



Saddlebrook Preparatory School

Curriculum Map- Scope and Sequence:
Chemistry

Purpose of Planning	Unit One Introduction to Chem Q1, W1-2	Unit Two Atoms Q1, W3-6	Unit Three Periodic Law Q1, W7-8	Unit Four Chemical Bonding Q1-Q2, W9-15	Unit Five Stoichiometry Q2, W16-18
Unit Topic and Overview:	The study of chemistry involves multiple science disciplines and a strong mathematical understanding to relate the composition, structure, and properties of matter with the process and energy changes matter undergoes.	The study of atoms focuses on the scientists involved and their experiments that lead to the discovery of subatomic particles within an atom, and relates how understanding the chemical composition of elements affects all matter.	The study of periodic law explores the trends that lead to the development and revisions of the modern periodic table.	The study of chemical bonding connects the types of bonded atoms with the naming/writing of chemical compounds as formulas, and the application of conservation laws within chemical equations to represent chemical reactions.	The study of stoichiometry mathematically connects the chemical equations of an experiment to the amounts of matter used in different chemical reactions.
Prerequisite Student Knowledge *What should students have previously mastered prior to this unit?	Students should have background knowledge of physical sciences and be familiar with most vocabulary terms.	Students should have background knowledge of the subatomic particles based on vocabulary; properties or different models of the atom.	Students should have background knowledge of the existence of the periodic table or may have memorized parts previously.	Students should have background knowledge of atoms combining to make compounds/molecules and seen simple formulas or chemical equations.	Students should have background knowledge of conversion factors and some simple mole calculations problems.



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<p>Essential Knowledge & Student Expectations *What are the anticipated learning outcomes for students?</p>	<p>Students will demonstrate knowledge of the composition, structure, and properties of matter; additionally apply this knowledge to a student-driven science project.</p> <p>Essential Questions: 1. Differentiate the various branches within the study of chemistry. 2. Distinguish how scientists classify types of matter and how elements are classified. 3. Generate a hypothesis to test an inference you have observed. Summarize your experimental findings.</p>	<p>Students will demonstrate knowledge of subatomic particles and the evolution of models of the atom evolved.</p> <p>Essential Questions: 1. Explain, verbally and with diagrams, the evolution of the model of the atom. 2. Compare and contrast the scientists and experiments that studied subatomic particles that lead to models of the atom. 3. Correctly apply the four electron configurations for any element on the periodic table.</p>	<p>Students will demonstrate knowledge of the periodic trend present in positioning elements in the periodic table.</p> <p>Essential Questions: 1. Compare and contrast the scientists and their experiments that lead to the creation of the modern periodic table. 2. Explain, verbally and with arrows across the periodic table, the periodic trends for the arrangement of electrons in groups and periods.</p>	<p>Students will demonstrate knowledge of writing names and formulas for compounds in chemical reactions, construct the molecular geometries for these compounds, and identify the reactions taking place.</p> <p>Essential Questions: 1. Analyze the different types of chemical bonds and the molecular compounds these bonds create. 2. Correctly identify and construct models of molecular geometry for compounds. 3. Using bond types, correctly name or write the molecular formulas for compounds, then combine molecular formulas into balanced chemical equations, and identify the type of reaction taking place.</p>	<p>Students will demonstrate knowledge of using chemical equations to solve for mathematical unknowns within a experiment.</p> <p>Essential Questions: 1. Given an amount of a known substance, mathematically show the theoretical yield for any other unknown substance in that chemical equation. 2. For experiments, calculate theoretical yields, identify limiting or excess reactants, solve percent yield, and explain the percent error in your experiment.</p>
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<p>Anchor Text and Supplemental Texts *Illustrate texts used, and how students' knowledge builds across units.</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Lab Handbook xxii Ch 1 Matter and Change (pg2-25) Ch 2 Measurements and Calculations (pg26-61)</p> <p>Literary Texts:</p> <p>Informational Texts: From Library- will vary with student project topics</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 3 Atoms: The Building Blocks of Matter (pg62-89) Ch 4 Arrangement of Electrons in Atoms (90-123)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 5 Periodic Law (pg124-163)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch6 Chemical Bonding (pg 164-205) Ch 7 Chemical Formulas and Chemical Compounds (pg 206-245) Ch 8 Chemical Equations and Reactions (pg 246-281)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 9 Stoichiometry</p> <p>Literary Texts:</p> <p>Informational Texts:</p>
<p>Multi-Media Links: *Videos, presentations, any and all supplemental online material.</p>	<p>-Ch 1 Virtual Lab: Separating Substances -Ch 2 Virtual Lab: Using Units and Measurement</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: Elements of Chemistry: Atoms: The Building Blocks of Matter -Ch 4 Virtual Lab: Identifying Elements -Discovery Education Video: Standard Deviants School of Chemistry: Inside the Atom</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: The Periodic Table -Discovery Education Video: The Periodic Table: Reactions and Relationships - WebQuest: Mixed Reception</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: Bonding: Between Atoms -Discovery Education Video: Standard Deviants Teaching Systems: Chemistry: Model 02: Bonds and Molecular Structure -Ch 6 Virtual Lab: Determining Bond Types -Ch 7 Virtual Lab: Determining an Empirical Formula</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: Standard Deviants teaching Systems: Chemistry: Model 07: Stoichiometry -Ch 9 Virtual Lab: Determining Limiting Reactant</p> <p>*Student premium resources available for student help/scaffolding</p>



