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

<u>Geological Survey Program</u> 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

American Field Guide

<u>Fossils</u> Understand the concept of relative dating of fossils, determine the geological age for several "rocks" and identify which rocks will be most useful for oil companies looking to drill for oil. Grade Level: 6-8, 9-12

Dakota Digest (SDPB Radio): Uranium Mines

<u>Power-Tec</u> Mining Company is now exploring for uranium in the Southern Black Hills. SDPB's Charles Michael Ray looked into the plans for uranium mining in South Dakota.

<u>Uranium Mines</u> At two people per square mile, Harding County in the northwestern corner of the State is among the most sparsely populated areas in South Dakota. While the County is low in population, it's high in something else - uranium. A boom in the 1950s led to the establishment of more than 30 open-pit uranium mines in the area.

Dragonfly TV

Crystals Dragonfly TV investigates crystals. more

<u>Glaciers</u> Dragonfly TV investigates glaciers. Activity guide, watch program online and more.

<u>Rocks</u> Dragonfly TV investigates types of rocks. Activity guide, watch program online and more.

<u>SciGirls Activity 2: Dinosaurs</u> 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

Iowa Public Television Connections to Science

<u>Geology</u> Learn about what rocks are made of, how geologists test rocks, and where minerals are found in household items.

Mama Mirabelle's Home Movies

<u>Fossil Cookies</u> Learn how fossils are tracks left by long-ago animals on different surfaces. Make fossil cookies by stamping "tracks" of different items on the dough before baking. Grade: PreK

NOVA

<u>Jewel of the Earth - Amber</u> 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

<u>Microraptor's World</u> 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

<u>NOVA scienceNOW - T. Rex Blood? Inside the Bones</u> 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

<u>What on Earth Made This?</u> Take an online quiz and discover how earthly forces created land arches, 60 feet rock posts, a large depression in the earth, a fossilized feathered dinosaur, potholes, pumpkin-sized rocks, limestone towers and a granite profile.

Scientific American Frontiers

<u>The Wild West: All That Glitters</u> Identify the original geometric crystalline shapes of the six crystal systems, and grow crystals of the same substance over different periods of time. Explore the field of mineral mining, select a method and simulate mining for minerals.

60 Second Science

<u>Fake Fossils</u> Discover how paleontologists find and care for fossils while digging for pretend fossils. Grade Level: K-2, 3-5

<u>Weathering Rocks</u> 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

<u>The USGS and Science Education</u> 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. <u>Types of rocks</u>

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

<u>Study of Abandoned Uranium Mining Impacts</u> Study of private land on land surrounding US Forest Service land in western South Dakota.

The Natural Source Northern State University

<u>South Dakota Habitats</u> 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