



Ready, set, GROW!

Cormac Hughes and Lillian Rodenheizer

Ms. Nugent

Grade 6

Nathan Bishop

How Do Different Temperatures of Water Affect Plant Growth?



Why did we choose this question?

We wanted to investigate this question because it was something we had on our minds, and it would be helpful to find out. Once we had our answer, it would be easier to grow plants that would be healthier, taller, or bigger.





Predictions

We predicted that the room temperature water would help the plants grow the best, because that is what people usually use to water their garden.

Methods of Data Collection

We were observing mint plants, and when they sprouted, and how much they grew.

We made our observations around midday.

We made our observations twice every week, normally on Tuesdays and Fridays.

We measured the height of the plants (from the soil) in inches.

Results

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Hot	(has not sprouted)	(has not sprouted)	(has not sprouted)	½ inch	1 inch	2 ½ inch	3 ⅓ inch	4 ¾ inch	5 inch
Room Temp.	(has not sprouted)	(has not sprouted)	(has not sprouted)	¼ inch	⅔ inch	1 ⅔ inch	2 ½ inch	3 ⅔ inch	4 ¼ inch
Cold	(has not sprouted)	(has not sprouted)	(has not sprouted)	(has not sprouted)	¼ inch	½ inch	1 ¾ inch	2 ½ inch	3 ¾ inch

One pattern that we noticed was between weeks 5 and 7, the height of the plants spiked very high. We also noticed that during the beginning, the plants grew very slowly, but over time, they found a steadier pace after spiking in the middle.



Conclusions and Future Work

The question that we investigated was “How do different temperatures of water affect plant growth?”

Our conclusion is that the hot water worked the best on the plants, since the plant grown with hot water grew to be the tallest in the shortest amount of time.

The evidence from our results is that the chart shows how much the plant grew each week. It was also the first to sprout, and had the biggest spike in growth.

Some things we could do to improve our investigation would be to

- Test more plants.
- Test them in warmer weather so they could grow outside with more natural light.
- Test the plants more frequently.
- Test other types of plants to see the differences.

A question I have about this topic is “How can we make plants grow faster than they normally would in the wild?”

<https://youtu.be/THwAS9oKKs0>