

Fossil Exploration Activity



Paleontologists study fossils to learn about ancient animals, plants, and how our environments have changed over time. Utah has undergone many changes over the course of millions of years. Through this activity students will make observations and inferences using fossil photos and make a hypothesis about what Utah looked like during the Eocene Epoch.

Grade Level	3rd-5th Grade
Activity Length	20-40 Minutes Depending on Number of Fossils Used

Disciplinary Core Ideas

(LS1) Molecules to Organisms

(LS4) Biological Evolution

(ESS1) Earth's Place in the Universe

SEEd Standards:

Standard 3.2.5 Engage in argument from evidence that in a particular habitat (system) some organisms can survive well, some survive less well, and some cannot survive at all. Emphasize that organisms and habitats form systems in which the parts depend upon each other. Examples of evidence could include needs and characteristics of the organisms and habitats involved such as cacti growing in dry, sandy soil but not surviving in wet, saturated soil.

Standard 4.1.1 Construct an explanation from evidence that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. Emphasize how structures support an organism's survival in its environment and how internal and external structures of plants and animals vary within the same and across multiple Utah environments. Examples of structures could include thorns on a stem to prevent predation or gills on a fish to allow it to breathe underwater.

Standard 4.1.3 Analyze and interpret data from fossils to provide evidence of the stability and change in organisms and environments from long ago. Emphasize using the structures of fossils to make inferences about ancient organisms. Examples of fossils and environments could include comparing a trilobite with a horseshoe crab in an ocean environment or using a fossil footprint to determine the size of a dinosaur.

Standard 4.1.4 Engage in argument from evidence based on patterns in rock layers and fossils found in those layers to support an explanation that environments have changed over time. Emphasize the relationship between fossils and past environments. Examples could include tropical plant fossils found in Arctic areas and rock layers with marine shell fossils found above rock layers with land plant fossils.



**NATURAL HISTORY
MUSEUM OF UTAH**

Rio Tinto Center | University of Utah

Fossil Exploration Activity



Student Name: _____

Paleontologists study fossils to learn about ancient animals, plants, and how our environments have changed over time. Utah has undergone many changes over the course of millions of years. Use the photos to examine the fossils from the Eocene Epoch (66 million to 23 million years ago) here in Utah. Then make observations and inferences about each fossil.



Fossil #1

Observations

What do you notice about this fossil? Observations are measurable, such as size of the object, or descriptions.

Inferences

An inference is your best guess. Observations are your evidence for your inference.





Fossil #2

Observations	Inferences
<p>What do you notice about this fossil? Observations are measurable, such as size of the object, or descriptions.</p>	<p>An inference is your best guess. Observations are your evidence for your inference.</p>



Fossil #3

Observations

What do you notice about this fossil? Observations are measurable, such as size of the object, or descriptions.

Inferences

An inference is your best guess. Observations are your evidence for your inference.



Put It All Together!

Have you seen animals and plants like these before? Where did you see them?

Did these animals and plants have anything in common? List what they had in common.

What types of habitats do you think these plants and animals come from?

All three of these fossils are from the Eocene Epoch here in Utah. Use your observations to make your best guess about what type of habitat existed in Utah?

