

From Field to Lab: The Process of Paleontology

Target Grade Range: 2-8

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Overview

Lots of kids dream of becoming a paleontologist but may not truly understand what the job entails! Learn all about the process of paleontology - from discovering fossils in the field to mounting dinosaurs for display - with Paleontology Lab and Field Specialist Scott Williams.

Student Objectives

Students will be able to:

1. Explain multiple steps in the process of paleontology.
2. Describe how paleontologists use a geologic map to find fossils.
3. Explain the role erosion plays in the process of paleontology.

Standards Alignment

Montana Science Standards

Grade	Subject Area	Content Standard <i>Each student will:</i>
2 nd	Earth and Space Science	Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
3 rd	Life Science	Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.
4 th	Earth and Space Science	Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. Make observations or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
5 th	Earth and Space Science	Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, or atmosphere interact.
6 th – 8 th	Earth and Space Science	Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6 billion-year-old history. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time scales and spatial scales. Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.

Next Generation Science Standards

Discipline and Core Idea	<i>Students who demonstrate understanding can:</i>
2-ESS1-1. Earth's Place in the Universe.	Use information from several sources to provide evidence that Earth events can occur quickly or slowly.
3-LS4-1. Biological Evolution: Unity and Diversity	Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.
4-ESS-1. Earth's Place in the Universe	Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time.
4-ESS2-1. Earth's Systems	Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.
4-ESS2-2 Earth's Systems	Analyze and interpret data from maps to describe patterns of Earth's features.
5-ESS2-1 Earth's Systems	Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
MS-ESS2-2 Earth's Systems	Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
MS-ESS2-3 Earth's Systems	Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.