

Review Sheet

Types of problems

Stoichiometry

- Simple road map
- Limiting reactant
- Precipitate
- Acid/base

Empirical Formula

- Mass spec (%)
- Combustion analysis
- Molecular formula

Gas Laws

- Ideal gas law
- Combined gas law (and 3 gas laws)
- Graham's Law
- Avogadro's Law

Thermochemistry

- Energy/heat/work
- Heat transfer (final temp, specific heat)
- Hess' Law
- Enthalpies of formation

Tools

- molecular weight
- % composition
- grams $\rightleftharpoons$ moles
- polyatomic ions
- ionic/covalent/acid nomenclature
- solubility table
- pressure/temp conversions

Concepts

- kinetic/molecular theory
- atomic theory (atomic structure)

Random stuff

- STP, standard conditions
- 22.4 L/mol
- 273 K
- 760 torr
- Ag^+ , Zn^{2+}