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<p>Instructional Practices: * Various Instructional Modalities, including Technology used</p>	<p>-Bell work and discussion of Essential Questions daily -Lecture with PowerPoint, students take notes (pen/paper) Ch 1 & Ch 2 -Focused reading of anchor text and vocabulary -Checking unit comprehension with practice problems and checking HW daily -Outlining student driven experiment/project -Scientific research methods on student laptops</p>	<p>-Bell work and discussion of Essential Question daily -Lecture with PowerPoint, students take notes (pen/paper) Ch 3 & Ch 4 -Focused reading of anchor text and vocabulary -Checking unit comprehension with practice problems and checking HW daily -Lab Periodic Trends (P Sci) -Virtual Lab demonstrates use of skills/knowledge gained this unit -Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily -Lecture with PowerPoint, students take notes (pen/paper) -Focused reading of anchor text and vocabulary -Checking unit comprehension with practice problems and checking HW daily -WebQuest: Mixed Reception to identify unknown chemical substances - WebQuest connects using periodic table to properties of known elements -Virtual Lab demonstrates use of skills/knowledge gained this unit -Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily -Lecture with PowerPoint, students take notes (pen/paper) Ch 6, Ch 7 & Ch 8 -Focused reading of anchor text and vocabulary -Checking unit comprehension with practice problems and checking HW daily -Ch 6 practice problems -Virtual Lab demonstrates use of skills/knowledge gained this unit -Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily -Lecture with PowerPoint, students take notes (pen/paper) -Focused reading of anchor text and vocabulary -Checking unit comprehension with practice problems and checking HW daily -Lab S 'mores limiting reactants -Lab Baking Soda/Vinegar % yield -Virtual Lab demonstrates use of skills/knowledge gained this unit -Virtual Investigation as resource to reinforce concepts with simulations</p>
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<p>Assessments: *Types and Measurements of Mastery</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, weekly check points for student project, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, labs, and WebQuest Mixed Reception.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs. *Semester 1 Final Exam</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>
<p>Interdisciplinary Lessons & Projects: *State additional content areas and title all lesson(s) and project(s)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math) -Student driven projects (Science, LA/Writing, Research Skills, Math, Technology)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math) -History/ biographies in lecture notes</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math) -WebQuest: Mixed Reception (Science, LA/Writing, Technology, Math, Drama) -History/ biographies in lecture notes</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math) -Lab: S 'mores and Baking soda (Science, LA/Writing, Math, Culinary Arts/Nutrition)</p>
<p>Honors Course Differentiation(s):</p>	<p>-E-mail proposals for Q1 scientist project -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-E-mail outline for Q1 scientist project -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-E-mail final paper for Q1 scientist project -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-E-mail proposals for Q2 Adopt-an-element project -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-Adopt-an-element informational fact sheets and advertisement due week 17. -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>



