



HERE'S A LESSON WORTH TEACHING

Lesson # 6 Exploration of Soil

Appropriate for Elementary

SUPPLIES NEEDED

Three clear plastic bottles with covers (such as water/juice containers, at least 400 ml)

Soil Sample (from your yard or potted house plants)

Print out of sorting diagram

Magnifying glass

OVERVIEW

Not all soil is the same. Even soil that looks similar can be very different. Soils contain different properties and different nutrients that plants use. This activity looks closely at differences you can see in the soil, including organic and inorganic material.

PROCEDURE

Step 1: Give each student one print out.

Step 2: Place one spoonful of soil in the center of the printout.

Step 3: Ask the students to sort the soil into the four categories. Non-



living large pieces, nonliving small pieces, living large pieces and living small pieces. Students can use a magnifying glass if one is available.



Step 4: Ask students (if possible) to share what they found in their soil samples.

- What was something they found interesting in the sample?
- What are examples of pieces of organic matter that were found?
- What are examples of inorganic matter that were found?

Step 5: Wrap-up: Soils differ in their composition. The soils contain organic and inorganic materials. Visual inspection gives you an idea that soils are different but does not fully evaluate everything about soil. Some things that you cannot see are what nutrients are in the soil.

FURTHER DISCUSSION

Some students may have questions about living/once living organisms. Materials from living or once living organisms can be called organic matter, like dead plant material, worms, and decomposing insects. Nonliving materials, such as clay, rocks, or sand are inorganic materials.

Learn more about soils and what they contain in our soil [reader](#).

MAJOR CONCEPTS

Soils differ in their composition

The soils contain organic and inorganic materials

Visual inspection gives you an idea that soils are different but does not fully evaluate every-thing about soil

Nutrients (plant food) cannot be seen in the soil



OUR MISSION

Educating Canadians about the sustainable use of nutrients to increase the health and quality of our soil, improve production of nutritious food, and preserve green spaces.

Nutrients for Life Foundation Canada is a non-profit organization that provides information and resources to educators and individuals like you, to help inform the public about the vital role that plant nutrients play in feeding the world. The information we have compiled is science-based and user-friendly. It has been successfully implemented by educators across the country. Through a grassroots effort, we can spread the word about soil health to students of all ages and to adult organizations that are always looking for programs. Our story is not only important, but it is interesting and serves a vital role in educating consumers and decision-makers in the future.

This lesson is found in NFL's resource, *Nourishing the Planet in the 21st Century*.

All of our resources are free to teachers across Canada.



Master 2.2, *Graphic Organizer*

Name _____

Date _____

