

## **Fossils, Minerals and Mining**

### **Marmarth Research Foundation**

[Marmarth Research Foundation](#) Current excavations, field programs, photos and more.

### **State of South Dakota**

#### **South Dakota Department of Environment and Natural Resources**

[Geological Survey Program](#) Maps, digital database, publications and more.

[Mineral and Mining Program](#) Information about mineral exploration and more.

#### **South Dakota Department of Game, Fish and Parks**

[Custer State Park](#) Map, park information and more.

[Free Class Trips Teachers](#) Outdoor Campus field trip.

[Project Wild](#) Outside activities to do with children.

#### **South Dakota Sings and Symbols**

[Signs and Symbols](#) Identify South Dakota's state mineral, state fossil and more.

### **PBS Resources**

#### **South Dakota Public Broadcasting**

[Land Subsidence Activity](#) During this activity your students will learn about the history of the Open Cut surface mine in Lead, SD. Your students will also learn about the issue of land subsidence in Lead which was due to poor backfilling/stabilization practices during the mining of gold. Then your students will complete an activity in which they will use materials like sand and coffee grounds to understand the importance of backfilling and stabilization.

[Paleontologist: Unearth a Flower \(Fossil\)](#) During this activity your students will learn how the discovery of a single old bone lead to the development of one of the world's premier fossil beds (mammoth site). Your students will also complete an activity in which they will learn that fossils are very delicate and that extreme care must be taken when the fossils are excavated.

Dakota Pathways: [Mining Booms and Busts](#)

Dakota MIDDAY

[Early History of Homestake Gold Mine](#)

[Uranium Mining Debate](#)

#### **Dragonfly TV**

[Crystals](#) Dragonfly TV investigates crystals. [more](#)

[Glaciers](#) Dragonfly TV investigates glaciers. Activity guide, watch program online and more.

[Rocks](#) Dragonfly TV investigates types of rocks. Activity guide, watch program online and more.

[SciGirls Activity 2: Dinosaurs](#) Model how paleontologists estimate the age of fossil discoveries. Investigate how animal skeletons help us determine what kinds of animals live together in an ecosystem. Grade: 3-5, 6-8

## **PBS Parents**

[Homemade Fossils](#) If you're ever in need of a coffee break AND a fun and educational craft for the kids, this is perfect! My recipe makes enough dough for three kids to make one large or three small "fossils" each, and it uses just the right amount of leftover coffee to empty my coffeemaker.

## **NOVA**

[Jewel of the Earth - Amber](#) Around the World Examine an interactive map that shows major sources of fossil-bearing amber. Learn about the ages and distribution of the sites and other interesting facts that set them apart from one another. Grade Level: 6-8, 9-12

[Microraptor's World](#) Explore the fossil remains of feathered dinosaurs discovered in China's Liaoning Province. Learn how scientists have been able to reconstruct a vivid picture of an Early Cretaceous ecosystem and glimpse creatures that inhabited the region long ago. Grade Level: 6-8, 9-12

[NOVA scienceNOW - T. Rex Blood? Inside the Bones](#) See what a paleobiologist and her team found within the primordial remains of everything from a mammoth to a Triceratops. Grade Level: 6-8, 9-12

[What on Earth Made This?](#) Take an online quiz and discover how earthly forces created land arches, 60 foot rock posts, a large depression in the earth, a fossilized feathered dinosaur, potholes, pumpkin-sized rocks, limestone towers and a granite profile.

## **60 Second Science**

[Fake Fossils](#) Discover how paleontologists find and care for fossils while digging for pretend fossils. Grade Level: K-2, 3-5

[Weathering Rocks](#) Collect rocks from the local area and investigate how water affects the rocks. Grade Level: K-2, 3-5

[Soil: Taking It Apart](#) Collect soil from the local area and examine it for various materials. Grade Level: K-2, 3-5

## **U.S. Geological Survey Department of the Interior/USGS**

[The USGS and Science Education](#) The U.S. Geological Survey provides scientific information intended to help educate the public about natural resources, natural hazards, geospatial data, and issues that affect our quality of life. Discover selected online resources, including lessons, data, maps, and more, to support teaching, learning, education (K-12), and university-level inquiry and research. [Types of rocks](#)

[The Cretaceous-Tertiary Boundary Interval in Badlands National Park, South Dakota](#) 49 page document.

## **USDA Forest Service**

[Soil Education](#) Erosion, water cycle, formation of soil, soil classifications, identify your state soil and more.

## **South Dakota School of Mines and Technology**

[Study of Abandoned Uranium Mining Impacts](#) Study of private land on land surrounding US Forest Service land in western South Dakota.

## **The Natural Source Northern State University**

[South Dakota Habitats](#) Information about South Dakota habitats, forests, fossils and more.

## **Links**

[Black Hills Institute of Geological Research, Inc.](#)

[The Journey Museum](#)

[SDSM&T Museum of Geology](#)