

Watershed and Envirosnacks

Brief Description

Learn about watershed and envirosnacks while making a tasty treat.

(Note: This activity should be done using an Enviroscape or Watershed model. Many county Extension offices and Soil and Water Conservation District offices have these.)

Objectives:

The student will be able to:

- Discuss the pollution of watersheds
- Construct a topographical map

Sunshine State Standards:

Grades K-2:

SS.B.1.1

Grades 3-5:

SS.B.1.2; SS.B.2.2

Materials Needed:

- Chocolate Graham Crackers – Soil
- White spreadable cake frosting – Adhesive agent
- Chocolate kisses (2 or 3 per student) – Mountains
- Chocolate chips – Hills
- Green sprinkles – Grassland
- Green tree nonpareils (evergreen shape) – Forests
- Tube of blue cake icing (no gel) – Lakes and streams
- Small marshmallows or whipped topping – Clouds/precipitation

Preparation:

- Have all of the ingredients set up and ready to mix.

Background:

Water is important to every living thing. A watershed is the area of land that water flows over or under on its way to a stream, river, lake or ocean. The water in the watershed comes from rain, snow, sleet, ice or irrigation.

Some activities that cause pollution of a watershed are: cars leaking oil and gas, a mountain with no trees, construction sites that contribute silt, oil, etc., factories that contribute to pollution, cows stir up sediment in rivers when they get a drink, fertilizer and pesticides used around houses and on golf courses, sewage treatment plants that are not properly maintained, loose soil, fertilizer and pesticides from farms.

There are some things that we can do to keep pollution out of the clean lakes. We put up fences to keep the cows out of the rivers, maintain our cars, tractors and bulldozers so that they don't leak, plant grass filter strips along the edge of the farms so the loose soil, fertilizer and pesticides get trapped in the grass before they reach water.

Activity:

1. Assemble the envirosnack by spreading white frosting on a full size cracker.
2. Add hills and mountains as desired.
3. Sprinkle with green grassland sugar crystals.
4. Place the evergreen nonpareils to create a forest area.
5. Add blue icing to form mountain waterfalls, rivers, and lakes. (Make sure to use cake icing and not gel.) The instructor may want to control application of the blue icing as it is the most expensive ingredient. (Another choice would be to use blue sugar sprinkles in place of the blue icing.)
6. Add clouds according to personal preference – perhaps surrounding the mountains, creating precipitation that ends up as a mountain stream. (Whipped topping could be used instead of marshmallows, but would require refrigeration.)
7. Now eat your Envirosnack and enjoy!

Extensions:

Paper Pieces
Edible Dirt
Water Cycle Bracelets
Show Your Work

Evaluation:

Have students write or discuss about the interaction of pollutants and watersheds. Also, on the completion of the Envirosnack.