



Grade Level: 1st - 12th Time Duration: 10 - 15 minutes



## INTRODUCTION

Nearly everything we use in a day can be linked back to soil in one way or another. Soil is not just the brown stuff under our feet, but rather a natural resource that is important to us all and plays a role in making items like our food, clothes and even our bicycles and building materials for our homes.

Soil is not the same as dirt, though many use those terms interchangeably. Dirt is a basic layer of soil. It does not contain any nutritional properties. Soil is composed of dirt, but has added properties that create a nutritious enviroment. Soil is important to farmers because the nutition it possess is essential to growing crops for us to eat as well as livestock to eat. If a farmers soil is not healthy, the crops that grow in it will not be healthy either. Therefore, farmers seek to maintain a healthy soil year round.

In this lesson students will learn about the different layers of soil and how they play a role in creating most of what we use everyday. Here are a few examples of everyday products that can be linked back to soil: Plastic products like a water bottles are made from crude oil. Crude oil is found in the soil, under the bedrock layer and is created when decomposed properties of plants and animals are met with heat and pressure. Crude oil is also called rock oil and is very valuable to us in many other ways. Metals that we find in our cars, bicycles and silverware have a similar link to soil as they are made from raw ore found in the ground. There are also many products that are pretty easy to link back to soil like lumber or a cotton t-shirt. We know that trees, cotton plants, fruits and vegetables need healthy soil to grow big and strong. What other products can you link back to soil?





## STUDENT ENGAGEMENT

To begin this activity, discuss with your students the following questions:

- What is the difference between soil and dirt?
- Why is soil important to us?
- Using the image below, discuss the layers that make up soil. What do they observe about the make up of soil? Is soil solid throughout? How many layers does soil have? Is the order of each layer important?
- Referring back to the soil layer image below when linking items back to soil might be helpful when discussing where materials like metal come from.

## **MATERIALS NEEDED**

- Printed images of everyday items (printable images on page 4-5)
- Tape to display the everyday items, if printed
- White board or chalk board
- Markers to write on the board





## ACTIVITY OUTLINE

In this activity, we are linking everyday items back to soil. Feel free to use the printable items on the next two pages or let your students come up with their own items.

First, list out five or more everyday items to link back to soil. Then, as a class, go through each item listed and work backwards until that product is linked back to soil. Most items are fairly simple to connect back to soil, but some might take several "links". Listed below are a few examples of common items to link. In this example chart, each item has only one link between the product and soil, but feel free to be creative and link the items back in as much depth as you and your students would

EXAMPLE





