Growing Mushrooms

Purpose

- Our project is being done so that we can learn about responsibility and how we are supposed to take care of nature.
- We are doing this so that we can learn how to work with outdoors.
- The result of this is that if the mushrooms grew successfully then we know that we did good, and we are responsible for taking care our mushrooms.

Customers

- The project is for people that ever want to grow mushrooms, and this is a project that will help people find ways to grow mushrooms indoor.
- It will benefit any people who live in harsh environments find ways to grow food indoor all year long.
- There was a other groups that also grew mushrooms, so we also spent time talking to them and seeing how their mushrooms are doing and to get more ideas.

Desired end result

- What made our project a successful is that we were focusing on our mushrooms health. and they in return that we with our mushrooms they grew healthy because we took care of them.
- Our goals were for our mushrooms to hit their max which is ten inches.

Measures of Success

- We will be finished when we know we tried everything to accomplish our goal or when we did reach our goal.
- We can be measured by our teacher or people who really know about mushrooms.
- We can measure our success when we are happy with our results or we reached our goal.

Introduction

- Our research question is how moist should the soil be for our mushrooms.
- From an article called “Review Scout” we got a lot of information telling us what is bad for our mushrooms and what is good for them, we also got a lot of information about what we should do when there is mold.
- We consistently took out mold everyday, we had to do this because mold steals the mushrooms food and if we don't remove it they will die.
- The mold is cause by the the moist and warmth of our mushrooms habitat.

Our Problem

- Our question is how long would it take our mushrooms to grow to their max (which is ten) inches in three weeks.
- Our hypothesis is our mushrooms will hit at least five inches.
- The problem for our project is that there was a lot of mold that we had to take out, and if the soil was too wet the mushrooms would die, and if the soil was too dry they could also die.

How we set up our mushroom tank

- Got the soil ready
- Put the soil in a tank
- Planted the mushrooms
- Taped a fan
- Taped lights
- Made a plastic sheet out of plastic bags
- Added nutrients
- Added a hygrometer

- Took out mold
- Collected data
- Filled up our spray bottle
- Watered our mushrooms

Data Chart: How many minutes we worked on our mushrooms each day

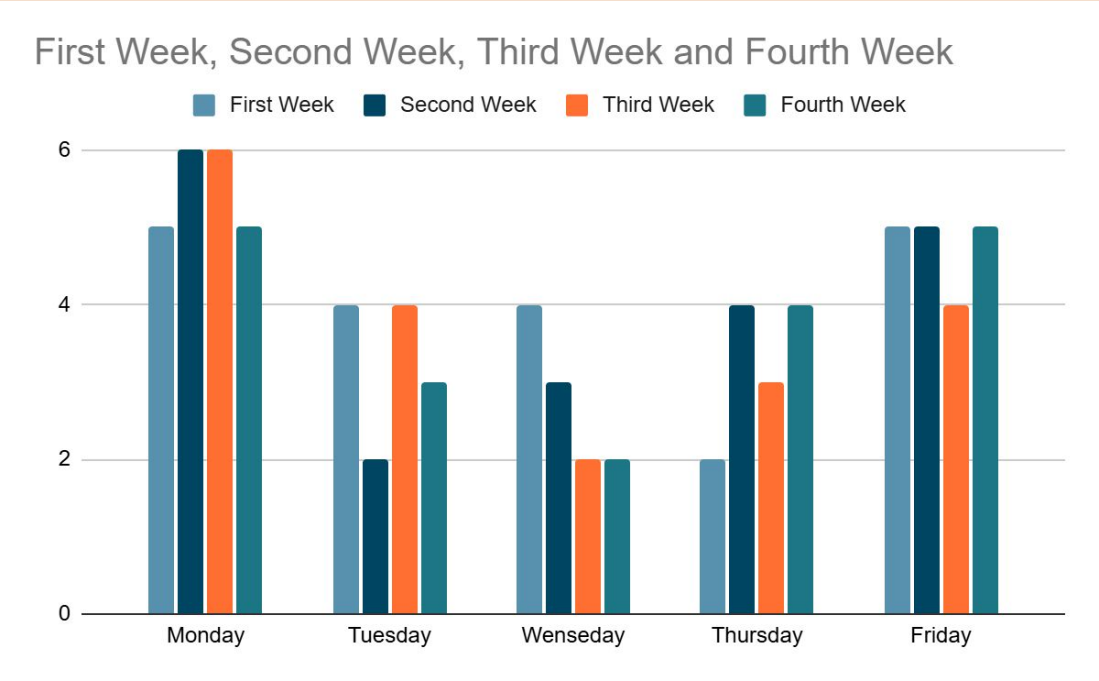
Monday	18	25	25	20
Tuesday	44	12	10	15
Wednesday	45	48	45	40
Thursday	25	25	28	23
Friday	25	20	15	25

