



EDIBLE SOIL

OUTWIT OUTGROW
SEED SURVIVOR
OUTLIVE sponsored by Agrium

activity: grades 1 to 3



EDIBLE SOIL

Time Approximately 30 minutes

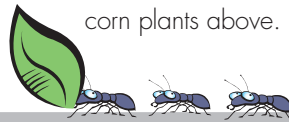
Concept

- Soil profiles or layers
- Function of living and non-living things in the soil

Objective Learn about the needs of plants and animals, small crawling and flying insects and rocks and minerals.

Background Soil has three layers; topsoil, subsoil and parent material. Topsoil is where the plants grow. Wind or water erosion can wash away this valuable layer if it is not protected. In fact, it takes nature over 500 years to replace just one inch of soil. Most nutrients, organisms and roots are in this layer. Subsoil is often where roots and earthworms often live. This layer is found approximately one foot below our feet. Parent material is the bottom layer, located about three feet below the surface. It is more compact and often has rocks and stones in it.

Agrium has a game on its website www.agrium.com in the education centre called the A-Maze-ing Underground. This PacMan™ like game requires students to travel through the soil layers and collect the right balance of nutrients for the corn plants above.



Concept This recipe makes a 'dirt cake' to eat. Students learn about soil layers while they build this cake.

Ingredients

- 1 large package of Oreo cookies, crushed
- 4 tbsp. butter
- 1, 8 oz. package of cream cheese
- 1 c. icing sugar
- 3½ c. milk
- 12 oz. whipped topping
- 2, 3 oz. packages of instant vanilla pudding
- 1 c. gummy worms
- 1 c. chocolate chips
- 1 c. flaked coconut, tinted with green food coloring

Method

1. Line an 8" pan or clay flowerpot with aluminum foil.
2. Cream together the butter, cream cheese and icing sugar until smooth. Put aside.
3. Mix together milk and pudding mixes and whipped topping, stirring until smooth.
4. Combine the cream cheese mixture with the pudding mixture. Mix well. Set aside.

Bottom layer (Parent Material)

1. Begin with a layer of crushed Oreo cookies (1/3). Then mix chocolate chips with half of the creamed mixture and smooth it over the cookies.

Second layer (Subsoil)

2. Add more crushed cookies (1/3). Mix remaining creamed mixture with the gummy worms (save one worm for the top layer!) and smooth over the cookies.

Top layer (Topsoil)

3. Finish with a layer of crushed cookies (remaining 1/3). Sprinkle with green coconut for 'grass' and poke a gummy worm through the top to peek out of your 'soil'.
4. Refrigerate for 1 hour before digging in!

