



CANADA
4-H Ontario

How Much Soil Is There In The World?



Objectives

To learn the importance of soil as a limited, natural resource and how our food system is dependent on taking proper care of the soil so food can be grown to feed the world.

Materials

Apple(s), Plastic Knives, Cutting board, Paper towels.

Instructions

1. Pretend that this apple is planet Earth. Notice how its skin hugs and protects the surface. Cut the apple in quarters. Three of the four quarters represent how much of the earth is covered with **water** - oceans, lakes, rivers, and streams. Set three of four quarters aside.
2. Left is just one quarter (25 percent), representing the portion of our earth that is **dry land**. Take this quarter and cut it in half. One of these halves represents land that is **desert, swamps, polar, or mountainous regions** where it is too hot, too cold, or too high for humans to be productive. Set this half aside.
3. The other half (one--eighth or 12.5 percent of the apple) represents where **humans can live and grow crops**. Slice this section lengthwise into four equal parts. Now you have four 1/32nds (3 percent each) of an apple. The first of these represents land **too wet for food production**. It isn't swamp land, but it may flood during the growing season. The second section represents land that is **too rocky and poor to grow food**. A third 1/32nd represents areas that are **too hot**. Set these three sections aside.
4. The last section (1/32nd or 3 percent of the apple) represents the area of the **world developed by humans**. Now, carefully peel the last 1/32nd section. This small bit of peel represents the portion of our planet that is **soil** on which humans **depend for food production** and similar uses.

So, like water and air, soil is a very important and is a limited natural resource!



Discussion

All living things depend on soil to live. What are some of our important natural resources? Answers might include materials such as oil, water, coal, trees, animals and gold. All of those are important natural resources, but we often forget to mention one of our most important natural resources: **soil**.