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Integrated Common Core or NGSSS Standards (List): *See Below for Links	CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.N.1.1-SC.912.N.1.7, SC.912.N.2.1-SC.912.N.2.5, SC.912.N.3.1-SC.912.N.3.5, SC.912.N.4.1-SC.912.N.4.2	CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.3, SC.912.P.8.4, SC.912.P.8.5, SC.912.P.12.2,	CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.13	CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.8, SC.912.P.8.6,	CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.8, SC.912.P.8.9
Integrated CCSS Writing Standards (List): *See Below for Links	CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9	CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9	CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9	CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9	CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9
Links to CCSS/NGSSS Curriculum Standards:	The following links will be used to incorporate the CCSS and other applicable standards: <ul style="list-style-type: none"> • The Common Core State Standard expectations in grade 9-12 • The K-12 English LA and Content Area Writing Standards • The K-12 Reading Standards • The K-12 Mathematics Standards • The K-12 NGSSS Science & Social Studies Standards 				



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Purpose of Planning	Unit Six States of Matter Q3, W19-25	Unit Seven Acids and Bases Q3-Q4, W26-29	Unit Eight Types of Reactions Q4, W30-36	Unit Nine Branches of Chem If time allows	
Unit Topic and Overview:	The study of the states of matter involves how the states of matter (solids, liquids, gases, or plasmas) contain unique properties and undergo change in solutions or ionic forms.	The study of acids and bases explores the similarities and differences among acids-bases, and how to use titration reactions to deduce mathematically or calculate logarithmic values for pH or pOH from ionic concentrations.	The study of types of reactions focuses on reaction energies and reaction kinetics with emphasis on how chemical equilibriums or oxidation-reduction reactions occur.	The study of chemistry can be broken down into 6 major branches; this unit takes an individual approach to focus on electrochemistry, nuclear chemistry, organic chemistry, and biochemistry topics.	
Prerequisite Student Knowledge *What should students have previously mastered prior to this unit?	Students should have background knowledge of the states of matter and the vocabulary relating the various scientific laws.	Students should have background knowledge of vocabulary relating acids and bases to the pH scale.	Students should have background knowledge of kinetics/movement of objects from physical sciences.	Students should have background knowledge of branches of chemistry and some may have studied individual ones too.	



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<p>Essential Knowledge & Student Expectations *What are the anticipated learning outcomes for students?</p>	<p>Students will demonstrate knowledge of the states of matter and the processes that transition through the states of matter.</p> <p>Essential Questions: 1. Apply the gas laws to example problems or labs to solve real-world examples. 2. Differentiate between types of mixtures and calculate concentrations (molarity or molality) of unknown substances from known concentrations. 3. Correctly calculate boiling-point elevations or freezing-point depressions for ionic substances in aqueous solutions.</p>	<p>Students will demonstrate knowledge of properties of acids-bases, understanding of acid-base reactions, and mathematically calculate logarithmic values for concentrations, pH, or pOH.</p> <p>Essential Questions: 1. Relate examples of acids-bases and salts, in life, as well as in chemical equations and identify the different acid-base pairs to their conjugate acid-base pairs. 2. Determine concentrations of ions, pH or pOH functions for titration reactions.</p>	<p>Students will demonstrate knowledge of the impact of kinetics affecting the changes of energies or equilibriums in specific chemical reactions.</p> <p>Essential Questions: 1. Identify the factors influencing reactions and calculate the reaction rates for chemical reactions. 2. Define the factors influencing equilibrium and calculate the solubility equilibrium for chemical reactions.</p>	<p>Students will demonstrate knowledge of the connectivity within the chemistry branches affect their daily lives.</p> <p>Essential Questions: 1. Explain the importance of the products or services provided by the following branches of chemistry: electrochemistry, nuclear chemistry, organic chemistry, and biological chemistry.</p>	
<p>Anchor Text and Supplemental Texts *Illustrate texts used, and how students' knowledge builds across units.</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 10 States of Matter (pg 310-339) Ch 11 Gases (pg 340-377) Ch 12 Solutions (pg 378-409) Ch 13 Ions in Aqueous Solutions and Colligative Properties (pg 410-439)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 14 Acids and Bases (pg 440-469) Ch 15 Acid-Base Titrations and pH (pg 471-499)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 16 Reaction Energy (pg 500-527) Ch 17 Reaction Kinetics (pg 528-553) Ch 18 Chemical Equilibrium (pg 554-593) Ch 19 Oxidation-Reduction Reactions (pg 594-615)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	<p>Anchor Texts: Sarquis, M. and Sarquis, J. <u>Modern Chemistry</u>. Orlando, Florida. Holt McDougal, 2012. Ch 20 Electrochemistry (pg 616-639) Ch 21 Nuclear Chemistry (pg 640-667) Ch 22 Organic Chemistry (pg 668-705) Ch 23 Biological Chemistry (pg 706-737)</p> <p>Literary Texts:</p> <p>Informational Texts:</p>	



