

ACTIVITIES FOR BEFORE AND AFTER PROFESSOR W'S EARTH SCIENCE CIRCUS

Observation

Take the students on a sensory walk of an indoor environment, such as the library or multipurpose room. Ask them if and where they can see, hear, or touch signs of animals, plants, the sun, rocks, soil, air and water. Take notes on a clipboard.

Walk out to the playground, sit in a circle, observe the surroundings, and repeat the questions. Take notes again. Discuss the similarities and directness between both settings. Discuss how plants and animals use the four elements (air, soil/rock, water, sunlight) and then compare these uses with how people use them. Using a simple chart or diagram, the students compare and contrast their findings from both visits.

The Four Natural Resources

Students cut out pictures of living things, such as flowers, trees, fungi, and other plants, birds, insects and other animals. They glue each picture to paper or cardboard and make a yarn necklace.

Prior to class, make a necklace for each of the four elements (sun, water, air, soil/rock). Ask four students to each wear one of the necklaces and sit in the center of the classroom. Direct the other students to sit in a circle around the elements.

Ask the students, "What things does the sun need?"

Verify each response and establish connections by instructing students to tautly hold the ends of long "connecting strips" of precut yarn. (Alternately, the students can use a ball of yarn to make the connections.) When everyone is connected, the element "Water" drops his/her ends. The class will quickly discover what is affected when water quality becomes impaired.

Wastewater

Students identify substances and activities within their individual households that can affect water quality, reflecting upon the waste that is usually disposed of down the sink or toilet.

Create "sample waste" in the classroom by putting water into a bucket and adding diverse materials such as: shampoo, toilet paper, salad dressing, gravy (with fat), food dye, detergent, and toothpaste.

Mix this up and distribute small paper cups of the moisture to each student. Discuss what wastewater is and where it travels to after leaving a home.

Paper Recycling

Students collect, save and weigh the class's discarded paper for one week. Discuss or design ways in which this weight/volume could be reduced, and challenge the students to adopt these new practices in the classroom.

For a second week, the students again collect, save, and weigh the class's discarded paper. Discuss any changes, if any that took place. As extension activities, students research the production of new paper and the production of recycled paper. Then they make recycled paper in the classroom.

Stories To Read

The Wump World by Bill Peet

The Lorax by Dr. Seuss

The Giving Tree by Shel Silverstein

Brother Eagle, Sister Sky by Susan Jefferies

Vocabulary

Environment, limited resources, natural resources, recycling, vaudeville, planet, refuse, eco-system, Earth, elements, product, raw materials, garbage, pollution, juggling, magic, manufacture, consumer, plastic, gas mileage, global warming, photosynthesis, energy