**Gobstopper Lab Activity**

**Observations**: Observe one gobstopper with detail. Use all five senses!! Draw and describe below.

**Conduct your first set of tests!**

**Data set #1 Temperature of water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Color** | **Time** | **Observations** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Repeat Data set #1**

**Temperature of water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Color** | **Time** | **Observations** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Is your data iterative (repeatable)? Explain

Do you think a change in temperature would change the **RATE** of change? Explain

What problems did you run into while running these experiments?

**Test #2**: Today you will manipulate **one** variable. Fill in the following table. Identify as many controlled variables as possible.

|  |  |  |
| --- | --- | --- |
| **Test Variable(s)** | **Outcome Variable (s)** | **Controlled Variables** |
|  |  |  |

**Data set #2 Temperature of water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Color** | **Time** | **Observations** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Repeat Data set #2 Temperature of water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Color** | **Time** | **Observations** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Is your data iterative (involving repetition)? Explain

**Analyze**: What did you notice about this test?

Compare your results to your first test. What was your test variable (independent variable) and how did that change your results? WHY?

Picture of the lab:

What did you learn about variables from this lab?

Why is the independent variable also called the test variable?

Why is the dependent variable also called the outcome variable?

What does ***repetition*** (multiple trials) mean in regards to an experiment?

What does ***replication*** (by others) mean in regards to an experiment?