

The background of the page features a large, pixelated, grayscale version of the Seal of the Commonwealth of Massachusetts. The seal depicts a Native American figure holding a bow and arrow, with a five-pointed star above his right shoulder. The text is centered over the seal.

Curriculum Map
Chemistry #221/222
Saugus High School
Saugus, MA 01906

Week 1	
Performance Standards	
<i>The students will:</i>	
Be able to make observations from a scientific perspective. Be able to read, interpret & examine scientific claims. Be able to pose questions & form hypotheses based on personal observations, scientific articles, experiments & knowledge	
Unit/Topic./Lesson	
Intro to Chemistry 1.1 The importance of Chemistry 1.2 What is Chemistry 1.3 The scientific approach to problems 1.4 Using scientific thinking	
Objectives (Students will...)	Essential Question
Understand the importance of learning chemistry Define Chemistry Recognize the general steps scientists use in solving problems	What does chemistry mean to you?
	Labs/Demonstrations/Handouts
	Handout: Chapter Study Guide Demo: Reactivity of 3 Alkali Metals
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 1 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #1 Quiz CH 1 (1.1 - 1.4) WS: the scientific method	Completed by:
	Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 2	
Performance Standards	
<i>The students will:</i>	
Be able to make observations from a scientific perspective. Be able to read, interpret & examine scientific claims. Be able to pose questions & form hypotheses based on personal observations, scientific articles, experiments & knowledge	
Unit/Topic./Lesson	
Intro to Chemistry 1.5 The Scientific method 1.6 Learning Chemistry	
Objectives (Students will...)	Essential Question
Illustrate the scientific method Describe the method scientists use to study nature Develop successful strategies for learning chemistry	What steps do chemists use to solve problems?
	Labs/Demonstrations/Handouts
	Demo: The Carbon Tower Lab: Safety Procedures Lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 1 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Test Chapter 1 Problem Set #2 Lab Safety Quiz	Completed by:
	Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 3		Week 4	
<p align="center">Performance Standards</p> <p>Chemistry 1.2: Explain the differences between mixtures and pure substances</p> <p>Chemistry 1.3: Describe the four states of matter in terms of energy, particle motion and phase transitions.</p>		<p align="center">Performance Standards</p> <p>Chemistry 1.1: Distinguish between chemical and physical properties</p>	
<p align="center">Unit/Topic./Lesson</p> <p>Matter 2.1 The Particulate Nature of Matter 2.2 Elements & Compounds 2.3 States of matter</p>		<p align="center">Unit/Topic./Lesson</p> <p>Matter 2.4 Physical & Chemical properties & changes 2.5 Mixtures & pure substances 2.6 Separation of mixtures</p>	
<p align="center">Objectives (Students will...)</p> <p>Learn about the composition of matter Learn the difference between elements & compounds Define the three states of matter Learn to distinguish between physical & chemical properties</p>	<p align="center">Essential Question</p> <p>What is the difference between an element & a compound?</p>	<p align="center">Objectives (Students will...)</p> <p>Learn to distinguish between physical & chemical changes Learn to distinguish between mixtures & pure substances Learn two methods of separation</p>	<p align="center">Essential Question</p> <p>What is the difference between a physical and chemical change?</p>
	<p align="center">Labs/Demonstrations/Handouts</p> <p>Handout: Chapter Study Guide Demo: Combustion=CO_2 & H_2O Lab : Measuring Mass, Volume, Temperature & Thickness</p>		<p align="center">Labs/Demonstrations/Handouts</p> <p>Demo: Electrolysis of Water Lab : Determining the density of water</p>
<p align="center">Teacher Resources</p> <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 2 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<p align="center">Media Resources</p> <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies 	<p align="center">Teacher Resources</p> <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 2 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<p align="center">Media Resources</p> <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
<p align="center">Assessment Activities</p> <p>Quiz Chapter 2 (2.1-2.3) Problem Set #3 WS – Elements & Compounds Lab report</p>	<p>Completion date:</p> <p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>	<p align="center">Assessment Activities</p> <p>Test Chapter 2 Problem Set #4 WS-Physical & Chemical Changes Lab report</p>	<p>Completion date:</p> <p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 5	
Performance Standards	
<p>Chemistry 2.1: Recognize discoveries from Dalton, Thompson, Rutherford and Bohr and understand how each discovery leads to modern atomic theory.</p> <p>Chemistry 2.2: Describe Rutherford's Gold Foil experiment. Identify major components of the nuclear atom and how they interact.</p>	
