

Name: _____ Date: _____ Period: _____

Nature of Science Study Guide

1. Define the term science.
2. What are the 3 branches of science? Provide an example for each.
3. What is the difference between a scientific law and a scientific theory? (Which can be changed and why?)
4. Give 1 example of a scientific law & 1 example of a scientific theory? (Lesson 1)
5. What is a fact? What is an opinion?
6. What is a dependent variable?
7. What is an independent variable?
8. What is the control?
9. What are constants?
10. What is the importance of the International Systems of Units?

List the base unit for the following measurements:
 - a. Temperature -
 - b. Mass –
 - c. Length –
 - d. Volume of Liquids -
11. Describe range, mean, median, and mode.

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12. Describe the following scientific tools:

a. Thermometer –

b. Graduated Cylinder –

Describe the
steps to read
volume } 1.
 } 2.
 } 3.

c. Triple Beam Balance -

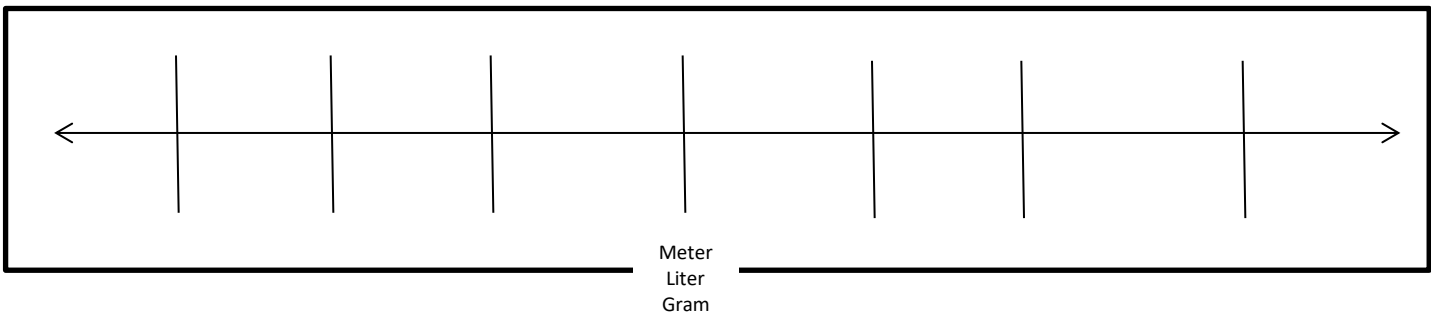
13. Steps of the Scientific Method (hint: 6 steps – reference Lesson 1):

14. How do you test a hypothesis?

15. What is the difference between a qualitative observation and quantitative observation?

16. What is an observation and an inference?

17. Complete the Metric Conversion Chart. Write the prefixes AND the numeric units.



Examples:

1. 42 mg = _____ g

2. 12 km = _____ hm

3. 0.65 cm = _____ mm

4. 1.89 L = _____ mL

5. 7.4 hg = _____ g