

Honors Chemistry Review Sheet

Semester 1 Final Exam

You will be given:

- Periodic table

You will need to bring:

- Calculator
 - Cannot be a graphing calculator unless memory is cleared
 - DO NOT count on your teacher for one
 - There will be NO sharing
- Pencils
- 1 sheet of notes
 - MUST BE COMPLETELY HANDWRITTEN
 - Can use both sides of sheet
 - CANNOT BE XEROXED
 - Will be turned in with test

Important Topics to Study (not necessarily all-inclusive)

UNIT 1

- Physical versus chemical properties
- Physical versus chemical changes
- Phases of matter
- Exothermic vs. endothermic
- Separations
- Metric system and metric conversions
- Measurement (tolerance, accuracy vs. precision)
- Significant figures
- Scientific notation
- Density

UNIT 2

- Atomic theory (history, people)
- Structure of the atom (subatomic particles)
- Isotopes and isotopic notation (including average masses)
- Moles

UNIT 3

- Waves and electromagnetic radiation
- Electron energy levels and emission spectra
- Electron orbital diagrams and configurations

UNIT 4

- Development of the periodic table
- Regions of the periodic table
- Periodic Law
- Periodic trends (atomic radius, ionization energy, electron affinity)

UNIT 5

- Basics of bonding
- Naming and formulas of ionic and covalent compounds
- Percent composition
- Empirical (and molecular) formulas
- Dot and line structures (including polyatomic ions)
- Shapes of molecules
- Bond types
- Polarity of molecules
- Intermolecular forces and their affect on compound properties
- Types of compounds (ionic, molecular, network, metallic)

UNIT 6

- Chemical equations
- Types of reactions (including predicting products)
- Stoichiometry (including % yield)
- Limiting reagents