

# PACING GUIDE

## SCH3U (GRADE 11 CHEMISTRY)

### WEEK ONE

#### UNIT 1: ATOMIC STRUCTURE

- Atomic Structure
- Ions, Isotopes and Atomic Mass
- Graphing Periodic Trends
- Periodic Trends
- Compounds and Bonding
- Ionic/Covalent Gizmos
- Chemical Formulas and Nomenclature
- Polar Bonds and Molecules
- Chemical Reactions

#### Ionic or Molecular Lab

#### Noodlium Lab

#### Unit 1 Test

#### UNIT 2: SYNTHESIS AND DECOMPOSITION

- Synthesis and Decomposition
- Balancing Gizmo
- Single and Double Displacement

### WEEK TWO

#### UNIT 2 (CONTINUED)

- Combustion
- Neutralization
- Reactions in the Environment

#### Neutralizing Pain Relievers Lab

#### Unit 2 Test

#### Chemical Reaction Research Project Due

#### UNIT 3: QUANTITATIVE AND QUALITATIVE ANALYSIS

- Quantitative and Qualitative Analysis
- Molar Mass and Number of Entities
- Composition of Unknown Compounds
- Mole Ratio and Mass Stoichiometry
- Limiting Reagent and Percent Yield
- Limiting Reactants

### WEEK THREE

#### Unit 3 Test

#### UNIT 4: WATER AND SOLUTIONS

- Water and Solutions
- Dissolving Process
- Concentration and Preparing Dilutions
- Ions in Solution
- Chemical Analysis and Stoichiometry
- Acids and Bases

#### Rainbow in a Jar Lab

#### Titration Lab

#### Unit 4 Test

#### UNIT 5: STATES OF MATTER THEORY

- States of Matter Theory

### WEEK FOUR

#### UNIT 5 (CONTINUED)

- The Gas Laws
- Boyle's and Charles Law
- Avogadro's Law
- Ideal Gas Law
- Partial Pressures and Stoichiometry

#### Exploring Air Quality

#### Unit 5 Test

#### Culminating Task

#### Exam