Name:

Teacher:

Class:

Date:

The Effect of _____ on _____

(Independent variable) (Dependent variable)

Introduction

The experiment conducted was to _____

_____

The purpose of the experiment was to _____

_____

_____ was changed and _____

_____

was measured to see if the changes made a difference.

The prediction was if _____ seeds are given _____ milliliters of water, then _____ seeds will germinate, because _____.

Three reasons to support this prediction include, _____, and _____ and finally, _____.

Materials:

-
-
-
-
-
-
-
-
-
-
-
-
-
-

Procedures:

1. Put a piece of tape on the lid of the petri dish and write your name on the tape.
2. Trace petri dish bottom on quartered paper towel and cut out the tracing.
3. Place tracing in bottom of petri dish and draw a large + sign on the paper towel.
4. Label each quadrant with the type of seed that will be in it: 'bean', 'pea', 'radish', and 'lettuce'. Place two seeds of each type in the appropriate quadrant.

_____

_____

_____

_____

_____

_____

_____

_____

Results:

Germination Lab Tables

Germination Lab Results*

Amount of Water Used	Type of Seeds	Number of Seeds	Number that Germinated	Percent that Germinated	To Germinate, seeds need
Period ___ average water usage and average number of seeds that germinated was	Beans				
	Peas				
	Radish				
	Lettuce				
____ ml. and ____ seeds	**TOTAL**				

* These results represent the entire Period ____ class.

The Effect of Average Water Usage on Average # of Seeds Germinated

Average Water Usage per Class	P_ ___ ml used	P_ ___ ml used	P_ ____ ml used	P_ ___ ml used	___ Team ___ ml used
Average # of Seeds Germinated per Class					
% Seeds Germinated					

On average, _ seeds germinated for Period _, having used __ milliliters of water.
Period _ had the highest germination percentage rate of __ %.

Germination Lab Graph

The Effect of Water Amount on Seed Germination

Discussion:

Claim-

The purpose of the experiment was to _____

_____

The prediction was if _____ seeds are given _____ milliliters of water, then _____

seeds will germinate, because _____.

Evidence-

The independent variable was _____ and the dependent variable was _____. The results _____ support the prediction because _____

_____

_____.

For Science, Period ____, on average _____ milliliters of water was added, and _____ seeds germinated. For Science, Period ____, on average _____ milliliters of water was added, and _____ seeds germinated. For Science, Period ____, on average _____ milliliters of water was added, and _____ seeds germinated. For Science, Period ____, on average _____ milliliters of water was added, and _____ seeds germinated. For the _____ Team, on average _____ milliliters of water was added, and _____ seeds germinated.

Reasoning-

Having used _____ milliliters of water, Period _____ had the best average germination rate with _____ seeds germinating. Period _____ had _____ % of all seeds germinate.

_____.

_____.

_____.

The results were reliable, because _____

_____

_____

_____.

In conclusion, the right amount of water to germinate _____ seeds in six school days is _____ milliliters, because that is what happened in this experiment. The new prediction is if eight

seeds are given _____ ml of water, then _____ seeds will germinate, because seeds need water to germinate.

An unexpected result was that _____

_____

_____

The unexpected results may have happened because _____

_____

_____

_____

_____.

Applications:

This procedure could be used to test a variety of variables on the germination rate of seeds. For example, scientists could use _____,

_____,

or _____

in the attempt to germinate seeds. Farmers could also use this information for the further investigation of _____.

From this experiment it can be learned that seeds will germinate with the right amount of water, Period _____, showed that on average _____ milliliters of water would germinate _____ seeds on average. The results of this experiment could also be applied to _____,

_____

_____.