## Cookie Mining Activity

North Dakota Lignite Geology, Mining and Reclamation

Mine Name: $\qquad$
Group Member Names: $\qquad$

## Cookie Mining Rules

1. You can hold the cookie in place with a hand while mining.
2. You can break the cookie up and move chocolate chips only with the mining equipment.
3. A group can only mine one cookie at a time.
4. Multiple group members can work on mining the same cookie.
5. Large chocolate chunks are worth $\$ 2$ each and small chocolate chips are worth $\$ 1$ each.
6. Broken chocolate chip pieces may be combined to make a whole chip.
7. Broken equipment MUST be replaced.
8. Your teacher can fine you for cookie crumbs found outside your mining area.
9. Each minute of mining costs the company $\$ 1$ in employee salaries. If you mine for 10 minutes, the mine will pay salaries of $\$ 10$.
10. Your group can spend up to 15 minutes mining.

## Expenses

## Equipment and Land Expenses

|  | Quantity | Price | Total Price <br> (Quantity $x$ Price) |
| :---: | :---: | :---: | :---: |
| Flat Toothpick |  | $\$ 1$ each |  |
| Round Toothpick |  | $\$ 2$ each |  |
| Paperclip |  | $\$ 3$ each |  |
| Store Brand Cookie |  | $\$ 1$ each |  |
| Regular Cookie |  | $\$ 2$ each |  |
| Deluxe Cookie |  |  | Box $A$ (add boxes above together) |
| Grand Total |  |  |  |

Salary Expenses

| Minutes to Complete Mining |  |
| :---: | :---: |
| Salary | \$l per minute |
| Total Salary Expense | Box B (multiply boxes above together) |

## Additional Expenses

| Fine Amounts |  |
| :---: | :---: |
| Equipment Replacement |  |
| Total Additional Expenses | Box C (add boxes above together) |

## Income

|  | Number of Chips Mined | Sale Price | Total Price <br> (Number Mined x Price) |
| :---: | :---: | :---: | :---: |
| Regular Chips |  | $\$ 1$ each |  |
| Deluxe Chips |  | $\$ 2$ each |  |
| Grand Total |  |  | BoxD (add boxes above together) |

## Profit

| Total Income (Box D) |  |
| :---: | :---: |
| Total Expenses (Box $A+$ Box $B+$ Box C) |  |
| Profit | Box E (subtract expenses from income) |

## Questions

1. Did your mine make a profit?
2. If you did this activity again, how could you make your mine more profitable?
