



# Wonder Underground

## Overview

Children will engage in the joy of discovery as they dig to uncover the wonders that can be found underground. They will use scientific skills to collect, classify, describe and record their findings.

## Illinois State Goals

**Science State Goal 11:** Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

**Learning Standard A:** Know and apply the concepts, principals and processes of scientific inquiry.

**Science State Goal 12:** Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.

**Learning Standard C:** Know and apply concepts that describe properties of matter and energy and the interactions between them.

## Vocabulary

- Observation
- Earth
- Dirt
- Nature
- Underground

## Materials

Bins filled with non-fertilized topsoil

Rocks

Pieces of bark

Roots

Twigs

Leaves

Littered items (bottle caps, 6 pack rings, paper clips, etc.)

Tools such as sifters and shovels

Gardening gloves

Sorting trays

Tarp for floor

## **Procedure**

1. Discuss with children what they might find underground. *Has anyone ever dug into the ground before? What did you find? What do you predict you might find today?*
2. Set up a digging station or stations by filling bins with topsoil. Bury natural items and litter under the soil.
3. Give children tools with which to dig (gardening shovels and sifters).
4. Allow them to dig and discover the items.
5. Discuss the items they find. *What objects are natural items? Are any of the items living things, or things that were once living? What about the litter? Do you think the litter is good for the earth?*
6. Give children sorting trays and ask them to sort the items they have found. They might sort by color, size, living or non-living thing, litter or non-litter, etc. They can decide individually.
7. Ask children to describe how they sorted the items.
8. Have a discussion about the litter and ask children what they could do to help prevent the litter from getting into the ground.

## **Extension**

### ***Up Above and Down Below***

As a class, read the book, *Up Above and Down Below* by Sue Redding. Have a discussion about all the things that may be down below your school, below the street out front, below your homes, etc. Make a list of the children's ideas. You might ask them to create their own "Up Above and Down Below" drawings of a certain place, such as their own backyard or the school playground.

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