

Names: _____

Engineering Team Name: _____

Tunnel Engineering Design Worksheet



Tunneling Process: Describe the process you will use to create a tunnel through your clay mountain. What tools will you use?

Tunnel Design: Sketch your design in the box below for construction approval. Remember to label dimensions and materials used for reinforcement.

Materials List: List the materials your engineering team needs for its tunnel process and final design.

Analysis:

1. How effective was your process for tunneling through the mountain? What properties of the materials and tools that you used to dig were helpful or not helpful?
2. Was your tunnel insulated from the weather? (Did it leak?) Why or why not?
3. How much weight could your tunnel hold? Would your tunnel collapse if your mountain was covered in heavy snow, increased growth of plant life or added structures?
4. Did the development of your tunnel change the structure of the mountain? Describe.
5. What did you do with the extra clay that you dug out when tunneling through your mountain? What impacts do you think this had on the surrounding environment?

