

SEED GERMINATION LAB /29

NAME _____

Pollution that gets into our water supply has a negative effect on plants. Pollutants come from many sources. **Soap** that washes down our drains contains phosphates, which is a pollutant in our water. **Acid** enters our water supply when acid rain forms from factory smoke and car exhaust. Farmers spray pesticides, herbicides, and **fertilizers** on crops which can leach into the water supply. **Salt** put on the roads in the winter can wash off into ditches and get into the water supply.

SCIENTIFIC QUESTION:

How does pollution affect the germination of a radish seed?

HYPOTHESIS: (What is your guess?) I think _____

PROCEDURE/EXPERIMENT: (5pts)

Design and carry out an experiment to determine which substance will cause a radish seed to germinate more successfully. Write out your steps below. You may or may not need all 5 steps below. Add any if needed on the backside.

- 1 _____
- 2 _____
- 3 _____
- 4 _____
- 5 _____

RESULTS/ DATA: Make a data table for your experiment. (5pts)

ARGUMENT: Make a claim about what you have found. Which substance will cause a radish seed to germinate most successfully? Create a statement of truth that is supported by **evidence** you found in this lab. (2pts)

1. What part of the experiment served as the control?
2. What was the independent variable?
3. What was the dependent variable?
4. What were the controlled variables in this experiment? Name at least 3

1

2

3

5. What was the sample size for this experiment?
6. Do you think the amount of the pollutant makes any difference?
7. Design an experiment that you could do that would test the AMOUNT of a particular pollutant.

1

2

3

4

5

8. What parts of this experiment may have contained experimental error? What are the problems may have possibly gone wrong with our experiment? Name at least 3

1

2

3