Unit/Topic./Lesson	
Chemical Foundations: Elements, Atoms & Ions 3.1 The elements 3.2 Symbols for the elements 3.3 Dalton's atomic theory 3.4 Formulas for compounds 3.5 The structure of the atom	
Objectives (Students will...)	Essential Question
<p>Learn about the relative abundances of the elements</p> <p>Learn the names of elements 1-20.</p> <p>Learn the symbols of elements 1-20</p> <p>Learn about Dalton's theory of atoms</p> <p>Understand & Illustrate the law of constant composition</p> <p>Learn how a formula describes a compound's composition</p> <p>Learn about the internal parts of an atom</p>	What is Dalton's atomic theory?
	Labs/Demonstrations/Handouts
	<p>Handout: Chapter Study Guide</p> <p>Lab: Density of Solids & Liquids</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 3 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Quiz Chapter 3 (3.1-3.5) Problem Set #5 WS-Elements WS: Periodic Table Lab Report	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 6	
Performance Standards	
<p>Chemistry 2.5: Identify 3 main types of radioactive decay and compare their properties.</p>	
Unit/Topic./Lesson	
Chemical Foundations: Elements, Atoms & Ions (Cont) 3.6 Intro to the modern concept of atomic structure 3.7 Isotopes 3.8 Intro to the periodic table	
Objectives (Students will...)	Essential Question
<p>Understand Rutherford's experiment to characterize the atom's structure</p> <p>Describe some important features of subatomic particles</p> <p>Learn about the terms: isotope, atomic number, and mass number</p> <p>Learn about various features of the periodic table</p>	Who discovered the nuclear atom and what particles reside in the nucleus?
	Labs/Demonstrations/Handouts
	<p>Demo: Al & CuSO₄</p> <p>Lab: Conservation of Mass</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 3 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #6 WS-Elements, Isotopes & Ions, Lab report	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 7	
Performance Standards	
Chemistry 2.5: Identify 3 main types of radioactive decay and compare their properties.	
Unit/Topic./Lesson	
Chemical Foundations: Elements, Atoms & Ions (Cont) 3.9 Natural states of the elements 3.10 Ions 3.11 Compounds that contain ions	
Objectives (Students will...)	Essential Question
Learn some of the properties of metals, nonmetals & metalloids Learn the natural states of the common elements Describe the formation of ions from their parent atoms Predict which ion a given element forms by using the periodic table Describe how ions combine to form natural compounds	How many types of ions are there and how are they formed?
	Labs/Demonstrations/Handouts
	Lab: The Golden Penny Handout: Chapter 5 packet
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 3 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Test Chapter 3 (3.1-3.11)	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 8	
Performance Standards	
Chemistry 4.6: Name & write chemical formulas for simple ionic and molecular compounds: including polyatomic ions; ammonia, carbonate, hydroxide, nitrate, phosphate, sulfate.	
Unit/Topic./Lesson	
Nomenclature 4.1 Naming compounds that contain a metal & a nonmetal 4.2 Naming binary compounds that contain only nonmetals 4.3 Naming binary compounds	
Objectives (Students will...)	Essential Question
Learn to name binary compounds of a metal & a nonmetal Learn how to name binary compounds containing only nonmetals Review the naming of Type I, Type II, and Type III binary compounds Learn the names of common polyatomic ions and how to use them in naming compounds	What is the difference between a Type I, Type II, & Type III binary compound?
	Labs/Demonstrations/Handouts
	Handout: Chapter Study Guide Lab: The Golden Penny
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 4 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Quiz Chapter 4 (4.1-4.3) Problem Set #7 WS-Naming Binary Compounds, Lab report	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 9	
Performance Standards	
<p>Chemistry 4.6: Name & write chemical formulas for simple ionic and molecular compounds: including polyatomic ions; ammonia, carbonate, hydroxide, nitrate, phosphate, sulfate.</p>	
Unit/Topic./Lesson	
<p>Nomenclature (cont.) 4.4 Naming compounds that contain polyatomic ions 4.5 Naming acids 4.6 Writing formulas from names</p>	
Objectives (Students will...)	Essential Question
<p>Learn how the anion composition determines the acid's name Learn names for common acids Learn to write the formula of a compound, given its name</p>	<p>What is a polyatomic ion?</p>
	Labs/Demonstrations/Handouts
<p>Lab : Thickness of Aluminum Foil</p>	
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 4 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Test Chapter 4 (4.1-4.6) Problem Set #8 WS – Naming Type I,II,III WS-Naming with polyatomic ions Formal Lab report</p>	Completed by:
	Comments: <i>Alternative Evaluation:</i>
	<p>Paper, Project, Poster</p>

