

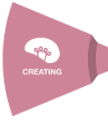










	Theme	Overview of key learning to take place	How learning will be assessed
Term 1	Unit 9: Metals	<p>9.5 Corrosion of metals</p> <ul style="list-style-type: none">I can state the conditions required for the rusting of iron and steel to form hydrated iron (III) oxideI can state some common barrier methods, including painting, greasing and coating with plasticI can describe the use of zinc in galvanising as an example of a barrier method and sacrificial protection.I can explain sacrificial protection in terms of the reactivity series and in terms of electron loss. <p>9.6 Extraction of metals</p> <ul style="list-style-type: none">I can describe the ease in obtaining metals from their ores, related to the position of the metal in the reactivity seriesI can describe the extraction of iron from hematite in the blast furnace.I can describe the extraction of aluminum from purified bauxite / aluminum oxide	 <p>Examples of Formative Assessment to be used this term: In class peer and self-assessment of extended answer questions Homework questions</p> <p>Summative assessment: Baseline Assessment Mid Term assessment Unit 9 and 7 End of term assessments (Unit 1, 2,3,1, 4,5,6,7,8,9,10,11 and 12)</p>
Term 1	Unit 7 – Acid, Bases and Salts	<p>7.1 The characteristic properties of acids and bases</p> <ul style="list-style-type: none">I can define acids and bases in terms of proton transfer, limited to aqueous solutionsI can describe the meaning of weak and strong acids and bases <p>7.2 Types of oxides</p> <ul style="list-style-type: none">I can classify oxides as either acidic or basic, related to metallic and non-metallic characterI can classify other oxides as neutral or amphoteric <p>7.3 Preparation of salts</p> <ul style="list-style-type: none">I can describe the method of preparation, separation and purification of salts	 

		<ul style="list-style-type: none"> I can describe the preparation of insoluble salts by precipitation I can suggest an appropriate method of making a given salt from a suitable starting material, given appropriate <p>12.3 Identification of ions and gases</p> <ul style="list-style-type: none"> I can describe the various tests to identify the positive metal ions/ cations I can describe the test to identify the anions 	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Term 1</p>	<p>Unit 11 Organic Chemistry</p>	<p>11.1: Names of compounds</p> <ul style="list-style-type: none"> I can name and draw the structures of the unbranched alkanes, alkenes, alcohols and acids containing up to four carbon atoms per molecule I can state the type of compound present, from its name <p>11.2 and 11.3: Fuels and Homologous series</p> <ul style="list-style-type: none"> I can describe petroleum as a mixture of hydrocarbons I can describe fractional distillation to separate the fractions I can give uses of each fractions I can describe the concept of homologous series I can explain the characteristics of homologous series <p>11.4: Alkanes</p> <ul style="list-style-type: none"> I can describe the bonding and substitution reactions in alkanes <p>11.5: Alkenes</p> <ul style="list-style-type: none"> I can describe the properties of alkenes in terms of addition reactions with bromine, hydrogen and steam I can distinguish between saturated and unstaured hydrocarbon <p>11.6: Alcohols</p> <ul style="list-style-type: none"> I can describe the manufacture of ethanol by fermentation and by the catalytic addition of steam to ethane I can describe the properties and uses of ethanol I can outline the advantages and dis advantages of both the methods of preparation of ethanol 	 

		14.7: Carboxylic Acids <ul style="list-style-type: none"> I can describe the formation of carboxylic acids I can explain ethanoic acid as weak acid I can explain the reaction of carboxylic acid with alcohols to give esters 	
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Term 2	Unit 11.8	11.8: Polymers <ul style="list-style-type: none"> I can define the terms associated with polymerisation I can understand that polymers have different linkages I can explain the differences between condensation and addition polymerization. I can deduce the structure of the polymer product from a given alkene and <i>vice versa</i> I can describe the formation of nylon (a polyamide) and <i>polyethylene terpthalate - PET</i> (a polyester) by condensation polymerization. I can describe the pollution problems caused by non biodegradable plastics I can describe the structure of protein, starch I can describe the hydrolysis of proteins to amino acids and starch to glucose I can describe, in outline, the usefulness of chromatography in separating and identifying the products of hydrolysis of carbohydrates and proteins 	 <p>Examples of Formative Assessment to be used this term: In class peer and self-assessment of extended answer questions Homework questions</p> <p>Summative assessment: Mid Term assessment Unit 11 and 3 Mock Examination – Complete Syllabus</p>
Term 2	Unit Stoichiometry 3:	3.3: The Mole Concept <ul style="list-style-type: none"> I can define the <i>mole</i> and the <i>Avogadro constant</i> I can use the molar gas volume, taken as 24 dm³ at room temperature and pressure I can calculate stoichiometric reacting masses, volumes of gases and solutions, and concentrations of solutions expressed in g / dm³ and mol / dm³. I can do calculations involving the idea of limiting reactants may be set. 	

		<ul style="list-style-type: none">• I can calculate empirical formulae and molecular formulae• I can calculate percentage yield and percentage purity	
Term 2	Revision	Revision of past paper and preparation for the Mock examination	