

Quiz 1  
PSC1341

Match the letter with the correct definition with the terms below:

- 1) Precision \_\_\_\_\_
- 2) Accuracy \_\_\_\_\_
- 3) Hypothesis \_\_\_\_\_
- 4) Experiment \_\_\_\_\_
- 5) Theory \_\_\_\_\_
- 6) Law \_\_\_\_\_

- a) How reproducible a measurement is.
- b) a summary of observed behavior.
- c) used to test the hypothesis
- d) a possible explanation for an observation.
- e) closeness to correct value
- f) a hypothesis or a set of tested hypothesis that gives an overall explanation of some part of nature.

7) What is the answer to the following math problem?

$$3.14 / (8.30 \times 10^{-3}) =$$

8) The number 0.0000028 can be expressed in exponential notation (also called scientific notation) as the number

9) The equality for the metric relationship between milliliters and liters is

- a) 1L = 100ml
- b) 1ml = 100L
- c) 1L = 1000mL
- d) 1ml = 1000L

10) How many significant figures in the number 5150?

11) How many significant figures in the number  $6.2 \times 10^5$ ?

12) How many significant figures in the number 0.0052?

13) What is the temperature in °C of 59 °F?

14) What is the temperature in K of 78 °C?

15) What is the weight in pounds of 269 mL of mercury (density = 13.6 g/mL)?

(Show all work. Use the factor label method. Write your answer with the correct significant figures and with the correct units.)