

Date _____ Period _____ Name _____
Physical Science Quiz Scientific Method (30 pts)

MATCHING: Place the printed CAPITAL letter of the correct answer on the line. (6 pts)

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| 1. _____ Thing which remains the same during an experiment | A. hypothesis |
| 2. _____ The part of the experiment changed by the experimenter | B. control |
| 3. _____ The part of the experiment that changes when something else changes | C. inference |
| 4. _____ The part of an experiment that is used to compare with the data | D. independent variable |
| 5. _____ Information that can be seen, felt, smelled, heard, tasted | E. constant |
| 6. _____ A conclusion based on an observation | F. observation |
| | G. dependent variable |

7. Use the paragraph to answer the questions below.

A sixth grader investigates to see if the mass of a toy car will change the distance the car travels after it reaches the bottom of a ramp. The ramp is set at the same height for all the trials. The same car is used each time and only the mass of the car is changed. One trial is just the car with no mass added to it. The same ramp is used each time. The car is released at the top of the ramp, not pushed to start it. The distance traveled is always measured in the same units and with the same meter stick. (7 pts)

- a. Write a possible and appropriate hypothesis for this experiment:

- b. What is the independent variable?

- c. What is the dependent variable?

- d. What is the control for this experiment?

- e. List 3 constants for this experiment.