

Physical Science

Chapter 1 Review

Terminology: *Define the following terms.*

Science

Technology

Scientific method

Observation

Hypothesis

Experiment:

Conclusion

Theory

Scientific Laws

Control

Independent variables

Dependent variables

Constants

SI Standard Unit

Derived Units

Measurement standard

Short Answers:

1. List the steps of the Scientific Method.

Name: _____

2. How do theories and laws differ?
3. List 5 of the fundamental units of measurement we will use in this class. List their symbols too.
4. How do independent and dependent variables differ?
5. What is the idea number of variables in an experiment? Why?
6. Arrange the following in order, from largest to smallest: (a.) Gigabyte, (b.) kilobyte, (c.) millibyte, (d.) Megabyte, (e.) byte
7. Arrange the following in order from largest to smallest: (a.) 1 kg, (b.) 1 mg, (c.) 1 g, (d.) 1 cg, (e.) 1 μ g
8. Convert the following quantities to the unit on the right:
 - a. 507.6 g --> _____ kg
 - b. 0.365 km --> _____ m
 - c. .000599 s --> _____ ms
 - d. 300 km --> _____ cm
 - e. 175 cL --> _____ L
9. What type of graph would be best to show the percentage of girls and boys in any class?
10. What type of graph would be best to show how distance changes as time goes on

for a moving object.

11. On which axis of a scatter graph do we plot the independent variable?

12. What is the equation for Density? What are the units?

13. What is the equation used to calculate density?

14. List the 5 sections of a lab report in the order they should appear.

15. How do we measure mass in our lab?

16. What is mass?

17. Explain how a law is different from a theory.

18. State whether the following are examples of "technology" or "science".

- a.) Michael Jordan's shoes
- b.) Using the Hubble Space Telescope being used to view the remnants of a supernova.
- c.) a "laser"
- d.) The new electronic billboard in the cafeteria.
- e.) Measuring the speed of light with a laser.

19. How is science different from other fields of study?

Name: _____

20. Convert the following:

- a.) 35.67 mg --> _____g
- b.) 0.000093 ks --> _____ms
- c.) 10,500 mN --> _____kN
- d.) .098 L --> _____mL
- e.) 376 cm --> _____m

21. What 4 things does every good experiment have?

22. What is the purpose of the control in an experiment?

[Answers](#)