

Exam 1: Friday, October 5**Topics: Chapters 1-5**

- nomenclature
- significant figures
- dimensional analysis

- periodic table – general information
- density
- atomic composition
- isotopes

- mole / mass calculations
- percent composition calculations
- empirical & molecular formula calculations

- balancing chemical equations
- stoichiometry (e.g., limiting reactant, theoretical/percent yield calculations)
- mixture problems

- types of solutions and types of reactions in solutions
- precipitation, acid-base, gas-forming reactions
- molecular, total ionic, net ionic equations
- distinguishing between strong/weak acids/bases, soluble/insoluble salts, non/weak/strong electrolytes

- molarity and solution calculations
- solution stoichiometry
- pH
- acid-base titrations (see handout and section 5.10)

- anything from lab

(Disclaimer: This is intended to be a helpful checklist in preparation for exam #1. While effort has been made to be complete here, this is not guaranteed and it remains the student's responsibility to completely prepare for the exam.)