

Your name

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Biology Period 1

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## Mustard Seed Germination in Sunlight versus Darkness

### 2. Purpose:

The purpose of this experiment was to see if mustard seeds would germinate better with sunlight than in darkness.

### 3. Hypothesis:

If we put mustard seeds in the sunlight versus the darkness, then the seeds will germinate better in sunlight because they will be able to do photosynthesis.

### 4. Materials:

Mustard seeds

Water

Plastic baggie

Graduated cylinder

### 5. Procedures:

- Place 10 mustard seeds into each baggie.
- Add 10 mL of water to each baggie.
- Place one baggie in the sunlight, the other in darkness.

### 6. Data:

See attached data table.

### 7. Results:

See attached graph.

#### 8. Conclusion:

The purpose of this lab was to see if mustard seeds would germinate better in sunlight than in darkness. My hypothesis was that they would germinate better in sunlight. My hypothesis was not supported.

We grew mustard seeds in plastic baggies with sunlight and in darkness. The control was the mustard seeds in darkness, the independent variable was the seed in sunlight, and the dependent variable was the germination of the seeds. I learned that mustard seeds germinate better in darkness than in sunlight because, 8 mustard seeds germinated in darkness, while 4 germinated with sunlight.

One hidden variable was that the lights in the room were not always on. Another hidden variable was that the temperature in the room was not constant. These variables could affect how well the mustard seeds germinated.