

Name: _____

Date: _____ Period: _____

Review: Foundations

Directions: Carefully read over the checklist of items that you need to know for the “Earth Science Foundations” test. Be sure to attend extra help if you have any questions.

OBSERVATION AND INFERENCE:

- Terms to Know: qualitative, quantitative, prediction
- Classification systems are based on observations and help organize observations
- Inferences are an interpretation bases on an observation
- Observations are recorded observations using the five senses
- The 5 senses: sight, smell, hearing, taste, and touch

MEASUREMENT

- Terms to Know: length, mass, volume, displacement, temperature, air pressure
- Measuring Instruments: electric balance, ruler, graduated cylinder
- Be able to calculate volume using $V = l \times w \times h$
- Be able to measure volume using displacement
- Be able to convert between different prefixes of the metric system
- King · Henry · Died · Unexpectedly · Drinking · Chocolate · Milk
- Kilo · Hecto · Deca · Unit · Deci · Centi · Milli
- Be able to expand scientific notation [example: $2.3 \times 10^6 = 2,300,000$]
- Be able to write large numbers in scientific notation [example: $1,200,000,000 = 1.2 \times 10^9$]

DENSITY

- Terms to Know: mass, volume, density
- Earth Science Reference Tables: Equations [Density]
- Know how to calculate Density with the proper units
- All substance are the densest in the solid phase... except water
- Solid water [ice] floats in liquid water... so it is less dense
- Density remains the same for a material unless heat or pressure is changed
- If temperate increases then density will decrease
- If pressure increases then density will increase

GRAPHING ANALYSIS

- Terms to Know: extrapolate, dependent variable, independent variable
- Recognize a graph of a “direct relationship” and provide example[s]
- Recognize a graph of an “inverse relationship” and provide example[s]
- Recognize a graph of a “cyclic change” and and provide example[s]
- Earth Science Reference Tables: Equations [Rate of Change]
- Know how to calculate Rate of Change with the proper units
- Graphs reveal patterns can be used to extrapolate data to help predict future event