

Earth Processes in New York State

At-Home Resources

1. Have you ever found a fossil? In Colorado, a person operating a bulldozer dug up large bones in the soil. Watch this video to see what happened:

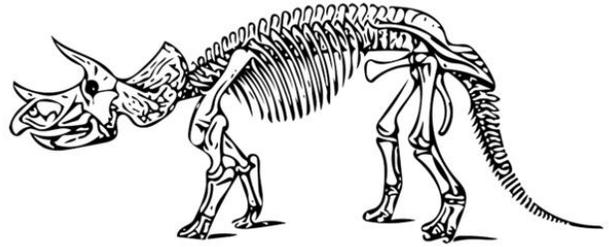
Video: Scientists unearth massive ice age fossil cache (4.3 minutes)



http://www.pbs.org/newshour/video/2010/11/29/20101129_8_fossils.mp4

2. In the space below, write some questions you have about this fossil discovery:

3. Look at the questions you wrote about the video. Choose one question you can research in order to find out the answer.



My question is:

The answer to my question is: _____

I know this because: _____

4. The following short video from Britannica explains how fossils form:

<https://www.britannica.com/video/143163/Fossils-organisms-sediment-organism-minerals-shape>

Scientists use fossils to learn the history of a part of the Earth. They compare fossil animals to those that live today.

Look closely at Image A. and image B. below. These are both photographs of different types of fossilized brachiopods. They lived millions of years ago. Do you see any **patterns** in the images?

Image A:



Image B.



The animals that inhabited the shells in Image C. lived sometime in the last few years. Scientists study and compare the fossil animals of long ago to the animals that live on the Earth right now. Do you notice any **patterns**?

Image C.



Seashells that we find today are from animals that lived in water. Brachiopods also lived in water. Scientists have learned much about where different types of fossilized animals once lived. They also know when in the Earth's history the animals lived.

5. Scientists look for **patterns** in layers of rocks. Sometimes different kinds of rocks are different colors as in Image D. below.

Image D.



Write your observations about the rock layers in Image D. in the space below:

6. Each layer of rock was formed in a different environment. Almost all sedimentary rocks were formed in water. Sometimes the water was deep. Sometimes it was shallow. Sometimes the water had iron in it. These different conditions change the properties of the rocks that formed. For instance, rocks that have lots of iron in them often look red.

Image E.



The rocks in Image E. have striped layers. There are some red layers and some gray layers. What do you think happened? Write your answer in the space below:

7. Look at the photos of canyons below. Do you see any **patterns**?



Image F.



Image G.



Image H.



Image I.

Image J.



8. What is the same in all of the Images F – J? What **pattern** do you see?

9. Can you think of the **CAUSE** that would have created a canyon or gorge?

10. The SciShow Kids video “The Grand Canyon” explains the processes that formed the Grand Canyon. This is a HUGE gorge or canyon in the Southeastern United States. Watch the video at the link. Did you choose the correct answer for Question #9 above? Write your answer below.

<https://www.youtube.com/watch?v=oZZEJMtLOKU>
