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Period 2

Mr. Hamilton

Sponge Capsule Lab Report

Question: Does the type of water, tap water or acidic water, affect the rate of growth?

Hypothesis: If the sponge capsule is in acidic water, then the acid in the water will dissolve the capsule faster than the tap water.

Materials: 3 sponge capsules, 3 Dixie cups, 60 mL of tap water, 60 mL of vinegar, and a stop watch

* 6 sponge capsules
* 3 Dixie cups
* 60 mL of water
* 60 mL of vinegar
* Stop watch

Procedure:

1. Collect all the materials from the materials list
2. Pour 60 mL of water in the three Dixie Cup
3. Place one sponge capsule in each of the three Dixie cups
4. Start the stop watch to record the time it takes for the sponge to reach its full size. Take the time readings for when each of the sponges reach their full size.
5. Pour the water out of the Dixie cups and repeat steps 2-4 using vinegar instead of tap water

Independent Variable: type of liquid used (tap water vs. acidic water)

Dependent Variable: time it took for the sponge to reach full size

Controlled Variable: Using the same procedure, using the same cups, using the same colored capsule

Safety Concerns: A possible safety concern in this experiment is the possibility of spilling the liquids used. If a person would spills the tap water or the vinegar, one must clean it up appropriately and notify the teacher and the students around the spill of the accident. Finally another concern of this experiment is ingestions. One must not in

Data/Observations:

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| --- | --- | --- | --- |
| Tap or Acidic Water | Trial 1 | Trial 2 | Trial 3 |
| Tap | 23 minutes | 21 minutes | 22 minutes |
| Acidic | 13 minutes | 11 minutes | 15 minutes  |