Live

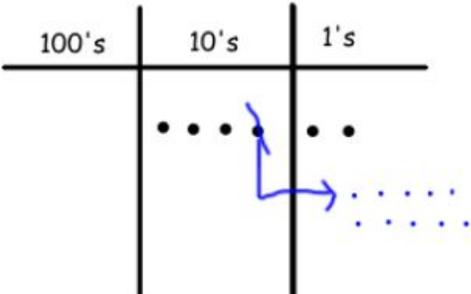
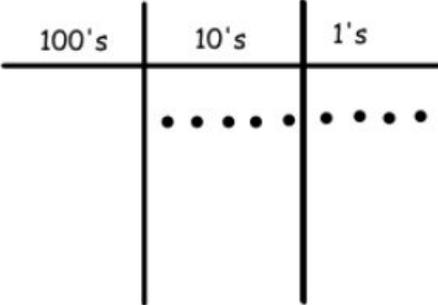
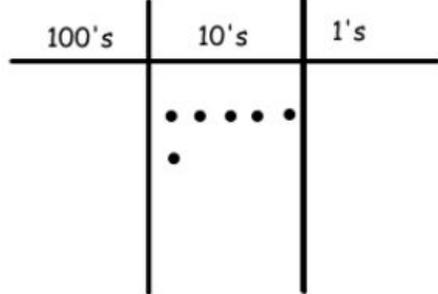


Greater vasa parrots live in Madagascar and nearby islands.

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.

<p>a. $42 - 26 = \underline{\hspace{2cm}}$</p>	
<p>b. $54 - 28 = \underline{\hspace{2cm}}$</p>	
<p>c. $60 - 17 = \underline{\hspace{2cm}}$</p>	

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. $31 - 19 = \underline{\quad}$

b. $46 - 24 = \underline{\quad}$

c. $51 - 33 = \underline{\quad}$

d. $67 - 49 = \underline{\quad}$

e. $66 - 48 = \underline{\quad}$

f. $77 - 58 = \underline{\quad}$

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. $63 - 35 =$ _____





Barnard College	Columbia University	New York University
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Thursday
January 7, 2020

Fossils and the Earth Long Ago

Name: _____ Date: _____



1	<p>Rock Layers</p> <p>Look at the rock in the picture. This rock is called a sedimentary rock. These rocks are made from layers of mud and sand. The layers got pressed together. Slowly they became rock. It takes a long time to make sedimentary rock. Paleontologists look at fossils inside the layers of these rocks. This helps them learn about plants and animals from long ago. Fossils in the bottom layers are the oldest. Fossils in the top layers are not as old. Paleontologists found more plant fossils in the bottom layers. They found more animal fossils in the top layers. This means that plants were on Earth before animals. They also learned that the oldest plants did not have roots! They floated in water.</p>	
2	<p>Learning from Fossils</p> <p>Fossils give clues about the past. Fossils give paleontologists information about plants and animals from long ago. They can study, or look closely at, a fossil of a tooth. A sharp tooth means the animals ate meat. A big tooth means the animal was big. They can also learn from fossil footprints. A big footprint means the animal was big. A small footprint means the animal was small.</p>	
3	<p>Earth Long Ago</p> <p>Fossils can tell us what Earth was like a long time ago. They tell us about how it has changed. Paleontologists may be on a mountain. They may find a fossil of a fish on the mountain. This was not a mountain a long time ago. It was underwater! They may go to a cold place. They may find a fossil of a plant that grows in warm places. This means the place was not cold a long time ago. It was warm. The earth has changed a lot!</p>	

Written by EL Education for Instructional Purposes
490L

“Fossils and the Earth Long Ago”: Selected Response Questions

Name: _____ **Date:** _____

RI.2.1, RI.2.2, RI.2.4, RI.2.5, RI.2.6, W.2.8, L.2.4

Directions: Read each question. Choose the best answer.

1. What is the meaning of *sedimentary rock* as it is used in paragraph 1?
(RI.2.4, L.2.4a)
 - A. rock made in a mountain
 - B. rock made from layers of mud and sand
 - C. rock made from layers of fossils

2. What do paleontologists learn from studying fossils in sedimentary rock? (RI.2.1)
 - A. They learn about mud and sand from the past.
 - B. They learn about mountains from the past.
 - C. They learn about plants and animals from the past.

