

## Chemistry 11 Year Plan 2018-2019

August 28, 2018--November 1, 2018	November 4, 2018--January 17, 2019	January 20, 2019--March 21, 2019	March 24, 2019--June 3, 2019
<p><b>Chapter 1: Matter &amp; Change</b>            Section 1 – Chemistry Is a Physical Science            Section 2 - Matter &amp; its Properties            Section 3 - Elements</p> <p><b>Chapter 2: Measurements &amp; Calculations</b>            Section 1 – Scientific Method            Section 2 – Units of Measurement            Section 3 – Using Scientific Measurements</p> <p><b>Chapter 3: Atoms: The Building Blocks of Matter</b>            Section 1 – The Atom – From Philosophical Idea to Scientific Theory            Section 2 – The Structure of the Atom            Section 3 – Counting Atoms</p> <p><b>Chapter 4: Arrangement of Electrons in Atoms</b>            Section 1 – The Development of a New Atomic Model            Section 2 – The Quantum Model of the Atom            Section 3 – Electron Configurations</p> <p><b>Chapter 5: The Periodic Law</b>            Section 1 – History of the Periodic Table            Section 2 – Electron Configuration &amp; the Periodic Table            Section 3 – Electron Configuration &amp; Periodic Properties</p>	<p><b>Chapter 6: Chemical Bonding</b>            Section 1 – Introduction to Chemical Bonding            Section 2 – Covalent Bonding &amp; Molecular Compounds            Section 3 – Ionic Bonding &amp; Ionic Compounds            Section 4 – Metallic Bonding            Section 5 – Molecular Geometry</p> <p><b>Chapter 7: Chemical Formulae &amp; Chemical Compounds</b>            Section 1 – Chemical Names &amp; Formulae            Section 2 – Oxidation Numbers            Section 3 – Using Chemical Formulae            Section 4 – Determining Chemical Formulae</p> <p><b>Chapter 8: Chemical Equations &amp; Reactions</b>            Section 1 – Describing Chemical Reactions            Section 2 – Types of Chemical Reactions            Section 3 – Activity Series of the Elements</p> <p><b>Chapter 9: Stoichiometry</b>            Section 1 – Introduction to Stoichiometry            Section 2 – Ideal Stoichiometric Calculations            Section 3 – Limiting Reactants &amp; Percentage Yield</p>	<p><b>Chapter 10: States of Matter</b>            Section 1 – The Kinetic – Molecular Theory of Matter            Section 2 – Liquids            Section 3 – Solids            Section 4 – Changes of state            Section 5 – Water</p> <p><b>Chapter 11: Gases</b>            Section 1 – Gases &amp; Pressure            Section 2 – The Gas Laws            Section 3 – Gas Volume &amp; the Ideal Gas Laws            Section 2 – Diffusion &amp; Effusion</p> <p><b>Chapter 12: Solutions</b>            Section 1 – Types of Mixtures            Section 2 – The solution Process            Section 3 – Concentration of Solutions</p> <p><b>Chapter 13: Ions in Aqueous Solutions &amp; Colligative Properties</b>            Section 1 – Compounds in Aqueous Solutions            Section 2 – Colligative Properties of Solutions</p> <p><b>Chapter 14: Acids &amp; Bases</b>            Section 1 – Properties of Acids &amp; Bases            Section 2 – Acid-Base Theories            Section 1 – Acid-Base Reactions</p> <p><b>Chapter 15: Acids &amp; Base Titration &amp; pH</b>            Section 1 – Aqueous Solutions &amp; the Concept of pH            Section 2 – Determining pH &amp; Titrations</p>	<p><b>Chapter 16: Thermochemistry</b>            Section 1 – Thermochemistry            Section 12– Driving Force of Reactions</p> <p><b>Chapter 17: Reaction Kinetics</b>            Section 1 – The Reaction Process            Section 2 – Reaction Rate</p> <p><b>Chapter 18: Chemical Equilibrium</b>            Section 1 – The Nature of Chemical Equilibrium            Section 2 – Shifting Equilibrium            Section 3 – Equilibria of Acids, Bases &amp; Salts            Section 4 – Solubility Equilibrium</p> <p><b>Chapter 19: Oxidation-Reduction Reactions</b>            Section 1 – Oxidation &amp; Reduction            Section 2 – Balancing Redox Equations            Section 3 – Oxidizing &amp; Reducing Agents</p> <p><b>Chapter 20: Electrochemistry</b>            Section 1 – Introduction to Electrochemistry            Section 2 – Voltaic Cells            Section 3 – Electrolytic Cells</p> <p><b>Chapter 21: Nuclear Chemistry</b>            Section 1 – The Nucleus            Section 2 – Radioactive Decay            Section 3 – Nuclear Radiation            Section 4 – Nuclear Fission &amp; Nuclear Fusion</p> <p><b>Chapter 22: Organic Chemistry</b>            Section 1 – Organic Compounds            Section 2 – Hydrocarbons            Section 3 – Functional Groups            Section 4 – Organic Reactions</p> <p><b>Chapter 23: Biological Chemistry</b>            Section 1 – Carbohydrates &amp; Lipids            Section 2 – Amino Acids &amp; Proteins            Section 3 – Metabolism            Section 4 – Nucleic Acids</p>
<p><b>Global Citizenship</b></p> <p>STEM 'Practical Action' – Plastics Challenge:            Students investigate the properties of plastics then</p>	<p><b>Global Citizenship</b></p> <p>Cape Town water crisis case study – design an action plan</p>	<p><b>Global Citizenship</b></p> <p>Syrian food and medical shortages – how can global citizenship influence the superpowers?            Develop a global awareness information</p>	<p><b>Global Citizenship</b></p> <p>Preserving global biodiversity against future world wide famine – examine the crop diversity issues connected to the Global Crop Diversity Trust, create a global map or pictograph of agricultural</p>

find solutions to problems caused by plastic waste globally		programme	species loss
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