Unit 7: Chemical Reactions

Content Area: **Template**
Course(s):
Time Period:
Length:
Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Unit 7: Chemical Reactions

Essential Questions

- How can you predict the products of a chemical reaction?
- How do chemical reactions obey the law of conservation of mass?
- What does the law of conservation of mass mean?
- What would this mean for a chemical reaction?

Objectives

- Describe the information found in a net ionic equation
- Describe the steps for writing and balancing a chemical equation
- Identify the 5 general types of reactions
- Predict the formation of a precipitate in a double replacement reaction
- Show how to write a skeleton chemical reaction
- Use the metal activities series to determine whether a reaction occurs

Standards

9-12.HS-PS1-7	Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction.
9-12.HS-PS1-2	Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.

Instructional Tasks/Activities

- Balancing PHET
- Chem Reactions Balancing Practice
- Chem Reactions Intro
- Chem Reactions Precipitation Lab
- Chem Reactions Rust Reactions
- Chem Reactions Test
- Chem Reactions Test Review
- Chem Reactions Types of Reactions
- Chemical Reactions Research Project
- Combustion Reaction Lab/Demo
- Common assessment chapter test
- Common assessment quiz
- Constructed response
- Do now's and/or exit slips
- Exothermic and Endothermic Lesson+Questions
- Graphic organizers or models
- Guided practice
- History of Chem Reactions Article and Questions
- Homework
- Individual, small, and large group work
- Laboratory investigations within small groups
- Metal Activity Series Lab
- Metal Activity Series Lesson
- Precipitation Reaction Lab
- Redox Reactions Intro
- Redox Reactions Lesson and Questions
- Redox Reactions Practice
- Redox Reactions Practice and Application Questions
- Review Activity
- Stoichiometry Intro
- Stoichiometry Practice and Application Questions
- Types of Reactions PRactice

Assessment Procedure

- Classroom Total Participation Technique
- Classwork
- DBQ

- Essay
- Exit Ticket/Entrance Ticket/Do Now
- Flashcards and/or drill and practice
- Inquiry based activities with reflective discussion
- Journal / Student Reflection
- Kahoot
- Laboratory groups
- Lecture with note taking or guided notes
- Online models and simulators
- Other named in lesson
- Peer Review
- Performance
- Power Point Presentsation
- Problem Correction
- Project
- Quiz
- Rubric
- Teacher Collected Data
- Test
- Whole and small group discussions
- Worksheet

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz

- Screencastify

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

Gifted and Talented

- Compare & Contrast
- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load

- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)
- other- please specify in plans
- provide desktop list/formula

Honors Modifications

Resources

- Resource 1
- Resource 2
- Resource 3
- Resource 4
- Resource 5