**PFC2 Guided Reading Chapter 1 Section 1**

1. Physics is a type of science that studies \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Mass is the measure of the amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in an object.
3. Energy is a measure of a system’s ability to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or ­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. What do you call a rule that describes an action or a set of actions in the universe?
5. How have humans deduced natural laws?
6. A system is a group of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are related.
7. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a factor that affects the behavior of a system.
8. Suppose you want to study the effect of wet roadways on the stopping distance of a car. Which of these items are a part of the system you want to study?
a. mass of car
b. volume of the stereo system playing in the car
c. speed of the car before braking
d. presence or absence of grass on the roadside near the testing site
e. the incline (steepness) of the roadway at the testing site
9. What is a hypothesis?
10. What is an experiment?
11. List the four parts of the scientific method described on page 6.
12. Give an example of pseudoscience.
13. In an experiment, the variable that causes the change in a system is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.
14. In an experiment, the variable that changes in response to choices made by the experimenter is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.
15. Explain the difference between the experimental variable and the control variables in an experiment.
16. Scientific evidence should be objective and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
17. What does it mean to say that evidence is objective?
18. In physics, what does the word *model* mean?