Defining the Layers of Edible Soil

Soil has many layers. Each layer is different and has certain distinct characteristics. The composition of soil determines what the soil is used for and why it is important. This edible activity will help you learn about each layer.

- **Butterscotch chips represent bedrock.**  
  Bedrock is usually a light tan color and is made of rock from the compressed layer of soil above it. Plant roots do not reach this layer.

- **Chopped graham crackers represents a layer of parent material.**  
  A layer of parent material exists between bedrock and subsoil and can contain rocks. Organisms don’t exist, and chances of plant roots entering it are low. This can be found 5 feet below, but it varies on location.

- **Chocolate pudding represents subsoil.**  
  Subsoil contains some nutrients, but it is also rich in clay. Subsoil can be found 2-4 feet below our feet.

- **Crushed Oreos represents topsoil.**  
  Topsoil is rich in nutrients, such as Nitrogen, Phosphorus and Potassium. Topsoil is essential for plant growth. Topsoil can be as deep as 2 feet.

- **Gummy worms represent worms!**  
  The topsoil is alive with organisms and organic matter.

- **Green coconut represents the grass and many plants that grow in the soil.**

- **Sprinkles represents fertilizer.**  
  Plants take nutrients from the topsoil and need to be replaced with fertilizer. Fertilizers play an important role in keeping the soil healthy and in growing our food.

In the cup below, draw what you see in your cup. Label both the actual soil layer or part and the edible representation of the part.

<table>
<thead>
<tr>
<th>Soil Layer</th>
<th>Edible Representation</th>
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DIAGRAM: Diagram of soil layers with each layer represented by an edible item.
EDIBLE SOIL

SUPPLIES:
- 3 TBSP CHOCOLATE PUDDING
- 1 CRUSHED OREO
- HALF GRAHAM CRACKER ROUGHLY CHOPPED
- 10 BUTTERSCOTCH CHIPS OR ROUND TAN CEREAL (EX. KIX, REESE PUFFS)
- 1 TBSP GREEN COCONUT (COLORED WITH GREEN FOOD COLORING)
- 1 TSP SPRINKLES (PREFERABLY A MIXED VARIETY WITH THREE COLORS)
- 2 GUMMY WORMS
- SMALL CLEAR CUP
- SPOON

INSTRUCTIONS:
1. LAYER INGREDIENTS IN THE FOLLOWING ORDER TO CREATE AN EDIBLE SOIL MODEL:
   - BUTTERSCOTCH CHIPS REPRESENT BEDROCK.
   - CHOPPED GRAHAM CRACKERS REPRESENTS A LAYER OF PARENT MATERIAL.
   - CHOCOLATE PUDDING REPRESENTS SUBSOIL.
   - CRUSHED OREOS REPRESENTS TOPSOIL.
   - GUMMY WORMS REPRESENT WORMS!
   - GREEN COCONUT REPRESENTS THE GRASS AND MANY PLANTS THAT GROW IN THE SOIL.
   - SPRINKLES REPRESENTS FERTILIZER.
2. LEARN ABOUT THE IMPORTANCE OF EACH LAYER IN SOIL.
3. ENJOY THE YUMMIEST TREAT YOU CREATED, THAT REPRESENTS THE SOIL IN WHICH WE GROW FOOD.