

Unit 10: Chemical Reactions

A: Chemical Equation--the Law of Conservation of Matter and balancing Chemical Equations

B: The reaction process

- Chemical Equilibrium
- Collision Theory
- Potential Energy Diagrams
- Factors Affecting Reaction Rate
- Measuring heat of reaction with calorimetry

C. Predicting products of the different reaction type

Resources and Assignments:

Description	Resources
Section 10A--Chemical equations and types of reactions	
10A Notes	Vocab link Teacher Notes <i>Video links for missed notes :</i> Tips for balancing equations Other resources: Video to understand Law of Conservation of Matter
Balancing Chemical Equations (WS10A) <i>Academic Responsibility</i>	Key
Quiz 10A • 6 balancing • 2 word problems to chemical equations	Balancing chemical equations game ChemBalancer for practice Chem quiz generator
Section 10B--The reaction process	
10B Notes	Vocab link Teacher Notes Reaction Rate simulation <i>Video links for missed notes :</i> Potential Energy Diagrams Energy introduction Calorimetry Notes Heat capacity simulation

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Potential Energy Diagrams (WS10B#1) <i>Academic Responsibility</i>	Key
Calorimetry WS (WS 10B#2) <i>Academic Responsibility</i>	Key
Calorimetry Lab <i>Intraunit Assessments</i>	Lab procedure Lab data for class averages If absent: Use this data to complete the lab
Quiz 10B: 20 points - Labeling of Potential energy diagrams - Concepts surrounding collision theory, reaction rates, PE diagrams and reversible reactions - Calorimetry problem	Potential Energy Quizlet Reaction Process practice ticket
Section 10C--Predicting Products	
10C Notes	Vocab link Teacher Notes Presentation links for notes: Combustion What is Fire? video Synthesis and Decomp Single Replacement Double replacement Net ionic Old Video links for missed notes (only slightly different) Synthesis and Decomposition Combustion Single Replacement Double Replacement
Predicting Combustion Reactions (WS 10C#1) <i>Academic Responsibility</i>	Key
Predicting Synthesis and Decomposition products (WS 10C#2) <i>Academic Responsibility</i>	Key
Activity Series Activity <i>Intraunit Assessments</i>	Metals in aqueous solution simulation Penny infographic If you are absent, these pictures can be used for the demonstration observations KEY

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Predicting Single Replacement Rxn products (WS 10C#3) <i>Academic Responsibility</i>	Key
Predicting Double Replacement Rxn products (WS 10C#4) <i>Academic Responsibility</i>	Key
Predicting products (mixed review) (WS 10C#5) <i>Academic Responsibility</i>	key
Net Ionic Equations (WS10C#6) <i>Academic Responsibility</i>	Key
Section 10C Review options	10C Google practice form with general concepts Predicting Product Simulation with quiz
Unit 10 Review and Test	
Unit 10 Vocab Test (optional) 20 points <i>End of Unit Assessment</i>	Chemical reactions quizlet Test link
Unit 10 Test <i>End of Unit Assessment</i> 54 points total: • 26 multiple choice • Balancing and classifying (9 points) • Predicting products/ionic and net ionic equations (19 points)	• Google Form review questions (shorter--good for an initial review of concepts) • Google Form review questions (longer--more specific questions--you can choose to only do one section at a time) • Google Concept Review (put in presentation mode to quiz yourself) • Chem quiz generator • Predicting Product Simulation with quiz • Other review options above next to the quizzes