Dig It! The Secrets of Soil

Where Did the Soil Go?

Age Range: 5-10
Keywords: Science, Math, Writing

 **Background**

For generations upon generations, we have lived on and learned to use soils. Soils sustain our world. We size up soils every day. Why? Because we care about clean water and clean air, fresh tomatoes and fine wine, dams and dry basements, subway tunnels and superhighways, fields and forests, wildlife and weather. Since humans first settled down, we have been sizing up soils. Today, soil scientists analyze soils and predict how they will behave. But scientists explore soils using tools and techniques—digging, touching, seeing, and smelling—that everyone can use. Every soil's life story is written in its structure, color, and patterns. You can read it by taking a closer look from the ground down.

 **Be A Museum Expert!** Before starting the activity, have students visit the Wise Choices section of the Smithsonian National Museum of Natural History's Online Exhibit Dig It! (http://forces.si.edu/soils/02_07_00.html) as a class, in groups or pairs, or individually to learn more about soil and the effect that humans and other factors have on soil.

 **Create It!** Students will construct erosion models and observe the effect of water erosion on soils.

 **Think About It!** Invite students to bring in objects from home and relate the steps between soil and the object.

Example: Leather shoes, boots or coat

1. Leather comes from cows
2. Cows eat grass in pastures
3. Grass depends on soil

 **Talk About It!** Go to the ePals Smithsonian forums to share some of the examples that you and your classmates came up with. Then, talk about why soil erosion is a problem and what you can do to help prevent it.