Information on Fossils

Fossils are preserved remains of organisms that lived long ago. It takes thousands of years to form a fossil.

Fossils can tell us what kinds of plants and animals lived thousands of years ago. Many of these organisms do not exist today.

Scientists have found fossils of animal bones, shells, fish scales, insects, and even plants!

Steps to Analyze Fossils

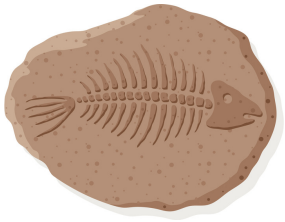
Step 1:
Read information about two different parks on Handout: Information on Parks.

Step 2:
Choose a park to make a fossil for.

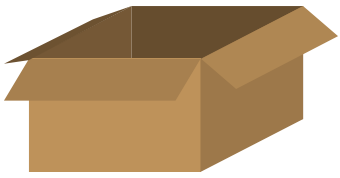
Badlands National Park (located in South Dakota)

Grand Canyon National Park (located in Arizona)

Step 3:
Choose one of the fossils shown on the handout in the park you chose. Use art and building supplies to recreate that fossil. If you chose a larger animal, you can make a fossil from part of that animal's body.



Step 4:
Use supplies provided by your teacher to recreate the park that your fossil is found in. Create your park in a box or on top of a tray or piece of cardboard. Then, place your fossil in the park.



Step 5:
Switch parks with another group. Look at the park and the fossil. Write down information on Handout: Making Observations. Then, make a guess about what park the fossil came from.

Information on Parks

Park 1: Grand Canyon National Park

Important Information about the park:

- Park is located in Arizona.
- The area used to be covered in water by the Colorado River.
- There are huge canyons that were carved by large glaciers, water, and wind.
- The park is currently dry, with hot weather during the day and cool nights.

Fossils found in Grand Canyon National Park:

Imprint of a Brachiopod Shell

These animals lived on the sea floor! There are many brachiopods that are living today!

Imprint of a Cnidarian

These animals lived in the sea! Cnidaria are similar to the jelly fish we know today.

Full-body Imprint of a Dragonfly

Dragonflies lived near ponds and marshes!

Shell and Cnidarian photos from www.nps.gov

Information on Parks

Park 2: Badlands National Park

Important Information about the park:

- Park is located in South Dakota.
- Nicknamed the “Badlands” because the lands are dangerous to cross. The land is still filled with huge rocks, gullies, and harsh winds.
- This park is still covered in tall grasses and huge ravines. Organisms that survived there adapted quickly to changing weather conditions.

Fossils found in Badlands National Park:

Imprint of a pig snout

These pre-historic pigs lived near flood plains! Flood plains are areas of land near rivers where flood water collects.

Imprint of a Hyaenodon horridus

These large mammals lived in the plains. A plain is a large area where the ground is flat and there are almost no trees or other large plants.

Information on Parks

Park 3: Joshua Tree National Park

Important Information about the park:

- Park is located in southern California.
- The park is named after the thousands of Joshua Tree plants that live in the park.
- The park is now a desert and gets very little rain.
- Thousands of years ago the area looked different. Temperatures were much colder and there was a lot more rain.

Fossils found in Joshua Tree National Park:

Columbian Mammoth fossil

The Columbian Mammoth was a huge animal, reaching 13 feet tall! This is a fossil of the mammoth's ribcage.

Camel fossil

Thousands of years ago, camels walked Joshua Tree National Park. This is a fossil of a camel foot.

Tortoise fossil

Desert tortoises are endangered in the park. This is the remains of a tortoise shell.

Photo credit: NPS / Eric Scott

Name: _____

Making Observations

Fill out the information below about the fossil you are making observations of. You can make bullet points in the chart or write short sentences.

Observations about the fossil color	Observations about the shape and size of the fossil	Observations about the Park

What animal do you think the fossil use to be?

What park do you think these fossils came from? Explain your reasoning.