Data Chart: How much we watered them each day

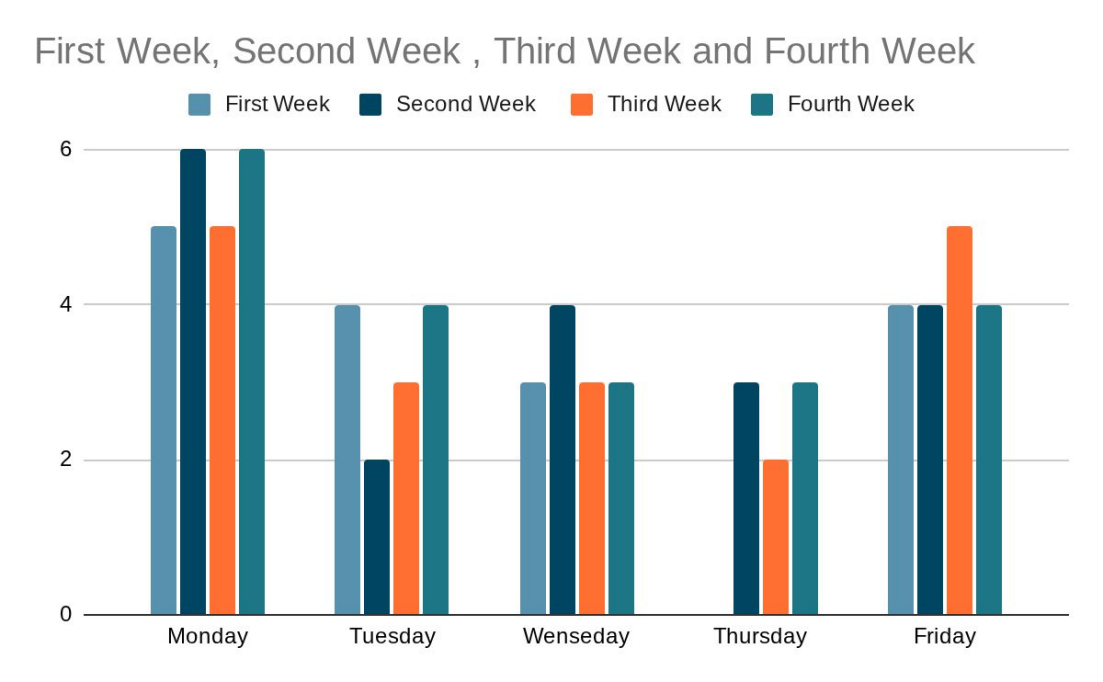
	First Week	Second Week	Third Week	Fourth Week
Monday	3	4	4	3
Wednesday	3	3	4	4
Thursday	3	3	3	2
Friday	3	2	3	3

