HONORS CHEMISTRY Test STUDY GUIDE

Unit 1- Measurement and Matter

Test Date:

Read over your notes, and *rework* your homework assignments and quizzes (especially those you didn’t do well on). Reviewing your labs may also be helpful. The Periodic Table Reference Sheet will be provided. You will do awesome on this test if you can do the following things.

# Using Measurements Explain the difference between accuracy and precision.

* Calculate % error.
* Use the correct number of sig figs when making a measurement.
* Identify the number of significant figures in a number.
* Round off calculated answers to the correct number of sig figs.
* Convert between normal and scientific notation.
* Distinguish between direct and inverse proportions.

# Units of Measurement

* Differentiate between a number and a quantity.
* Perform density calculations.

# Unit Conversions

* Perform SI prefix conversions.
* Perform unit conversions using dimensional analysis.

# Matter

* Explain the concept of Kinetic Molecular Theory.
* Distinguish between the four states of matter.
* Classify a substance as an element, compound, solution, or heterogeneous mixture.
* Compare and contrast the states of matter & classes of matter.
* Explain the Laws of Definite Composition and Multiple Proportions.
* Distinguish between chemical & physical properties/changes.
* Recognize the signs of a chemical change.

REMINDERS:

* You must show work for all calculations.
* Answers must include units & the correct # of sig figs.
* You must use dimensional analysis (“train track method”) for all unit conversions except simple SI prefix conversions.