

Mining for Chocolate Chips Lab

November 14, 2014

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Materials

- Lab Sheet
 - Everyone gets a lab sheet
- Testing Station
 - Everyone gets a paper towel
- Weigh Paper
 - Everyone gets a coffee filter



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Materials

- Mining Tools
 - Everyone gets 2 toothpicks
- Land
 - Everyone has 2 mining sites
 - Everyone gets 2 cookies



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Procedure:

- You must use only mining tools (toothpicks) to extract the ore (chocolate) from the land (cookie)—not your hands!
- Cookie 1: Break up the cookie as much as you want with the toothpicks in order to extract as much chocolate as possible.
- Cookie 2: Remove as much chocolate as possible, but damage the cookie as little as possible. Make few to no crumbs.
- Use the coffee filter to carry your materials to the scale to be weighed
- Do not eat your cookies until Part 5
- If you finish with extra time in the period, work on the challenge problem for extra credit.
- Turn in your lab sheet at the end of class for a classwork grade

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Challenge Problem (Extra Credit)

- Ask Mrs. Feldmann for a blank sheet of paper to complete the following challenge problem. Attach the problem to your lab for extra credit.

Mining has several expenses... buying the land, equipment, paying workers, plans for reclamation, etc. Make a detailed budget for your mining corporation of chocolate chips accounting for all of your expenses and materials used today. How much chocolate (at \$10 per gram) will you need to mine in order to make \$100,000 for cookie #1? For cookie #2?

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