Data Chart: How much mold we took out each day

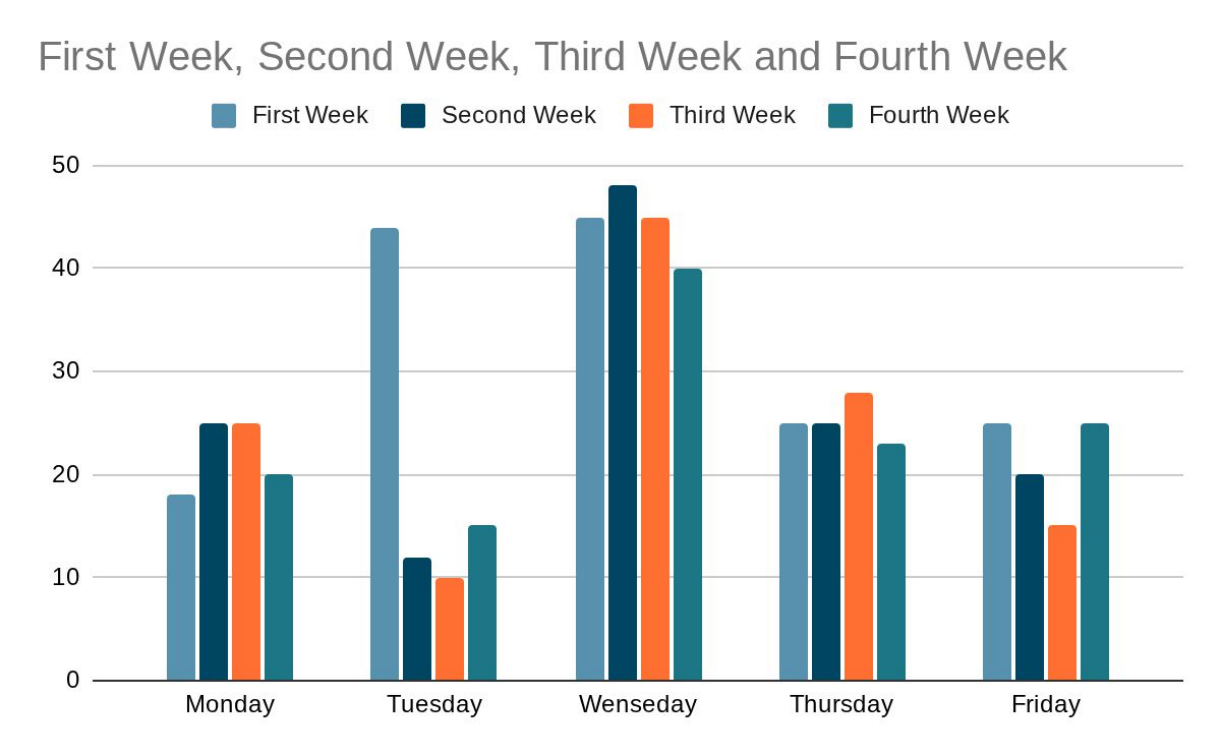
	First Week	Second Week	Third Week	Fourth Week
Monday	5	6	5	6
Tuesday	4	2	3	4
Wednesday	3	4	3	3
Thursday	0	3	2	3
Friday	4	4	5	4



- In this data graph you see how much time we worke on our mushroom each day for four weeks



- This graph shows how much mold we took out each day for four weeks.



- In this data set you can see how much we watered our mushrooms for four weeks.

Captions:

- This is the bag that we add on top of our mushrooms so it is more humid.

Capitons:

- This is our mushroom habitat that is all ready and all the mushrooms are planted.

Capitons:

- This is our higrometer that helps us see the humidity.

Discussion and Interpretation

- Limiting: Some things that were limiting were our supplies, like my partner and I would've like material like gloves, plastic sheet, tweezers, and much more.
- Uncontrollable: Something that was uncontrollable was the mold our mushrooms were growing, like in one of our graphs you can see how much mold we took out each day for four weeks.
- Data: We also took a lot of data on what we did with our mushrooms and how much they grew each day.
- Results:Our results didn’t reached our goal, but our mushrooms did grow about five inches.

Conclusion and Evaluation

- We did reached our goal, and even though we didn't have a lot of materials to work with we got really creative and took care of our mushrooms.
- What was effective to our mushrooms was the light and nutrients because our mushrooms grew a lot, and what was successful was that our mushrooms didn't die and grew at least five inches which was our goal.
- We know it was effective and successful because we reached our goal and none of our mushrooms died.
- From our background information we found out how to take care of the mold from our mushrooms and it helped a lot because none of mushrooms died.

Implications for Future Research

- Our project is important because it helps us study the materials that are best to grow mushrooms, and it also helps us learn what affects mushrooms and what you can do to fix it, we also wanted to help people find ways to grow food indoor.
- What we found interesting about our project is how some things affected the mushrooms growth, and how some materials helped them grow a lot.
- Some of our future ideas are to see how our mushrooms would react if they had different humidity each day, and how would they react if we changed the amount of water we watered them each day.
- We would change our data to have more specific details about mushrooms, we think this would help us be more successful because we could know what problems to fix instead of just looking at the mushrooms to see if there is mold.

References

- https://pmc.ncbi.nlm.nih.gov/articles/PMC11719500/
- https://www.reviewscout.org/top-5-mushroom
- Home - MycoCats | University of Arizona
- Mushrooms.pdf
- Wild About Mushrooms: Oyster Mushroom