Week 10	
Performance Standards	
<p>The Student will:</p> <p>Be able to use scientific notation. Understand units of length, mass & volume. Know what the difference is between accuracy and precision Be able to use significant figures.</p>	
Unit/Topic./Lesson	
<p>Measurement & Calculations. 5.1 Scientific Notation 5.2 Units 5.3 Measurement of length, mass & vol. 5.4 Uncertainty in measurement 5.5 Significant figures</p>	
Objectives (Students will...)	Essential Question
<p>Learn scientific notation Learn the English, metric and SI systems of measurement Use the metric system to measure length, volume & mass Learn how uncertainty in measurements arises Learn significant figures Learn the number of significant figures in a calculated result</p>	<p>Why do scientists use the SI system of measurement?</p>
	Labs/Demonstrations/Handouts
<p>Handout: Chapter Study Guide Lab: SI + Measurement</p>	
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 5 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Quiz Chapter 5 (5.1-5.5) Problem Set #9 WS-Scientific Notation WS – Unit Conversions WS-Significant Figures Lab report</p>	Completed by:
	Comments: <i>Alternative Evaluation:</i>
	<p>Paper, Project, Poster</p>

Week 11	
Performance Standards	
<p>The Student will: Be able to convert temperatures between Kelvin and Celsius.</p>	
Unit/Topic./Lesson	
Measurement & Calculations 5.6 Dimensional analysis 5.7 Temp. conversions 5.8 Density	
Objectives (Students will...)	Essential Question
<p>Learn how dimensional analysis can be used to solve various types of problems Learn the three temperature scales Learn to convert from one scale to another Continue to develop problem solving skills Define density and its units</p>	<p>How do we use significant figures to show uncertainty in our calculated results?</p>
	Labs/Demonstrations/Handouts
	<p>Lab: Rainbow Lab</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 5 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Test Chapter 5 (5.1-5.8) Problem Set #10 WS- Dimensional Analysis WS- Temp Conversions WS - Density Lab report	<p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 12	
Performance Standards	
<p>Chemistry 2.1: Trace the development of atomic theory and the structure of the atom from the ancient Greeks to the present.</p> <p>Chemistry 2.4: Understand that matter has both properties of particles and waves.</p> <p>Chemistry 3.1: Explain the relationship between an elements position on the periodic table to its atomic number and mass</p>	
Unit/Topic./Lesson	
Modern Atomic Theory 11.1 Rutherford's atom 11.2 Energy & light 11.3 The emissions of energy by atoms 11.4 The energy levels of hydrogen 11.5 The Bohr model of the atom 11.6 The wave-mechanical model of the atom	
Objectives (Students will...)	Essential Question
<p>Describe Rutherford's model of the atom Explore the nature of electromagnetic radiation Understand how atoms emit light Understand how the emission spectrum of hydrogen demonstrates the quantized nature of energy Learn about Bohr's model of the hydrogen atom</p>	<p>What is Rutherford's model of the atom?</p>
	Labs/Demonstrations/Handouts
	<p>Handout: Chapter Study Guide Lab: Effect of heat on a rubber band</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 11 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Quiz Chapter 11 (11.1-11.6) Problem Set #11 (11.1-11.6) WS1 (11.1-11.4) WS2 (11.4-11.6) Lab report	<p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 13	
Performance Standards	
<p>Chemistry 2.5: Using Bohr's model of the atom interpret changes in electron energies in the hydrogen atom</p> <p>Chemistry 2.6: Describe the electromagnetic spectrum in term of wavelength and energy</p> <p>Chemistry 2.7: Write electron configurations for the first three rows in the periodic table</p>	
Unit/Topic./Lesson	
<p>Modern Atomic Theory (cont.)</p> <p>11.7 The hydrogen orbitals</p> <p>11.8 The wave mechanical model further developed</p> <p>11.9 Electron arrangements</p>	
Objectives (Students will...)	Essential Question
<p>Understand how the electron's position is represented in the wave mechanical model</p> <p>Learn about the shapes of orbitals designated by s, p, d, & f</p> <p>Review the energy levels and orbitals of the wave mechanical model of the atom</p> <p>Learn about electron spin</p>	Where are the electrons found in an atom?
	Labs/Demonstrations/Handouts
	Lab: The Blob or Foam Production
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 11 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Problem Set #12 (11.7-11.11)</p> <p>WS3(11.7-11.8)</p> <p>WS4 Writing Electron Configurations</p> <p>WS5 (11.9-11.11)</p> <p>Lab report</p>	<p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 14	
Performance Standards	
<p>Chemistry 2.5: Using Bohr's model of the atom interpret changes in electron energies in the hydrogen atom</p> <p>Chemistry 2.6: Describe the electromagnetic spectrum in term of wavelength and energy</p> <p>Chemistry 2.7: Write electron configurations for the first three rows in the periodic table</p>	
Unit/Topic./Lesson	
<p>Modern Atomic Theory (cont.)</p> <p>11.10 electron configurations & the periodic table</p> <p>11.11 atomic properties & the periodic table</p>	
Objectives (Students will...)	Essential Question
<p>Understand how principal energy levels fill with electrons in atoms beyond hydrogen</p> <p>Learn about valence electrons and core electrons</p> <p>Learn about the electron configurations of atoms with Z greater than 18</p> <p>Understand periodic trends in the periodic table</p>	Why are valence electrons important?
	Labs/Demonstrations/Handouts
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 11 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Test Chapter 11 (11.1-11.11)</p>	<p>Completed by:</p> <p>Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster</p>

