

Putnam Soil and Water

The following programs are designed for 3rd grade classes and align to the state standards. All materials are provided and programs are free. To schedule a program email Bonnie Brooks at bonnie.brooks@putnamcountyohio.gov

Third Grade: 3.ESS.1: Earth's nonliving resources have specific properties. Soil is composed of pieces of rock, organic material, water and air and has characteristics that can be measured and observed. Rocks can be sorted. Rocks form in different ways. Air and water are also nonliving resources. 3.ESS.2: 3.ESS.3: Some of Earth's resources are limited due to overuse and/or contamination. Emphasis on non-living. Reducing resource use, decreasing waste and/or pollution, recycling and reusing can help conserve these resources. 3.LS.1: Offspring resemble their parents and each other indicating a reliable way to transfer information from one generation to the next. 3.LS.3: Plants and animals have life cycles that are part of their adaptations for survival in their natural environments. Geography: Daily life is influenced by the agriculture, industry and natural resources in different communities. Systems of transportation and communication move people, products and ideas from place to place.

1. Monarch Madness: Learn about the Monarch's amazing transformations and their ability to pass on genetic information through several generations to find their way back home across 3,000 miles. Students will play a game to simulate the Monarch's journey to see if they can make it safely to Mexico.

2. Rocks!: Classic mineral lab to determine density, crystal structure, and streak among other things. 1000 x's magnifiers, scales, and other equipment will be utilized.

4. Soils: What a valuable resource! We will learn how much of it is on the Earth, talk about how it's made, compare bedrock and the soils they make. We will see how soils behave with water, do an experiment to see how to protect them and watch how soils are made.

5. Break Out Boxes: Renewable and non-renewable resources. Students work together in teams to figure out answers to unlock boxes before time is out!

6. Farm to Plate: What do we eat, where does it come from and how does it get to us? Teams figure out how products are distributed. We make a yummy snack that incorporates many products and highlight the plant they are produced from.

7. Recycling/Papermaking: Students begin by having a competition between groups to learn about resources, how they are made and better choices to conserve non-renewables. Then we make paper from recycled paper in the classroom.

8. Worm Bin: There is so much life in a worm bin. Can they find cocoons, baby worms and adult worms in a worm bin with a 1000 x microscope? What other creatures live in this ecosystem? We will hook up a digital microscope to the big screen in the classroom to check out the life cycles of the worms.

9. Redesign the schoolyard to make it a better place for wildlife. Game to show what animals need, do an assessment of the grounds to see what is present. Make some decisions about what animals the school yard COULD support and create designs for the school yard that would welcome and support wildlife. If so desired by the teacher and students, our office could help make these designs come to life on the school grounds.