

## EnSci 35.1

Goals: Compare and contrast different mining methods, predict the environmental impacts of each type.

Plan:

- Imagine you had a cream cookie (like an oreo cookie) that was the size of your entire neighborhood and over 1000 feet tall.
  - Describe at least three methods to harvest the valuable element “creamium” from the cookie, leaving behind the cookies
  - Which will be most difficult/problematic? Keep in mind the following:
    - Safety of the workers
    - Cost/efficiency
    - Environmental impact
- Relate methods to real-world methods of mining (open pit, mountaintop removal, open seam, shaft mining)

HW: Determine which method is most environmentally friendly. Which would be safest for the workers?

## EnSci 35.2

Goals: Identify sources of pollution from mining, how we can restore the land after operations cease

Bellwork: Imagine someone allowed you to use their house for a big party. They won't be there, but they will return next week after going on a trip. What will be your responsibilities before, during and after the party?

Plan:

Discussion: reclamation and restoration

- Why are there laws for this?
- Who would enforce them?
- Why might mining companies fight these regulations?

Runoff and contamination: how do we mitigate the effects?

Homework: mining video (see website)