Week 15	
Performance Standards	
<p>Chemistry 5.3: Understand the mole concept in terms of number of particles, mass, and gaseous volume.</p> <p>Chemistry 5.4: Be able to determine molar mass, gram formula mass, and mole to mass conversions.</p>	
Unit/Topic./Lesson	
Chemical Composition 6.1 Counting by weighing 6.2 Atomic masses: counting by weighing atoms	
Objectives (Students will...)	Essential Question
<p>Understand the concept of average mass and explore counting by weighing</p> <p>Understand atomic mass and its experimental determination</p>	What is a mole and why is it important?
	Labs/Demonstrations/Handouts
	<p>Handout: Chapter Study Guide</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 6 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #13	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 16	
Performance Standards	
<p>Chemistry 5.3: Understand the mole concept in terms of number of particles, mass, and gaseous volume.</p> <p>Chemistry 5.4: Be able to determine molar mass, gram formula mass, and mole to mass conversions.</p>	
Unit/Topic./Lesson	
Chemical Composition (cont.) 6.3 The mole 6.4 Molar Mass	
Objectives (Students will...)	Essential Question
<p>Understand the mole concept and Avogadro's number</p> <p>Learn to convert among moles, grams & particles in a given sample</p> <p>Define molar mass</p>	What is Avogadro's number and how is it related to a mole?
	Labs/Demonstrations/Handouts
	<p>Lab: Moles of Chalk (CaCO₃) Lab</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 6 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Quiz Chapter 6 (6.1-6.4) WS – Molar Masses of Compounds Lab report	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 17	
Performance Standards	
Chemistry 5.5: Calculate the molar mass, percent composition, empirical formulas and molecular formulas.	
Unit/Topic./Lesson	
Chemical Composition (cont.) 6.5 Percent composition of compounds 6.6 Formulas of compounds	
Objectives (Students will...)	Essential Question
Learn mass percent of an element in a given compound Understand the meaning of the empirical formulas of compounds	What is molar mass?
	Labs/Demonstrations/Handouts
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 6 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #14 Formal lab report	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 18	
Performance Standards	
Chemistry 5.5: Calculate the molar mass, percent composition, empirical formulas and molecular formulas.	
Unit/Topic./Lesson	
Chemical Composition (cont.) 6.7 Empirical formulas 6.8 Molecular formulas	
Objectives (Students will...)	Essential Question
Understand empirical vs. molecular formulas Learn to calculate empirical & molecular formulas	What is the difference between an empirical formula and a molecular formula?
	Labs/Demonstrations/Handouts
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 6 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Test Chapter 6 (6.1-6.8)	Completed by: Comments: <i>Alternative Evaluation:</i> Paper, Project, Poster

Week 19	
Performance Standards	
<p>Chemistry 4.1: Explain how atoms combine to form compounds through both ionic and covalent bonding. Predict chemical formulas based on the number of valence electrons.</p> <p>Chemistry 4.3: Use electronegativity to explain the difference between polar and nonpolar covalent bonds.</p>	
Unit/Topic./Lesson	
Chemical Bonding 12.1 Types of chemical bonds 12.2 Electronegativity 12.3 Bond polarity & dipole moments 12.4 Stable electron configurations and ion charges 12.5 Ionic bonding and structures of ionic compounds	
Objectives (Students will...) Learn about ionic and covalent bonds and explain how they work Learn polar covalent bond. Understand nature of bonds and their relationship to electronegativity. Understand bond polarity as it relates to molecular polarity. Learn about stable electron configurations Learn to predict the formulas of ionic compounds Learn about ionic structures Understand factors that govern ionic size	Essential Question What are the types of chemical bonds?
	Labs/Demonstrations/Handouts Lab: Properties of Water Lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 12 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #20 Quiz Chapter 12 (12.1-12.5) Lab report	Completed by:
	Comments

