

Lab Sheet: Cookie Mining

Materials needed	<ul style="list-style-type: none">• plate• toothpick• 2 regular sized sheets of white paper• markers or colored pencils• 1 chocolate chip cookie (hard ones work best)
Hypothesis What do you think will happen?	
Procedure	<ol style="list-style-type: none">1. Fold each sheet of white paper in half. Set one sheet aside for later.2. On the first sheet of paper, sketch and color your cookie on one half of the page.

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Procedure

3. On the other half of the same paper, sketch what the ground would look like before the mine is created. Imagine that the land where the mine is going has been untouched. It is covered in a forest, with plants and animals, etc. Title the first sheet 'Before Mining'.

4. Set the cookie on the plate, and using the toothpick, begin to "mine" for chocolate chips. The chips represent the minerals, and the cookie is the dirt. Try to keep the chocolate chips whole, and don't lose any of the "dirt."

5. On the second sheet of paper, sketch and color what your cookie looks like now. Be sure to include the "minerals" in your sketch.

6. On the other half of the second sheet, imagine what the untouched forest looks like now. Draw what the land might look like now that the mine has been excavated for minerals using large machines.

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Observations *Remember, observations can be recorded with pictures, numbers, and/or words!	
Conclusions	
Questions	Questions to consider: <ul style="list-style-type: none">• What type of plants and animals may have lived in the ecosystem before the mine was established?• How might the ecosystem have changed now that the mine is established?• Are the chocolate chips a renewable resource? Will they grow back?• How might mining for minerals affect the environment? Record your responses in a method of your choice.