Lignite Energy Council’s
Cookie Mining Activity

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Let’s learn about mining

- What is lignite
- North Dakota lignite mines produce about 30 million tons of lignite yearly
- How many mines in North Dakota
- How many power plants
- What’s reclamation
Objective

- A simple mining exercise about mining, reclamation and economics
- Learn about income, expenses and profits
- You make decisions that will ultimately lead to your success or failure in the Chocolate Chip Mining Industry
Here’s Your Mine
Expenses

- Cookies
  - Chocolate Chip cookie - $6

- Mining Equipment
  - Round toothpick - $1
  - Paper clip - $3

- How many toothpicks and paper clips will you need?
  - Broken equipment must be replaced
Time Costs

- The average miner in ND makes $70,000 to $80,000 annually so time is money
- At the cookie mine, each minute costs $2
- You will have five minutes at a cost of $10 to complete the mining activity
Reclamation Costs

- In North Dakota, mined land must be reclaimed to a state that is as good or better than before mining.
- It really does “pay” to be neat…. Before completing mining, all “cookie waste” on the paper needs to be returned to the cookie or a reclamation penalty of $1 per grid square will be assessed.
How about Income?

- By using the mining equipment, carefully extract as many chocolate chips as you can – each chip is worth $2 (broken chips can be combined to make one chip)

- No fingers allowed to touch the “coal” but you can hold the cookie down with your hand
Any Questions?
Okay….BEGIN…. 
Tally Sheet - Expenses

- Cookie: $6.00
- Time – 5 minutes: $10.00
- Mining equipment:
  - Round Toothpick: $1.00
  - Paper Clip: $3.00
- Reclamation waste:
  - Per square: $1.00
Tally Sheet - Income

- Chocolate Chips $2.00 apiece
  - Broken chips can be combined to make one whole chip
Profit or Loss

- By subtracting the expenses from the income, you can determine your profit or loss
What did you discover?

- Who broke “mining tools”?
- Did it get harder to “mine” the chocolate chips as the time went on? Why?
- Was five minutes the correct length of time?
- Who took a “penalty” for cookie waste?
- Who made a profit?
Questions?