Week 20	
Performance Standards	
<p>Chemistry 4.2: Draw Lewis dot structures for simple molecules and ionic compounds</p> <p>Chemistry 4.4: Use valence-shell electron-pair repulsion theory (VSEPR) to predict geometry the molecular (linear, trigonal planar, and tetrahedral) of simple molecules.</p>	
Unit/Topic./Lesson	
Chemical Bonding 12.6 Lewis structures 12.7 Lewis structures of molecules with multiple bonds 12.8 Molecular structure 12.9 VSEPR theory 12.10 Molecular structure: molecules with double bonds	
Objectives (Students will...) Learn to write Lewis structures Learn to write Lewis structures for molecules with multiple bonds Understand molecular structure and bond angles Learn to apply the VSEPR molecule to molecules with double bonds	Essential Question How do Lewis structures form bonds to make molecules?
	Labs/Demonstrations/Handouts Lab: The Silly Polymer lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 12 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #21 Test Chapter 12 (12.1-12.10) Lab report	Completed by:
	Comments

Week 21	
Performance Standards	
<p>Chemistry 6.1: Using the kinetic molecular theory, explain the behavior of gases and the relationship between pressure and volume (Boyle's law), volume and temperature (Charles's law), pressure and temperature (Gay-Lussac's law), and the number of particles in a gas sample (Avogadro's hypothesis). Use the combined gas law to determine changes in pressure, volume, and temperature.</p> <p>Chemistry 6.6: Use the combined gas law to determine changes in pressure, volume, or temperature</p>	
Unit/Topic/Lesson	
Gases 13.1 Pressure 13.2 Boyles' law 13.3 Charles' law 13.4 Avogadro's law 13.5 The ideal gas law	
Objectives (Students will...) Learn about atmospheric pressure and the way in which a barometer works Learn the various units of pressure Understand the law that relates pressure and volume Learn about absolute zero Learn the law relating the volume and temperature of a gas at constant moles and pressure Understand the law relating the volume and number of moles of a sample gas at a constant temperature and pressure Understand the ideal gas law	Essential Question What are the different gas laws?
	Labs/Demonstrations/Handouts Lab: $Mg + HCl \rightarrow H_2$ gas lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> Zumdahl: World of Chemistry (2002) Chapter 13 Zumdahl Easy Planner Lab experiments CD-ROM Activities & Projects CD-ROM Standardized Test Practice CD-ROM Transparency Activity WS 	<ul style="list-style-type: none"> PowerPoint Presentations DVD Virtual Labs CD-ROM Teaching Transparencies
Assessment Activities Problem Set #22 Quiz Chapter 13 (13.1-13.5) Lab report	Completion date: Completed by: Comments

Week 22	
Performance Standards	
<p>Chemistry 6.2: Explain the relationship between temperature and average kinetic energy.</p> <p>Chemistry 6.3: Perform calculations using the ideal gas law.</p> <p>Chemistry 6.4: Describe the conditions under which an ideal gas departs from a real gas.</p> <p>Chemistry 6.5: Interpret Dalton's law of partial pressures and use it to calculate partial pressures and total pressures.</p>	
Unit/Topic/Lesson	
Gases 13.6 Dalton's law of partial pressures 13.7 Laws & models: a review 13.8 The kinetic molecular theory of gases 13.9 Implications of the kinetic molecular theory 13.10 Real gases 13.11 Gas stoichiometry	
Objectives (Students will...) Understand the relationship between the partial and total pressure of a gas mixture Understand the relationship between laws and models Understand the kinetic molecular theory Understand the term temperature Learn how the kinetic molecular theory explains the gas laws Describe the properties of real gases Understand the molar volume of an ideal gas Define STP Use these concepts and the ideal gas equation	Essential Question What is the Kinetic Molecular Theory?
	Labs/Demonstrations/Handouts Lab: Archimedes Cartesian Diver Lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> Zumdahl: World of Chemistry (2002) Chapter 13 Zumdahl Easy Planner Lab experiments CD-ROM Activities & Projects CD-ROM Standardized Test Practice CD-ROM Transparency Activity WS 	<ul style="list-style-type: none"> PowerPoint Presentations DVD Virtual Labs CD-ROM Teaching Transparencies
Assessment Activities Problem Set #23 Test Chapter 13 (13.1-13.11) Lab report	Completion date: Completed by: Comments