3. Which section in the article tells the reader about how paleontologists study fossils to learn about animals from long ago? (RI.2.5)
 - A. Rock Layers
 - B. Learning from Fossils
 - C. Earth Long Ago

4. *Inform* means “to give knowledge.” What might the word *information* mean? **(L.2.4c)**
- A. knowledge or facts about something
 - B. gifts for someone
 - C. how something is made
5. What is the meaning of the word *past* as it is used in paragraph 2? **(RI.2.4, L.2.4a)**
- A. all of the time before now
 - B. all of the plants and animals
 - C. all of the rocks in the earth
6. What is the meaning of the word *study* as it is used in paragraph 2? **(RI.2.4, L.2.4a)**
- A. to look closely
 - B. to prepare
 - C. to find fossils

Note-Taking Guide



main idea



connection

underline

key detail



surprising detail



**unfamiliar word,
phrase, or content**



"I understand"

Reading A-Z



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Handy Parrots

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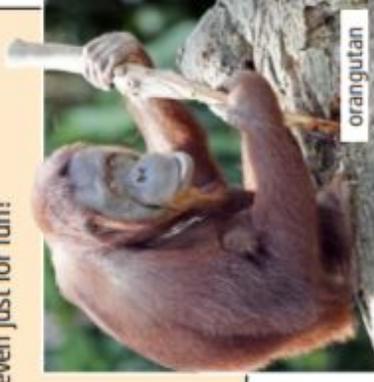
The scientists watched ten parrots over eight months. Out of the ten parrots, five used the tools to grind the seashells.

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1

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orangutan

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Where Greater Vasa Parrots Live



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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

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

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. $145 - 28 =$ _____

hundreds	tens	ones

2. $151 - 39 =$ _____

hundreds	tens	ones





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

Friday
January 8, 2020

Fossils and the Earth Long Ago

Name: _____ Date: _____



1	<p>Rock Layers</p> <p>Look at the rock in the picture. This rock is called a sedimentary rock. These rocks are made from layers of mud and sand. The layers got pressed together. Slowly they became rock. It takes a long time to make sedimentary rock.</p> <p>Paleontologists look at fossils inside the layers of these rocks. This helps them learn about plants and animals from long ago. Fossils in the bottom layers are the oldest. Fossils in the top layers are not as old. Paleontologists found more plant fossils in the bottom layers. They found more animal fossils in the top layers. This means that plants were on Earth before animals. They also learned that the oldest plants did not have roots! They floated in water.</p>	
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Written by EL Education for Instructional Purposes
490L

“Fossils and the Earth Long Ago”: Selected Response Questions

Name: _____ **Date:** _____

RI.2.1, RI.2.2, RI.2.4, RI.2.5, RI.2.6, W.2.8, L.2.4

Directions: Read each question. Choose the best answer.

7. What might paleontologists learn when they find a fossil of a fish on top of a mountain? **(RI.2.1)**
 - A. that the place was once under water
 - B. that the fish got lost
 - C. that fossils are hard to get

8. What is the main idea of paragraph 3? **(RI.2.2)**
 - A. The earth has changed.
 - B. Fossils have changed.
 - C. Mountains have fossils.

9. Why did the author write “Fossils and the Earth Long Ago”? **(RI.2.6)**
 - A. to explain what we learn from studying fossils
 - B. to explain what fossils might look like
 - C. to explain how to find fossils

10. According to the article, what can we learn from studying fossils? **(RI.2.1, W.2.8)**

Note-Taking Guide



main idea



connection

underline

key detail



surprising detail



**unfamiliar word,
phrase, or content**



"I understand"

Reading A-Z



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Handy Parrots

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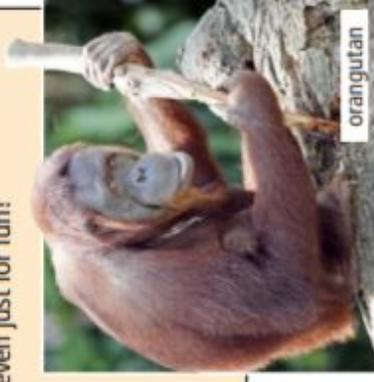
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1

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Where Greater Vasa Parrots Live



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2

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. $73 - 56$

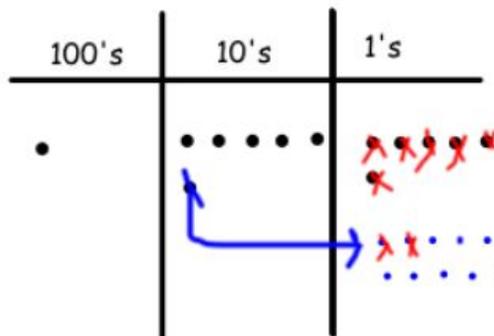
b. $170 - 53$

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.

$$\begin{array}{r}
 5 \overline{)166} \\
 - 48 \\
 \hline
 108
 \end{array}$$



a. Lisa correctly _____

b. Lisa needs to fix _____
