

TOPICS FOR THE CHEM 101 FINAL EXAM

- Inorganic Nomenclature
- Metric System
- Density
- Solubility of Ionic Compounds
- Kinetic Molecular Theory
- Ideal Gas Law
- Boyles Law
- Charles Law
- Gas Density
- Combined Gas Law
- Dalton's Law
- Thermochemical Equations
- Exothermic / Endothermic Processes
- Heat Calculations
- Hess's Law
- DH of formation
- Stoichiometry/Limiting Reagent/Theoretical Yield/Percent Yield
- Avogadro's Number
- Percent Composition by Mass
- Balancing Equations
- Isotopes / Isotopic Symbols
- Atomic Orbitals
- Quantum Numbers
- Electromagnetic Radiation – Energy/Frequency/Wavelength
- Continuous Spectra / Line Spectra / Energy of Transition
- Orbital Diagrams
- Electron Configuration
- Trends in the Periodic Table
- Oxidation numbers
- Lewis Dot Structures / Octet Rule / Formal Charge
- Use of Bond Energies
- VSEPR Theory / bond angles
- Valence Bond Theory
- Bond Polarity / Molecular polarity
- Resonance Structures
- Molecular Orbital Theory
- Molarity / Dilution / Titration
- Electrolytes / Nonelectrolytes
- Intermolecular Forces of Attraction
- Classification of Reactions
 - Acid-base
 - Oxidation-reduction / Oxidizing Agent / Reducing Agent
 - Precipitation
- Molecular / Ionic / Net Ionic Equations
- Tools that are used in the laboratory for precise mass or volume measurements
- Temperature Conversions

- There are 70 questions all multiple choice - This exam is curved
- No equations are given
- All constants are given