

Natural Resources Field Day Lesson Plan

September 10-11, 14-18, 2009: Guinavah-Malibu Campground, Logan Canyon
2-25 minute presentations, classes of 50 kids, broken into two groups

GROUP #1

- Introduce yourself
 1. Why is soil important?
 2. What is conservation? (Laminated sign is visual aid to show the word and definition)
 3. Do we have plenty of topsoil?

- Apple Demonstration
 1. Is it important to conserve topsoil?

- Soil formation (Use display board at site and see attached sheet: Factors that build our soil)
 1. How long does it take soil to form? (answer: 100 to 500 years for 1 inch of topsoil, depending on climate. In Cache County, approximately 25 years for the thickness of a dime (use dime to demonstrate). For this reason, soil is considered a non-renewable resource.)
 2. What is soil? (See attached sheet: Soil Pie: Components of Soil.)

- Soil Texture (Use display board at site)
 1. Sand, silt and clay
 2. Soil Sleuths (break students into three or four sub-groups and have them do attached lesson plan “Super Soil”). Ask how many correctly identified the three soil textures.
 3. *Optional activity if you have time: Have kids line up in two or three lines. Select two students to be water molecules, rest are soil particles. First is sand- arms outstretched; finger to finger; second is silt- elbow to elbow; third is clay- shoulder to shoulder. Have the water molecules move in and out. How easy is it? How hard? What happens to water in sandy soil? In clay soil?*

GROUP #2

- Soil Profile (see attached sheet: Soil Profile)
 1. Would all the soil under your feet look the same if you could take a slice, just like slicing into a birthday cake? Why? What would you find?
 2. Name the Layers: Topsoil, Subsoil, Parent Material, Bedrock.
 3. Build the soil profile in tubes (divide into two groups to walk down each side of picnic table).
 4. Test each child’s knowledge of the soil layers while placing labels on soil profile tubes.

- *Optional activity if there is time: Soil Erosion (See attached sheet: Soil Erosion – Dirty Business)*
 1. *How do we lose soil? Explain erosion: wind and water. Demonstrate water erosion on watershed model.*
 2. *What can we do to save the soil? (Conservation Farming Practices: Erosion Control Practices)*