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<p>Multi-Media Links: *Videos, presentations, any and all supplemental online material.</p>	<p>-Discovery Education Video: Particle Model and Kinetic Theory</p> <p>-Discovery Education Video: Standard Deviants School of Chemistry: Molecular Geometry</p> <p>-Discovery Education Video: Standard Deviants Teaching Systems: Chemistry: Model 03: States of Matter</p> <p>-Ch 11 Virtual Lab: Using the Ideal Gas Law</p> <p>-Ch 13 Virtual Lab: Investigating Aqueous Solutions</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: Elements of Chemistry: Acids, Bases, and Salts</p> <p>-Discovery Education Video: Standard Deviants School of Chemistry: Solutions and Dilutions</p> <p>-Discovery Education Video: Chemistry Connections: Acid-base Stoichiometry and Titration Curves</p> <p>-Discovery Education Video: Chemistry Connections: Acid-Base Calculations</p> <p>-Ch 14 Virtual Lab: Exploring Acids and Bases</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Discovery Education Video: Standard Deviants Teaching systems: Chemistry: Model 06: Chemical Reactions and Equilibrium</p> <p>-Discovery Education Video: Chemistry Connections: Writing and Predicting Equilibrium for Bronsted-Lowry Equations</p> <p>-Ch 17 Virtual Lab: Exploring Reaction Rates</p> <p>-Ch 18 Virtual Lab: Investigating Dynamic Equilibrium</p> <p>*Student premium resources available for student help/scaffolding</p>	<p>-Ch 21 Virtual Lab: Exploring Radioactivity</p> <p>*Student premium resources available for student help/scaffolding</p>	
<p>Instructional Practices: * Various Instructional Modalities, including Technology used</p>	<p>-Bell work and discussion of Essential Questions daily</p> <p>-Lecture with PowerPoint, students take notes (pen/paper) Ch 10, Ch 11, Ch 12, & Ch 13</p> <p>-Focused reading of anchor text and vocabulary</p> <p>-Checking unit comprehension with practice problems and checking HW daily</p> <p>-Virtual Lab demonstrates use of skills/knowledge gained this unit</p> <p>-Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily</p> <p>-Lecture with PowerPoint, students take notes (pen/paper) Ch 14 & Ch 15</p> <p>-Focused reading of anchor text and vocabulary</p> <p>-Checking unit comprehension with practice problems and checking HW daily</p> <p>-Lab: acid-base and pH</p> <p>-Virtual Lab demonstrates use of skills/knowledge gained this unit</p> <p>-Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily</p> <p>-Lecture with PowerPoint, students take notes (pen/paper) Ch 16, Ch 17, Ch 18, & Ch 19</p> <p>-Focused reading of anchor text and vocabulary</p> <p>-Checking unit comprehension with practice problems and checking HW daily</p> <p>-MRE Lab</p> <p>-Virtual Lab demonstrates use of skills/knowledge gained this unit</p> <p>-Virtual Investigation as resource to reinforce concepts with simulations</p>	<p>-Bell work and discussion of Essential Questions daily</p> <p>-Lecture with PowerPoint, students take notes (pen/paper)</p> <p>-Focused reading of anchor text and vocabulary</p> <p>-Checking unit comprehension with practice problems and checking HW daily</p> <p>-Virtual Lab demonstrates use of skills/knowledge gained this unit</p> <p>-Virtual Investigation as resource to reinforce concepts with simulations</p>	