Week 23	
Performance Standards	
<p>Chemistry 2.8: Describe alpha, beta, and gamma particles. Describe the properties of them and write balanced nuclear reactions.</p> <p>Chemistry 2.10: Compare the process of radioactive decay as the spontaneous breakdown of certain unstable elements into new elements through the spontaneous emission of alpha or beta particles.</p>	
Unit/Topic./Lesson	
Radioactivity and Nuclear Energy 19.1 Radioactive decay 19.2 Nuclear transformations 19.3 Detection of radioactivity and Half-life 19.4 Radio carbon dating 19.5 Medical applications of radiation	
Objectives (Students will...) Learn the types of Radioactive decay Learn to write nuclear equations that describe radioactive decay Learn how one element may be changed into another by particle bombardment Learn about radiation detection instruments Understand half life Learn how objects can be dated by radioactivity Discuss the use of radiotracers in medicine	Essential Question What is Nuclear chemistry?
	Labs/Demonstrations/Handouts Lab: Chromatography of Leaves
Teacher Resources <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 19 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	Media Resources <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities Problem Set #24 Quiz Chapter 19 (19.1-19.5) Lab report	Completion date: Completed by: Comments

Week 24	
Performance Standards	
<p>Chemistry 2.9: Compare nuclear fission and nuclear fusion and mass defect.</p> <p>Chemistry 2.11: Explain the concept of half-life of a radioactive element, e.g., explain why the half-life of C-14 has made carbon dating a powerful tool in determining the age of very old objects</p>	
Unit/Topic./Lesson	
Radioactivity and Nuclear Energy 19.6 Nuclear energy 19.7 Nuclear fission 19.8 Nuclear reactors 19.9 Nuclear fusion 19.10 Effects of radiation	
Objectives (Students will...) Introduce fusion and fission as producers of nuclear energy Understand how a nuclear reactor works Explain how radiation damages human tissue	Essential Question What is the difference between Nuclear fission and Nuclear fusion?
	Labs/Demonstrations/Handouts Lab: The half-life of Pennium Lab
Teacher Resources <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 19 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	Media Resources <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities Problem Set #25 Test Chapter 19 (19.1-19.10) Lab report	Completion date: Completed by: Comments

Week 25	
Performance Standards	
<p>Chemistry 4.5: Identify types of intermolecular forces present based on molecular geometry and polarity.</p> <p>Chemistry 6.4: Describe the law of conservation of energy. Explain the difference between an endothermic process and an exothermic process.</p>	
Unit/Topic./Lesson	
Liquids & Solids 14.1 Intermolecular forces 14.2 Water & its phase changes 14.3 Energy requirements for changes in state 14.4 Evaporation & vapor press. 14.5 B.P. & vapor pressure 14.6 Types of solids 14.7 Bonding in solids	
Objectives (Students will...)	Essential Question
<p>Learn about dipole-dipole attraction, hydrogen bonding and London dispersion forces</p> <p>Understand the effect of those forces on the properties of liquids</p> <p>Understand the important features of water</p> <p>Understand and use heat of fusion and heat of vaporization</p> <p>Understand the relationship among vaporization, condensation and vapor pressure</p> <p>Relate the boiling point of water to its vapor pressure</p> <p>Learn the various types of crystalline solids</p> <p>Understand the interparticle forces in a crystalline solid</p> <p>Learn how the bonding in metals determines metallic properties</p>	What are intermolecular forces?
	Labs/Demonstrations/Handouts
	Lab: The Golden Penny Lab
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 14 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #26 Test Chapter 14 (14.1-14.7) Lab Report	Completed by: Comments

Week 26	
Performance Standards	
<p>Chemistry 7.1: Describe the process by which solutes dissolve in solvents</p> <p>Chemistry 7.2: Identify and explain the factors that affect the rate of dissolving.</p> <p>Chemistry 7.4: Calculate concentration in terms of molarity, molality, and percent by mass.</p> <p>Chemistry 7.5: Use a solubility curve to determine saturation values at different temperatures.</p>	
Unit/Topic./Lesson	
Solutions 15.1 Solubility 15.2 Solution composition 15.3 Factors affecting rates of dissolution 15.4 Mass percent 15.5 Molarity	
Objectives (Students will...)	Essential Question
<p>Understand the process of dissolving</p> <p>Learn why certain substances dissolve in water</p> <p>Learn the qualitative terms associated with the concentration of a solution</p> <p>Understand the factors that affect the rate at which a solute dissolves</p> <p>Understand the concentration term mass percent and how to calculate it</p> <p>Understand molarity and calculate the number of moles of solute present</p>	What is molarity?
	Labs/Demonstrations/Handouts
	Lab: Effectiveness of an antacid
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 15 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
Problem Set #27 Quiz Chapter 15 (15.1-15.5) Lab Report	Completed by: Comments

