

Chemistry Syllabus

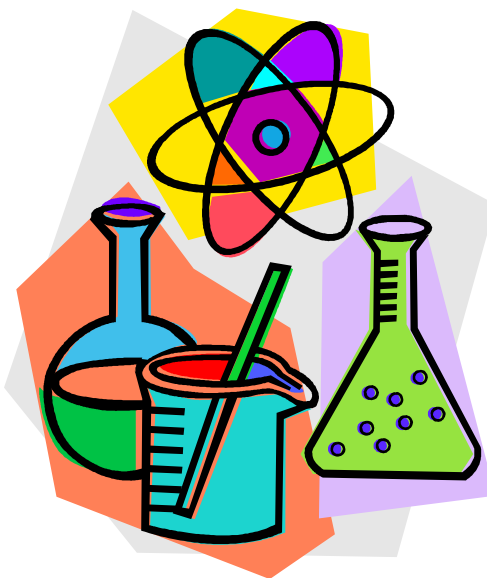
Complete each of the assignments in each section in the order listed. Lab activities may be added as you progress through the units.

All chapters and page numbers listed are for **Holt Modern Chemistry**, 2002 edition.

Instructions for each unit are available at the front of the room, should the instructor be unable to help you at the moment.

All assignments are to be completed on your own paper unless noted otherwise.

Unit exams can be taken on paper, but may be available online. All exams must be completed during class time



Unit 1: Measurement

Chapter 2: p 29-61

Vocabulary:

- Accuracy
- Precision
- Density
- Significant figures
- Percent error
- Scientific notation

Unit 1 Assignments

- Measurement Lesson
- Significant Figures WS
- Scientific Notation WS
- SI Conversion WS
- Metric Scramble (**extra credit**)

Unit Exam

Unit 2: Matter and Energy

Chapter 1: p 5-24; pieces of chapters 10 and 12

Vocabulary:

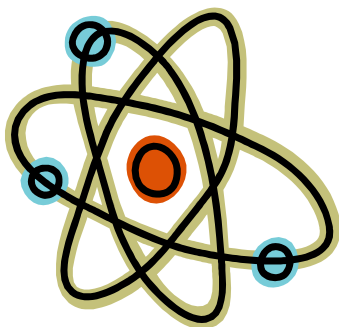
- Matter
- Element
- Compound
- Physical property
- Chemical property
- Heat
- Temperature
- Endothermic reaction
- Exothermic reaction
- Specific heat

Unit 2 Assignments:

- Matter Classification Chart
- Matter Classification WS
- Physical and Chemical Change Story
- Element Word Search

Unit Exam

Unit 3: Atomic Structure and the Atom



Chapter 3: p 65- 80

Vocabulary:

- Atomic number
- Mass number
- Nucleus
- Isotope
- Half life
- Cation
- Anion
- Law of Conservation of matter
- Nuclear Fission
- Nuclear Fusion

Unit 3 Assignments

- Using the Periodic Table WS
- Isotopes WS
- Atomic Scientists Movie and Questions

Unit Exam

Unit 4: Electrons and the Periodic Table

Chapter 4: p 98-116; chapter 5: p 123-151

Vocabulary:

- Energy level
- Period
- Valence electron
- Atomic radius
- Electronegativity
- Metal
- Nonmetal
- Metalloid
- Transition metal
- Orbital

Unit 4 Assignments

- Unit 4 Book Work
- Periodic Table Coloring Sheet
- Periodic Table Web Quest

Unit Exam

Unit 5/6: Bonding, Chemical Formulas, Equations

Chapter 6: p 161-193

Chapter 7: p 203-220; chapter 8: p 241-264

Vocabulary:

- Ionic bond
- Covalent bond
- Metallic bond
- Molecular geometry
- Oxidation number
- Polyatomic ion
- Diatomic
- Synthesis
- Decomposition
- Single replacement
- Double replacement
- Combustion
- Coefficient
- Subscript

Unit 5/6 Assignments

- Binary Compounds Practice
- Polyatomic Compounds Practice
- Covalent Compounds Practice
- Compound Naming Review
- Balancing and Naming reactions review

Unit Exam



Unit 7: Stoichiometry

Chapter 9: p 275-293

Vocabulary:

- Molar mass
- Empirical formula
- Molecular formula
- Limiting reactant
- Mole

Unit 7 Assignments

- Molar mass
- Mass/ mole conversions
- Percent composition by mass
- Empirical formulas
- Molecular formulas
- Unit 7 review

Unit Exam

Unit 8: Gases

Chapter 10: p 303-325; chapter 11: p 333-346

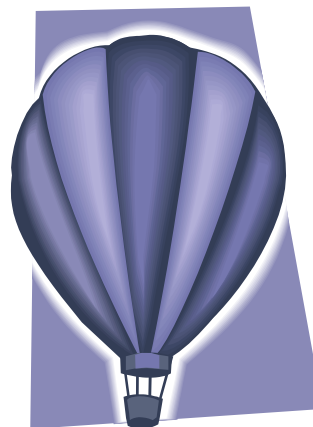
Vocabulary:

- Barometer
- Pressure
- Temperature
- Volume
- Ideal gas constant

Unit 8 Assignments

- Gases web quest
- The combined gas law
- The ideal gas law

Unit Exam



Unit 9: Solutions and Unit 10: Acids and Bases

Chapter 13: p 395-417

Chapter 13: p 395-417

Vocabulary:

- Molarity
- Molality
- Concentrations
- Solutions
- Solute
- Solvent
- Saturated
- Unsaturated
- Supersaturated
- Hydronium ion
- Acid
- Base
- Neutral
- pH
- ionization
- dissociation
- indicator

Unit 9 and 10 Assignments

- Solubility curve
- Molarity problems
- Acid/Base worksheet

Unit Exam

EOC

Chemistry



Review Guide

EOC Exam

Given in the following months- see instructor for exact date

of your exam

- December
- May
- July/ August, depending on summer school schedule