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**Curriculum Map- Scope and Sequence:
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<p>Assessments: *Types and Measurements of Mastery</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs.</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	<p>Informal Assessments: Bell work/Exit slips daily, class lectures/discussions, checking reading/vocabulary comprehension, checking HW comprehension.</p> <p>Formal Assessments: Pre-quiz, chapter quiz, chapter test, unit test, and labs. *Semester 2 Final Exam</p> <p>Objective: 80% of student athletes will be able to demonstrate mastery (mastery is defined as 80%+) on formal assessments at the completion of the unit.</p>	
<p>Interdisciplinary Lessons & Projects: *State additional content areas and title all lesson(s) and project(s)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math) -MRE Lab (Science, LA/Writing, Engineering, Intelligence, Math, Culinary Arts/ Nutrition)</p>	<p>-Virtual Investigation, labs (Science, LA/Writing, Technology, Math)</p>	
<p>Honors Course Differentiation(s):</p>	<p>-E-mail proposal of research topic for Q3 Chemistry in Society Project -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-Persuasive PowerPoint and outline due week 24. -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-E-mail proposal for Q4 Career in Chemistry project. -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	<p>-Persuasive presentation (magazine, video, PowerPoint) due week 35. -Additional test questions and extended response questions to demonstrate mastery. -Honors students required to accompany their projects to the school and district science fair.</p>	



Curriculum Map- Scope and Sequence: Chemistry

Saddlebrook Preparatory School

<p>Integrated Common Core or NGSSS Standards (List): *See Below for Links</p>	<p>CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.1, SC.912.P.8.2, SC.912.P.12.10, SC.912.P.12.11, SC.912.P.12.12,</p>	<p>CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.11, SC.912.P.8.7, SC.912.P.12.12,</p>	<p>CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.8.10, SC.912.P.8.7, SC.912.P.8.8, SC.912.P.12.13,</p>	<p>CCSS.ELA-Literacy.RST.11-12.1 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.4 CCSS.ELA-Literacy.RST.11-12.5 CCSS.ELA-Literacy.RST.11-12.6 CCSS.ELA-Literacy.RST.11-12.7 CCSS.ELA-Literacy.RST.11-12.8 CCSS.ELA-Literacy.RST.11-12.9 CCSS.ELA-Literacy.RST.11-12.10 SC.912.P.10.11, SC.912.P.10.12,</p>	
<p>Integrated CCSS Writing Standards (List): *See Below for Links</p>	<p>CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9</p>	<p>CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9</p>	<p>CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9</p>	<p>CCSS.ELA-Literacy.W.11-12.1 CCSS.ELA-Literacy.W.11-12.2 CCSS.ELA-Literacy.W.11-12.4 CCSS.ELA-Literacy.W.11-12.5 CCSS.ELA-Literacy.W.11-12.7 CCSS.ELA-Literacy.W.11-12.9</p>	
<p>Links to CCSS/NGSSS Curriculum Standards:</p>	<p>The following links will be used to incorporate the CCSS and other applicable standards:</p> <ul style="list-style-type: none"> • The Common Core State Standard expectations in grade 9-12. • The K-12 English LA and Content Area Writing Standards • The K-12 Reading Standards • The K-12 Mathematics Standards • The K-12 NGSSS Science & Social Studies Standards 				

