

Honors Chemistry Final Exam - Study Guide

- Know how to name ionic compounds and covalent compounds (You do not need to name acids)
- What is the difference between a covalent and ionic bond?
- VSEPR Theory and how to determine molecular geometry based on VSEPR.
- How do you balance chemical equations?
- What are the five reaction types? Can you identify each?
- What is the "activity series" and how do you use it?
- When gas is compressed (pressure increases) the volume of the gas decreases. Standard Temperature and pressure is freezing at sea level.
- Law of conservation of mass?
- Development of the atomic theory, how were electrons discovered? How were nuclei discovered?
- What is an isotope?
- Electron behavior in the Bohr model of the atom (light & energy)
- Electron configuration, how do you write an atom's e^- configuration?
- Significant figures - basic rules for multiplication and division.
- Mass number, Atomic number, Atomic mass - How are they different, how do they relate to isotopes?
- Basic conversions of measurements
- Basic mole conversions
- Write a balanced equation when given worded chemicals
- Stoichiometry conversions (DO NOT WORRY ABOUT LIMITING REACTANTS AND PERCENT YIELD) →

- Orbital notation, how is it written in conjunction with e^- configuration?
- Lewis structures - can you draw them correctly?