

## Experiment Group Report

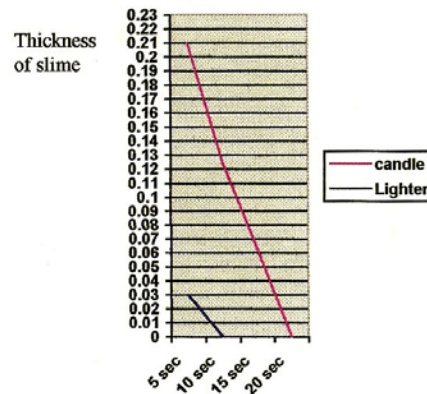
Hypothesis: That the slime will have to be very thick to put out the flame.

### Directions:

- Step 1: Get a butane lighter.
- Step 2: Make slime  $1/64^{\text{th}}$  inch thin.
- Step 3: Time how long it takes to burn through the slime, repeat twice.
- Step 4: Repeat steps one through 3 with candle mentioned.
- Step 5: Make slime  $1/4^{\text{th}}$  inch thick.
- Step 6: Time how long it takes the slime to put out a lighter, repeat twice.
- Step 7: Repeat steps 5 and 6 with candle mentioned.

### Data:

- It takes 20 seconds for a lighter to put a hole in the  $1/64^{\text{th}}$  inch thin slime.
- It takes 19 seconds for the  $1/4^{\text{th}}$  inch thick slime to put out a lighter.
- It takes 10 seconds for the  $1/4^{\text{th}}$  inch thick slime to put out a lighter.
- The candle will not burn through the slime.
- The candle's mass is 9 grams, its volume is 10 milliliters, and its density is .9 grams per milliliter.
- The candle's flame was 1.08 cm cubed.
- The candle's diameter was 38.1 millimeters, its height was 15.88 millimeters, the wick was 6.35 millimeters tall, and 1.59 millimeters wide.
- The slime can put out a fire 75 times its height.



Conclusion: My hypothesis was not correct, because the slime could be extremely thin and still put out a flame.