Week 27	
Performance Standards	
<p>Chemistry 7.3: Describe the dynamic equilibrium that occurs in saturated solutions.</p> <p>Chemistry 7.6: Calculate freezing point depression and boiling point elevation.</p> <p>Chemistry 7.7: Write net ionic equations for precipitation reactions in aqueous solutions.</p>	
Unit/Topic./Lesson	
<p>Solutions</p> <p>15.6 Dilution</p> <p>15.7 Stoichiometry of solution reactions</p> <p>15.8 Neutralization reactions</p> <p>15.9 Normality</p> <p>15.10 The properties of solutions: Boiling Point and Freezing Point</p>	
Objectives (Students will...)	Essential Question
<p>Learn to calculate the concentration of a solution made by diluting a stock solution</p> <p>Understand the strategy for solving stoichiometric problems for solution reactions</p> <p>Learn how to do calculations involved in acid-base reactions</p> <p>Learn about normality and equivalent weight</p> <p>Understand the effect of a solute on solution properties</p>	<p>How do neutralization reactions work?</p>
	Labs/Demonstrations/Handouts
	<p>Lab: The solubility of Ammonia Lab</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 15 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Problem Set #28</p> <p>Test Chapter 15 (15.1-15.10)</p> <p>Lab Report</p>	
	Completed by:
	Comments

Week 28	
Performance Standards	
<p>Chemistry 8.1: Define Arrhenius' theory of acids and bases in term of the presence of hydronium & hydroxide ions. . .</p> <p>Chemistry 8.2: Compare and contrast the nature, behavior, concentration and strength of acids & bases</p> <p>Chemistry 8.3: Identify a buffer and explain how it works.</p> <p>Chemistry 8.4: Explain how indicators are used in titrations.</p> <p>Chemistry 8.5: Describe the acid-base titration and its equivalence point.</p> <p>Chemistry 8.7: Calculate pH or pOH</p>	
Unit/Topic./Lesson	
<p>Acids & Bases</p> <p>16.1 Acids & bases</p> <p>16.2 Acid strength</p> <p>16.3 Water as an acid & base</p> <p>16.4 pH scale</p> <p>16.5 Measuring pH</p> <p>16.6 calculating pH of a strong acid</p> <p>16.7 Acid-base titrations</p> <p>16.8 Buffered solutions</p>	
Objectives (Students will...)	Essential Question
<p>Learn about two models of acids and bases and the relationship of conjugate acid-base pairs</p> <p>Understand acid strength and the relationship that and the strength of the conjugate base</p> <p>Learn about the ionization of water</p> <p>Understand pH or pOH</p> <p>Learn how to find pH or pOH</p> <p>Learn about acid-base titrations</p> <p>Understand the characteristics of buffered solutions</p>	<p>What are acids and bases?</p>
	Labs/Demonstrations/Handouts
	<p>Lab: Reaction of Metals with Acids Lab</p>
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 16 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Problem Set #29</p> <p>Test CH 16 (16.1-16.8)</p> <p>Lab Report</p>	
	Completed by:
	Comments

Week 29	
Performance Standards	
<p>Chemistry 7.5: Identify the factors that affect the rate of a chemical reaction (temperature, mixing, concentration, particle size, surface area, catalyst).</p> <p>Chemistry 7.6: Predict the shift in equilibrium when a system is subjected to a stress (LeChatelier's principle) and identify the factors that can cause a shift in equilibrium (concentration, pressure, volume, temperature).</p>	
Unit/Topic./Lesson	
Equilibrium 17.1 How chemical reactions occur 17.2 Conditions affecting reaction rates 17.3 Heterogeneous reactions 17.4 The equilibrium condition 17.5 Chemical equilibrium	
Objectives (Students will...) Understand how the collision model of how chemical reactions occur Understand activation energy Understand how a catalyst speeds up a reaction Observe reactions with reactants or products in different phases Learn how equilibrium is established Learn the characteristics of chemical equilibrium	Essential Question What is equilibrium? Labs/Demonstrations/Handouts Lab: Ksp of silver acetate
Teacher Resources <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 17 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	Media Resources <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities Problem Set #30 Quiz CH 17 (17.1-17.5) Lab Report	Completion date: Completed by: Comments

Week 30	
Performance Standards	
<p>Chemistry 7.5: Identify the factors that affect the rate of a chemical reaction (temperature, mixing, concentration, particle size, surface area, catalyst).</p> <p>Chemistry 7.6: Predict the shift in equilibrium when a system is subjected to a stress (LeChatelier's principle) and identify the factors that can cause a shift in equilibrium (concentration, pressure, volume, temperature).</p>	
Unit/Topic./Lesson	
Equilibrium 17.6 The equilibrium constant 17.7 Heterogeneous equilibria 17.8 Le Chatelier's principle 17.9 Application of the equilibrium constant 17.10 Solubility equilibria	
Objectives (Students will...) Understand the law of chemical equilibrium and learn to calculate values for the equilibrium constant Understand the role that liquids and solids play in constructing the equilibrium expression Learn to predict changes that occur when a system at equilibrium is disturbed Learn to calculate equilibrium concentration fro equilibrium constants	Essential Question How does Le Chatelier's principle effect equilibrium? Labs/Demonstrations/Handouts Lab: Making Rock Candy Lab
Teacher Resources <ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 17 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	Media Resources <ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities Problem Set #31 Test Chapter 17 (17.1-17.10) Lab Report	Completion date: Completed by: Comments

