Edible Soil Layers

A delicious demonstration of the soil layers you find in the earth below us.

What you need

• Oreo's (whole and crushed) • Milk and white chocolate chips (mixed) • Chocolate mousse • Baked coconut sliced (or shredded coconut)
• Gummy worms • Clear glass or cup (big enough for round biscuit) • Containers for ingredients • Spoons • Sticky labels

1. **Bedrock**. Oreo.
Take one biscuit and drop into the bottom of the glass. Bedrock is almost solid rock; nothing can grow in it and it is the outermost layer of the earth's crust.

2. **Parent Material**. Chocolate chips.
Take a spoonful (or two) of the chips and layer on top of the bed-rock. This material is formed from weathering of the bedrock. Soil forms above this layer.

3. **Sub Soil**. Chocolate mousse.
Carefully spoon in some mousse on top of the chips. Sub soil is rich in minerals but does not have as much organic material as the layer above. This layer is often hidden and very soft and it can hold a lot of water.

4. **Top Soil.** Crushed Oreo.
Add the crushed biscuits on top of the chocolate mousse. Topsoil is rich in minerals and is mostly organic, it provides lots of the important nutrients for growing plants.

5. **Gummy worms.**
Stick some of the worms into the top soil. After all, the top soil is where we find most organic and inorganic life.

6. **Humus**
Sprinkle the baked coconut pieces over the worms. A thin organic rich material forms the upper layer. The plants roots push through this. Humus is less than one inch thick and consists of decomposing animal and plant remains.

The Science

What is soil?

Soil is a mixture of organic matter, inorganic matter, water, minerals, gases and the decaying remains of plants and animals. Most soil contains all that is needed to support plant life and is vital to all life on earth. There are many different types of soil, but each type has a set of layers.

Bedrock is the bottom most layer and is a mass of rock such as granite, limestone, and sandstone. Weather and chemicals act on bedrock to break it up, forming the parent material. These provide support for layers above.

The organic layers: sub soil, top soil and humus, contain many of the nutrients plants need to survive. Plants germinate in the humus and put down roots that collect nutrients and water. The roots can spread into the sub and top soil.

Label your layers

Bedrock
Parent Material
Sub Soil
Top Soil
Humus

Take a spoon and eat!