CH115 Exam 1: Most Common Difficulties on Last Year's Exam

- Naming compounds
- Writing formulas of compounds
- Distinguishing extensive vs. intensive properties
- Explaining the differences between element, compound, mixture
- Doing metric conversions
- Calculating number of molecules
- Locating elements in Periodic Table
- Reading and answering entire question



Writing Formulas

Keys to writing formulas:

- Recognize what kind of name (ionic, molecular, acid)
- Figure out the parts
- 1. Ionic compounds
 - Determine the ions
 - Use charges to find the ratio of ions
- 2. Molecular compounds
 - Determine the elements
 - Change prefixes to subscripts
- 3. Acids
 - Morph the acid name into the anion name
 - Use charges to find the ratio of ions



- Hypochlorous acid
- Dinitrogen monoxide
- Chromium (III) carbonate
- Nitrous acid
- Diarsenic pentoxide

Metric Conversions and Sig Figs

- Metric conversions
 - Figure out what units converting from and to
 - Find equivalent measures (dominoes) and orient conversion factors properly so units cancel
- Significant figures
 - Addition rule
 - Multiplication rule
 - Order of operations (mathematically)

