Name _____ Date_____

Radish Plant Experiment with Household Chemicals

Title: The effect of _____ on the germination and growth of radish seeds in the laboratory.

Purpose: This laboratory will test the effects of various household chemicals on the germination and growth of radish seeds in the laboratory.

Experimental variable to be tested: _____

Hypothesis: If we add _____ to radish seeds it will have an adverse/enhanced effect on the germination and growth of the radish seeds.

Materials List: (make sure this list is complete and very specific.)

Procedure: (Temperature each day should be recorded.) **When writing this be very complete.** Include everything we did to set up the experiment. Remember that everything will be exactly the same for the experimental and variable group. These factors are considered the controlled variables. The one variable we will be testing will be the experimental variable. Write this section so that it could be repeated exactly by another group at another time. Remember that we must be able to repeat an experiment and get the results over and over again before we can truly accept a hypothesis as valid. You will be working with another lab group setting up either the control or the experimental group and will be using data from the other lab group.

Data Chart for Radish Experiment:

Date	Temp ^{o}C	Height of tallest plants in mm	Average ht. mm

Make a graph.

Graph title _____

X axis title _____

Y axis title _____

Results: Explain in a written results section what your results are.

Discussion and Conclusion: Explain about the information you used to derive your hypothesis by your review of literature. What sources will you be able to cite in your bibliography section and paraphrase here? Make sure to research the effects and find literature to help you devise an educated hypothesis that is testable. After you explain why you came up with the hypothesis you did, then either accept or reject your hypothesis using your results for support.

Bibliography: MLA format for the sources you used.

What could be improved in your experiment?

What question emerged?

Lab # _____ Name _____

Purpose	
Title	
Discussion All background knowledge that you find out first. Review literature already in print	
Vocabulary	

Hypothesis **Make sure it is an if/then statement**	
Materials **List every thing we used and be specific. Remember that a scientist may need to repeat the experiment.**	
Procedure **Again, include everything.**	

Results	
Conclusion	
Peer review	
Publish results	

Teatment	Date	Temperature	Height of plants (in milimeters)	Average
Control	5.7.12	23	0	0mm
Cetaphil	Day 1		0	0mm
Control	5.11.12	22	22, 10, 15, 17, 19, 10, 16, 13, 18, 16, 0, 0, 0, 0, 0, 0, 0, 0, 0	7mm
Cetaphil	Day 5		0	0mm
Control	5.14.12	23	62, 60, 54, 50, 57, 43, 35, 30, 44, 40, 50, 45, 55, 45, 40, 43, 43, 43, 40, 45	46.2mm
Cetaphil	Day 8		42, 14, 35, 39, 50, 30, 35, 22, 18, 25, 22, 30, 32, 20, 24, 19, 40, 23, 25, 20, 21, 19, 0, 0	25.0mm
Control	5.16.12	25	80, 70, 78, 70, 65, 73, 65, 84, 65, 71, 60, 70, 69, 75, 69, 75, 65, 82, 79, 76	72.05mm
Cetaphil	Day 10		36, 30, 64, 45, 63, 55, 50, 49, 70, 57, 34, 54, 55, 60, 66, 62, 41, 40, 60, 42, 0, 0, 50, 45	44.9mm
Control	5.18.12	24	85, 89, 86, 82, 83, 81, 84, 88, 82, 90, 79, 72, 84, 85, 88, 91, 82, 78, 84, 85	83.6mm
Cetaphil	Day 12		50, 53, 62, 70, 79, 77, 57, 75, 54, 54, 72, 64, 61, 65, 60, 64, 68, 85, 78, 59, 72, 56, 0, 0	59.6mm
Control	5.21.12	23	75, 78, 84, 90, 94, 86, 88, 63, 63, 105, 82, 95, 85, 95, 90, 82, 100, 102, 110, 99	85.15mm
Cetaphil	Day 15		64, 56, 87, 67, 98, 74, 70, 70, 80, 69, 82, 60, 60, 50, 82, 81, 87, 101, 85, 74, 70, 87, 0, 0	68.92mm

Example of AP Student Data