

Did you know that soil is made up of living things? Underneath our feet, there is a whole world of life that we can't always see with our eyes! Insects, worms, fungi, and tiny living things called microbes all call healthy soil "home", and work together to keep each other healthy. The fungi and microbes found in soil, help plant roots to eat and drink from the soil. You could say that the fungi and microbes are best friends with plant roots! But not all soils are good places for fungi and microbes to live. In fact, when soil is unhealthy, the fungi and microbes have a hard time living in the soil. Just like all living things need food and water to be healthy, soil does too! To keep soil healthy we need to add things like broken down leaves and vegetable scraps to feed it and make it healthy again. This is process called composting!



The Experiment

We need your help! By doing an experiment we can learn a lot about soil. For this experiment we want you to write down what you notice is different between the plants grown in different soils. We will do this by using regular soil bought at the store and Fungal Dominant Compost soil (FDC). FDC soil is made from broken down leaves and is loaded with one of plants roots best friends FUNGI!



<u>Materials</u>

For this experiment you will need:

- 2 cardboard cups*
- 2 beans*
- FDC (Fungal dominant compost-soil)*
- Store bought soil*
- Observation sheet (on the back) and a pencil/pen*
- Water
- 1 tray or plate (to catch water from your plants) (*Provided)

Instructions

- 1. Take your two cups and using a pencil, poke small holes in the bottom to allow water to drain.
- 2. In one cup you will put regular potting soil, fill the cup and press down leaving 1 inch of space at the top. Make sure to label the cup as Regular Soil.
- 3. In another cup you will put FDC soil, fill the cup and press down until leaving 1 inch of space at the top. Make sure to label the cup as FDC soil.
- 4. Poke a hole 1 inch deep into the soil, plant 1 bean per cup and cover.
- 5. Water in your seeds until water comes out the bottom holes of the cup. Make sure you have a tray under your cups! 6. Set your cups in a bright sunny window.
- 7. Make sure to water when the soil starts to dry out. Soil should be kept moist like a rung out sponge but not soaking wet
- 8. Over the course of 4 weeks we need you to take down as much information as you can on how the plants are growing in the different soil. On the back of this page you will find a table where you can write down what you see as the plant grows.
- 9. At the end of 4 weeks (May 20th) we want to see what you saw and learn more about soil! Either drop your sheet off to your nearest Rideau Lakes Public Library or have a parent or guardian send a scanned copy to rideaulhs@gmail.com. Pictures of your observations are welcome with your submissions!
- 10. Finally plant your bean plants outside and enjoy eating some yummy beans this summer!

FDC Soil	
Week	What does my plant look like? (ie. colour of leaves?, number of leaves?, how tall?)
ı	
2	
3	
4	
	Regular Soil
Week	Regular Soil What does my plant look like? (ie. colour of leaves?, number of leaves?, how tall?)
Week	
Week 1	