

BIOLOGY LAB

Lab: Salt Tolerance of Seeds

Names: _____

Problem: How will salt affect seed germination?

Hypothesis:

Experiment:

Materials:

Self-sealing plastic bags	paper toweling
Small cups	marking pen
Water	salt
Small seeds (radish works well)	

Procedure:

1. Soak 20 seeds in cups of freshwater and 20 seeds in cups of salt water overnight.
2. Remove 20 seeds from the cup labeled **water**. Wrap the seeds in a paper towel. Moisten the towel with water and slide it into a self-sealing plastic bag. Label the bag with your **group number, block letter**, and the word **water**.
3. Repeat step 2 for the seeds in salt water. Moisten the towel with water and label the bag with your **group number, block letter**, and the word **salt**.
4. After 2 days, record the number of seeds that germinate in the data table. Germinating seeds show a root growing from the seeds.

Data:

	Number of Seeds Germinating
In Water	
In Salt Water	

Conclusions:

1. Did the germination rates differ between treatments? If yes, how?
2. What abiotic factor was tested in this experiment? What biotic factor was influenced?
3. Might all seeds respond to salt in a similar manner? How could you find out?