**Chemical Reactions Unit Plan**

| Day | Curricular Reference | Expectations of the Day | Text Reference | Suggested Homework | Success CriteriaBy the end of the lesson, students will be able to… | Yes! I Can… |
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| 1 | C 2.2 | Law of Conservation of MassBalancing Chemical Reaction EquationsPractice with Word and Chemical Equations | Section 4.1 | Pg. 112 # 1Pg. 113 # 3Pg. 116 # 6Pg .117 # 7Pg. 118 # 4Worksheet | * Define the law of conservation of mass, and it’s relation to reactions
* Balance a chemical reaction with the use of coefficients
* Use nomenclature to write word equations for a balanced chemical reaction
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| 2 | C 2.2C 2.3C 2.4C 3.1 | Types of Chemical Reactions* Classifying Reactions using patterns
 | Section 4.2 | Pg. 122 # 10, 12Pg. 123 # 15, 16Pg. 125 # 1, 2Worksheet | * Define a synthesis reaction, and predict the product formed from a synthesis reaction
* Define a decomposition reaction, and predict the products formed from a decomposition reaction
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| 3 | C 2.2C 2.3C 2.5C 3.1 | Types of Chemical Reactions* Predicting Products of the Reactions
* Activity Series of Metals
 | Section 4.2 and 4.3 | Pg. 127 # 21Pg. 131 # 22 | * Using the activity series, predict whether or not a displacement reaction can occur
* Predict the outcome of the reaction, and represent it with a balanced chemical equation
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| 4 | C 2.4C 2.5 C 2.6 | Double Displacement Reactions* Solubility Guidelines

More Practice for Predicting Products | Section 4.3 | Page 135 # 27, 28 | * Understand the basics for a double displacement reaction, in relation to ions
* Using solubility rules, predict the formation of precipitates, where applicable
* Predict the outcome of the reaction, and represent it with a balanced chemical equation
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| 5 | C .3 | LAB ACTIVITYDistinguishing Between Types of Reactions* Predict type of reaction
* Observe and record evidence of Chemical Change
 | Lab HandoutUse Page 140 Concept Organizer as well as  | Chapter 4 Review for Quiz! | * Observe chemical reactions and determine qualitative properties providing evidence of a chemical change
* Determine the reaction type demonstrated, and create a balanced chemical equation for the scenario
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| 6 | C 2.2C 2.3C 2.5C 3.1 | QUIZ – Types of Chemical ReactionsLAB ACTIVITY continued …* Write Balanced Chem Rxn Eqns
 | Lab Handout | Lab Handout completed for evaluation | * Observe chemical reactions and determine qualitative properties providing evidence of a chemical change
* Determine the reaction type demonstrated, and create a balanced chemical equation for the scenario
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| 7 | C 1.2 | APPLICATIONSResearch Topics for Industrial Rxns * Production of NH3, H2SO4 etc.
 | See Nelson Chemistry 11 textbook pages | Answer Q from Nelson Textbook | * Research and discuss different gases produced through industrial reactions that are harmful to society
* Analyze the effects these products have directly to our lives
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| 8 | C 2.8C 3.3 | LAB ACTIVITYSynthesis of Acids and Bases (May need to do virtual or via video if there is no way to generate sufficient oxygen gas) | Lab Handout | Answer Lab Analysis Q on Worksheet | * Use knowledge of types of reactions with elements on the periodic table and water to synthesize an acid and a base
* Use virtual lab techniques to see ideal conditions for the creation of an acid and a base
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| 9 | C 3.1 | Complete and Incomplete Combustion Rxns LAB ACTIVITYComplete and Incomplete Combustion* Discuss answers to Analysis Q
 | Section 14.1Lab Handout | Page 584 #2-4 | * Define a combustion reaction, and predict the products formed from a combustion reaction
* Differentiate between a complete and incomplete combustion reaction, and the conditions that define each
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| 10 | C 1.1 | APPLICATIONS“Green Chemistry” assignment from pages in the Nelson textbook | See Nelson Chemistry 11 textbook pages | Study for Unit Test |  |  |
| 11 |  | UNIT REVIEW | Use Pages from New McGraw-Hill Textbook as Handout | Lab Questions |  |  |
| 12 |  | **Unit Test** |  |   |  |  |