

Name: _____

Date: _____

Life Science

Period: _____

Ecology

chocolate chip mining



purpose: To “mine” a model mineral deposit and attempt to restore the site to its original condition.

materials:

- Chocolate chip cookie
- Toothpick
- Graph paper

procedure:

1. Place a chocolate chip cookie on the graph paper. Using a pencil, trace the shape of the cookie on the graph paper. You will pretend that the chips are mineral deposits and the rest of the cookie is Earth’s crust.
2. Use a toothpick to locate and dig up the mineral deposits. Try to disturb the land as little as possible.
3. When mining is completed, try to restore the land to its original condition. Use your pencil again to trace the shape of your cookie post-mining.

analysis:

1. How well were you able to restore the land?

2. Compare the difficulty of digging for mineral deposits found close to the surface with digging for those found deep in Earth’s crust.

3. Describe environmental changes that might result from a mining operation.
