

Activity Overview:

The activity will give the students an understanding of the effect salinity has on the environment. During this activity, students will be divided into groups to experiment the effects salt has in the growth of plants. Through the experiment, the students will be able to understand the hazardous effects road salt has on the environment and learn the importance of using an alternative to road salts, such as beetroot deicer. There are no set answers for the conclusion questions.

Duration:

13 days – 3 days of preparation for plants to grow + 10 days of observation (once two days)

Materials:

Material	Quantity (per group)
2L bottle	6
Scissors	1
Soil	Enough to fill the bottle
Fast plant seeds	1 bag
Salt	1 bag
Tea spoon	1
Beaker for measuring 100mL	6

Instructions:

1. Using scissors, cut all 2L bottles into half.
2. Place soil into all of the previously cut bottles and plant 30 fast plant seeds into each of the bottles.
3. Wet the soil with equal amount of water and allow the plants to grow for 3 days before proceeding.
4. Label the first bottle "control" and number the rest of the bottles from 1 to 5.
5. Label the first beaker "control" and number the rest of the beakers from 1 to 5.
6. Pour 100mL of distilled water into all 6 beakers.
7. Add 1 tea spoon of salt into the beaker number "1".
Add 2 tea spoons of salt into the beaker number "2".
Add 3 tea spoons of salt into the beaker number "3".
Add 4 tea spoons of salt into the beaker number "4".
Add 5 tea spoons of salt into the beaker number "5".
8. Pour the water in each beaker into the corresponding bottles.
9. Record plant growth and measure the height of the plants.
10. Repeat the steps 6 to 9 every 2 days for the next 10 days.

Observations:

Day 2

Plant Number	Observation	Height
Control		
1		
2		
3		
4		
5		

Day 4

Plant Number	Observation	Height
Control		
1		
2		
3		
4		
5		

Day 6

Plant Number	Observation	Height
Control		
1		
2		
3		

4		
5		

Day 8

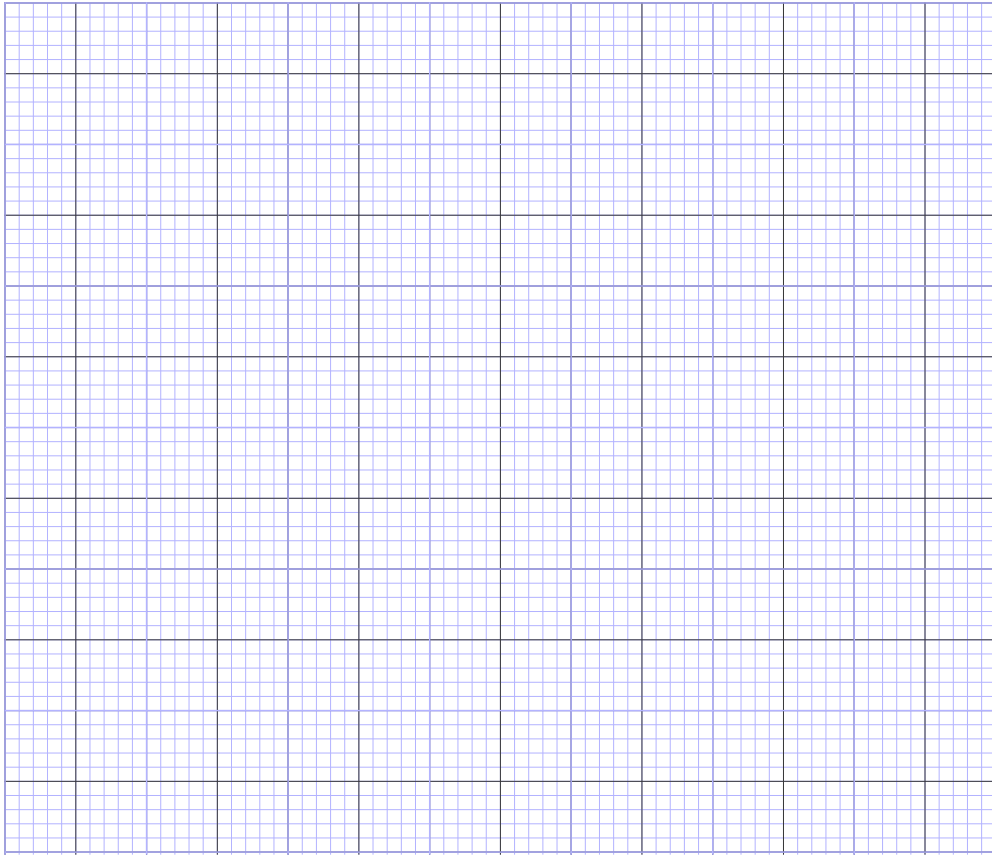
Plant Number	Observation	Height
Control		
1		
2		
3		
4		
5		

Day 10

Plant Number	Observation	Height
Control		
1		
2		
3		
4		
5		

Data Analysis:

Using the results obtained above, plot a graph of the tea spoon number of salt against the height of the plants.

**Conclusion Questions:**

1. What happened to the plants?

2. What effects did salt have on the plants?

3. What can be done for the experiment to be better next time?
