



ALLEN ACADEMY

Chemistry
2017-2018

First Trimester	Second Trimester	Third Trimester
<p>Unit 1: Physical and Chemical Properties of Matter</p> <p>Core Laboratory Investigations: 1 – Accuracy and Precision in the Food Industry 2 – Paper Chromatography 3 – Separation of a Mixture 4 – Density as an Intensive Property</p> <p>Unit 2: Atomic Theory</p> <p>Core Laboratory Investigations: 5 – Investigating Rutherford’s Classic Experiment 6 – Pennium 7 – Spaghetti Bridges</p> <p>Unit 3: The Electron Cloud</p> <p>Core Laboratory Investigations: 8 – Flame Tests</p> <p>Unit 4: The Periodic Table</p> <p>Core Laboratory Investigations: 9 – Reactivity within a Group</p> <p>Unit 5: Bonding and IMF</p> <p>Core Laboratory Investigations: 10 – Ionic or Covalent? 11 – Club Fuego and the Case of Intermolecular Forces</p>	<p>Unit 6: The Mole Concept and Compounds</p> <p>Core Laboratory Investigations: 12 – Analysis of a Hydrated Compound</p> <p>Unit 7: Chemical Reactions</p> <p>Core Laboratory Investigations: 13 – Observing Chemical Change 14 – Classifying Reactions 15 – Activity Series</p> <p>Unit 8: Stoichiometry</p> <p>Unit 9: Gas Laws and Gas Stoichiometry</p> <p>Core Laboratory Investigations: 16 – Boyle’s Law 17 – Mass of Butane 18 – Stoichiometry Rockets</p>	<p>Unit 10: Solutions and Solution Stoichiometry</p> <p>Core Laboratory Investigations: 19 – Effect of Temperature on Solubility of a Salt 20 – Intro to Colorimetry</p> <p>Unit 11: Acid-Base Chemistry</p> <p>Core Laboratory Investigations: 21 – Acid Nomenclature 22 – Exploring pH 23 – pH of Salt Solutions 24 – Weak Acid-Strong Base Titration</p> <p>Unit 12: Thermochemistry</p> <p>Core Laboratory Investigations: 25 – Energy Content of Food 26 – Specific Heat of a Metal 27 – Enthalpy of Solution 28 – Hess’s Law</p> <p>Unit 13: Electrochemistry</p> <p>Core Laboratory Investigations: 29 – Electrolysis 30 – REDOX Reaction</p>

Instructional Resources:

- Online Text: *Modern Chemistry*, Holt McDougal