

SNC 2P: Unit 1 Chemical Reactions and Their Practical Applications

Review of Chemistry Concepts

Safety, WHIMS, Lab Equipment
Matter, Properties, Classification of matter,
Define physical vs. chemical changes and evidence for each
Re-examine physical and chemical changes in the lab
Periodic table of the elements Recognizing Symbols and Names of various elements
Layout of the periodic table
Drawing Bohr Diagrams

Formation of Compounds

Ionic Bonding

Define Ionic bonding
Use Bohr and Lewis Diagrams to show atoms form positive and negative ions
Write formulas and naming ionic compounds

Covalent (Molecular) Bonding

Define Covalent bond and show these bonds form using Bohr and Lewis diagrams
Using Bohr and Lewis Diagrams how atoms form molecular compounds
Use molecular models to build various compounds
Write formulas and name molecular compounds

Balancing Chemical equations

Word and chemical equations
Law of conservation of mass (lab)
Balancing equations

Types of chemical reactions

Recognize Synthesis, Decomposition, Single Displacement and Double Displacement
Explore Combustion Reactions (complete vs. incomplete)
Corrosion

Acids and bases

Define Acid and Base
Experimentally determine properties of acids and bases
Explore common acids and bases and used in everyday products
pH Scale
Determine pH of common products
Neutralization Reaction

Chemicals at Home and in the workplace/Reactions

Project – Uses, Properties, Hazards, Alternatives
Examples of topics and labs that may be covered: Testing Aspirin
Tooth Paste lab, Comparing antacids lab, analyzing energy drinks, superglues, teeth whitening, soaps.

Chemical Reactions in Food

Maillard Reaction, Caramelizing, Fermentation, Food Preservation