

Beginning
Progressing
Mastered

Unit 1 – Introduction to Chemistry – Learning Targets

- 1 I can identify the location of and properly use all the safety equipment in the lab.
- 2 I can light a Bunsen Burner safely and adjust its flame to a blue cone.
- 3 I can correctly name all the pieces of lab equipment in my lab drawer.
- 4 I know and can use the 5 basic SI units, their abbreviations & quantities they represent.
- 5 I can use prefixes to change the size of units.
- 6 I can convert a measurement given in one unit to a different sized unit using the proper prefix.
- 7 I can combine SI base units to form derived units, and know what quantities the derived units represent.
- 8 I can convert between dm^3 , L, cm^3 , and mL.
- 9 I can convert temperatures between $^{\circ}\text{C}$, K, and F.
- 10 I can correctly set up chemical word problems using the units given in the problem and conversion factors.
- 11 I can measure/calculate the density of a substance from its mass and volume.
- 12 I can re-arrange the density equation to find the mass or volume of a substance.
- 13 I know and can correctly use the terms *uncertainty*, *accuracy*, *precision*, *errors*, *mistakes*, *magnitude of error*, and *% error*.
- 14 I can recognize and explain the difference between an error and a mistake.
- 15 I can recognize and explain the difference between the accuracy and precision of measurements.
- 16 I can determine the number of significant figures (sig. figs.) in any measurement.
- 17 I can re-write a measurement so it has a specified number of sig. figs.
- 18 I can keep the correct number of sig. figs. in my result when doing math that involves measurements.
- 19 I can calculate the *magnitude of error* for a measurement.
- 20 I can calculate the *% error* for my final result in a lab procedure.