**Nature of Science Test Review**

The test questions are over activities, labs and notes taken during class. Review the following activities and notes to be successful: **Nature of Science notes on Metric System and Scientific Thinking, Bell Ringers, Density Lab, Metric Mania, Measuring Volume and Mass, Lab Safety, and Mr. Hollow’s Earth Science Syllabus.**

Nature of Science Learning Targets

1. I can convert measurements from one metric unit to another. For Example, 1600 m = 1.6 km.
2. I can measure and identify base units of measurement for length, mass, and volume.
3. I can calculate derived measurements for density, area, and volume of a solid.
4. I can develop quantitative and qualitative observations.

*Complete these practice questions before test day:*

1. What is the most accurate scientific tool in Earth Science class used to measure volume of a liquid and mass of a substance?
2. What is the base unit for **length, mass and volume** in the metric system?
3. Compare qualitative and quantitative observations. Provide an example of each?

Density = mass / volume

1. A concrete block has a volume of 500cm3. Its mass is 300g.

What is its density?

1. Use the Metric Ladder and convert **45 grams = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_centigrams**.
2. Use the metric ladder and convert **1600 milliliters = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ liters.**
3. Use the metric ladder and convert **3500 meters = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ kilometers.**
4. If water’s density is 1.0 g/cm3 and a cork has a density of 1.1g/cm3, would the cork float or sink in water? Explain your answer.
5. How is an observation different than an inference?
6. Define density with words and a model (drawing).