

WEEK 4

LEARNING ABOUT SOIL



LESSON PLAN INFORMATION

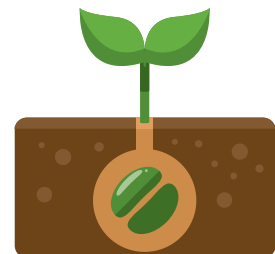


Activity: Gardening Tasks

- Fill in your plant growth chart.



- Have you noticed any changes with your plant?
- Can you see any signs of growth?



- Make sure to water your plant and don't let the soil get too dry or wet!



- You may also need to thin your plants.





ACTIVITY:

Soil and Compost

Click on the link below to watch the video:

Who Needs Dirt

Click on the link below to watch the video:

Soil Formation

- Soils sustains ecosystems, agriculture, and human societies. An important part of soil is organic matter. Soil organic matter consists of decomposed and decomposing remains of organisms, which give soil a dark colour and spongy texture.
- Soil that has organic matter makes it more resistant to erosion because all the soil and compost parts will be more tightly bound together.

Questions to consider:

- What is soil made of?
- *(Answer: dirt, mud, rocks, sand, etc.)*
- Where does it come from?
- *(Answer: crushed up rocks.)*
- Why do plants need soil?
- *(Answer: for their roots, to get water, for nutrients.)*



ACTIVITY: Soil as a Finite Resource

Materials:

- 32 cheerios or equivalent food item
- 1 cup to contain cheerios
- napkin
- world map or globe

Instructions:

- Begin by examining the map, noting the amount and proportion of water and land in the world.
- Take 32 Cheerios and place on the napkin.
- Seek input on the estimate of how much land exists compared to water. About $\frac{3}{4}$ of the world is comprised of bodies of waters: oceans, lakes, rivers and seas with the remaining $\frac{1}{4}$ being land. Split the number of Cheerios according to this proportion (24 for water; 8 for land). Place the 24 Cheerios into the cup.
- Of the 8 remaining Cheerios, estimate how much of the land is suitable to live and produce food on and what is not. The split is about half and half. Put 4 Cheerios back into the cup, representing the land that is not suitable for human habitation.
- Focusing on the remaining 4 Cheerios, one represents the land that is not suitable for food production as it is too rocky or of poor soil quality; another is for the area that is too wet for food production; with another representing the area where humans live and have developed homes, cities, malls, roads and other living places. Place 3 Cheerios back into the cup.
- The remaining and last Cheerio represents all the area on Earth that is suitable for food production.