Week 31		Week 32	
Performance Standards		Performance Standards	
<p>Chemistry 8.4: Describe oxidation and reduction reactions and give some everyday examples, such as fuel burning and corrosion. Assign oxidation numbers in a reaction.</p>		<p>Chemistry 8.4: Describe oxidation and reduction reactions and give some everyday examples, such as fuel burning and corrosion. Assign oxidation numbers in a reaction.</p>	
Unit/Topic./Lesson		Unit/Topic./Lesson	
<p>Oxidation-Reduction Reactions and Electrochemistry 18.1 Red-Ox reactions 18.2 Oxidation states 18.3 Reaction between nonmetals 18.4 Balancing Red-Ox reactions by their half reaction method</p>		<p>Oxidation-Reduction Reactions and Electrochemistry 18.5 Electrochemistry 18.6 Batteries 18.7 Corrosion 18.8 Electrolysis</p>	
Objectives (Students will...)	Essential Question	Objectives (Students will...)	Essential Question
<p>Learn about metal-nonmetal oxidation-reduction reactions Learn how to assign oxidation states Understand oxidation and reduction in terms of oxidation states Identify oxidation and reducing agents Learn to balance oxidation-reduction equations by using half-reactions</p>	<p>What are Redox reactions?</p>	<p>Understand the term electrochemistry Learn to identify the components of an electrochemical (galvanic) cell Learn the composition and operation of commonly used batteries Understand the electrochemical nature of corrosion and learn some ways to prevent it Understand the process of electrolysis</p>	<p>How does electrochemistry work?</p>
Labs/Demonstrations/Handouts		Labs/Demonstrations/Handouts	
Teacher Resources		Teacher Resources	
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 18 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies 	<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 18 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities		Assessment Activities	
<p>Problem Set #32 Quiz Chapter 18 (18.1-18.4) Lab Report</p>	<p>Completion date: Completed by: Comments</p>	<p>Problem Set #33 Test Chapter 18 (18.1-18.8) Lab Report</p>	<p>Completion date: Completed by: Comments</p>

Week 33	
Performance Standards	
<i>The students will:</i>	
Unit/Topic./Lesson	
Organic Chemistry 20.1 Carbon Bonding 20.2 Alkanes 20.3 Structural Formulas & Isomerism 20.4 Naming Alkanes	
Objectives (Students will...)	Essential Question
<p>Understand the types of bonds formed by the carbon atom</p> <p>Learn about the alkanes-compounds that contain saturated carbon atoms</p> <p>Learn about structural isomers and how to draw their structural formulas</p> <p>Learn the system for naming alkanes and substituted alkanes</p>	What types of bonds are formed in the carbon atom?
	Labs/Demonstrations/Handouts
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 20 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Homework: Chapter questions or worksheet</p> <p>Quiz</p>	<p>Completed by:</p> <p>Comments</p>

Week 34	
Performance Standards	
<i>The students will:</i>	
Unit/Topic./Lesson	
Organic Chemistry 20.5 Petroleum 20.6 Reactions of Alkanes 20.7 Alkenes & Alkynes 20.8 Aromatic Hydrocarbons 20.9 Naming Aromatic Hydrocarbons	
Objectives (Students will...)	Essential Question
<p>Learn about the composition and uses of petroleum</p> <p>Learn various types of chemical reactions that alkanes undergo</p> <p>Learn to name hydrocarbons with double bonds (alkenes) triple bonds (alkynes)</p> <p>Understand addition reactions</p> <p>Learn about aromatic hydrocarbons</p> <p>Learn the system for naming aromatic hydrocarbons</p>	What is the difference between Alkanes, Alkenes, Alkynes, and Aromatic hydrocarbons?
	Labs/Demonstrations/Handouts
Teacher Resources	Media Resources
<ul style="list-style-type: none"> • Zumdahl: World of Chemistry (2002) Chapter 20 • Zumdahl Easy Planner • Lab experiments CD-ROM • Activities & Projects CD-ROM • Standardized Test Practice CD-ROM • Transparency Activity WS 	<ul style="list-style-type: none"> • PowerPoint Presentations DVD • Virtual Labs CD-ROM • Teaching Transparencies
Assessment Activities	Completion date:
<p>Homework: Chapter questions or worksheet</p> <p>Test</p>	<p>Completed by:</p> <p>Comments</p>