

# Chapter 1 : Introduction & Measurement

PRINT Name \_\_\_\_\_ Period \_\_\_\_\_

You may write on this paper on the back.

All work MUST be done in INK. All Questions MUST be answered in complete sentences. Problems are to be solved by "Showing The Method": The Hup, Two, Three, Four. Be sure to PRINT your Name, the Period, and the Assignment on your papers.

1. What are the difference between Matter and Energy? How can they be interchanged?
2. Compare and give examples: Hypothesis, Theory, Law (Principle).
3. Discuss Objective and Subjective observations and give original examples.
4. Explain "Frames of Reference" and give an example.
5. Define and give an example of Parallax.
6. Give an example of Persistence of Vision.
7. What are the International Units of Length, Mass, and Time?
8. What is the definition of the Liter?
9. Define and give examples of Accuracy and Precision.
10. Define Significant Figures and give Five examples.
11. Define Scientific Notation and give Two examples.
12. Define Orders of Magnitude, Direct and Inverse Proportion, Interpolation, Extrapolation, Scalar, and Vector.
13. Define Matter, Mass, Inertia, Density, and Two kinds of Energy.
14. State the Law of Conservation of Matter and Energy.
15. Using the "Method of Problem Solving (Hup, Two, Three, Four)" Find the Density of 45.1 g of a metal whose volume is 62.3 cm<sup>3</sup>.

Show your work!      Ans: 0.724 g/cm<sup>3</sup>.