



Miracle Grow and Plant Height Graphing Assignment

Name _____ hr ____/13

A researcher conducted the following study about plant growth and the use of Miracle Grow. She created several different concentrations of Miracle Grow dissolved in one Liter of water. The strongest concentration was 20 grams of Miracle Grow per Liter, and the weakest concentration was 2 grams. Use the following chart to graph her data, then write a conclusion based on her results.
INDEPENDENT VARIABLE—the variable being changed/manipulated (the cause)
DEPENDENT VARIABLE—the final result that you measure in the experiment (the effect)
CONTROLLED VARIABLE—variables that you keep the same to make it a “fair test”

Miracle grow per Liter->	2 g/L	4g/L	6g/L	10g/L	12g/L	16g/L	20g/L
Plant height in cm ->	8.2 cm	8.4 cm	9.6 cm	10 cm	8.5 cm	4 cm	3 cm

1) List *at least* three other variables that had to be “controlled for” in this experiment.

2) What is the dependent variable in this experiment? _____

3) What is the independent variable in this experiment? _____

4) Create a line graph on a separate sheet of graph paper.

5) Using your graph, estimate plant growth for 14 g. _____

6) Using your graph, estimate plant growth for 18 g. _____

7) What was the scientific question the researcher was trying to answer?(2pts)

8) Conclusion: (argument with evidence) (2pts)

