

## CHM 1045 Exam 1 Review Sheet

Be able to do all of the following:

- Answer questions about all of the terms and their definitions.
- Determine the correct number of significant figures in calculations.  
Review example 1.02.
- Apply scientific units and use conversion factors.  
Review examples 1.06, 1.07, and 1.08.
- Determine the density of a substance ( $d = m/V$ ), and use density to calculate volume and mass from a density equation.  
Review examples 1.04 and 1.05.
- Determine the names of ionic and molecular compounds from their formulas. Review examples 2.04, 2.06, 2.08, and 2.10.
- Determine the formula units (or molecular formulas) from compound names. Review examples 2.03, 2.05, 2.07, and 2.09.
- Balance a chemical reaction equation, including the formulas, stoichiometric coefficients, and phase subscripts (g, l, s, or aq).  
Review example 2.12.
- Use molar mass to convert between mass and moles.  
Review examples 3.01, 3.04, and 3.05.
- Determine quantities of substances involved in a reaction from the chemical equation (stoichiometric coefficients).  
Review examples 3.13 and 3.15.
- Determine mass percentages and use them to find molecular formulas.  
Review examples 3.07, 3.08, 3.10, and 3.11.