

Curriculum Map 2020-21

Subject: Science _____

		Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7 Assessments: End of topic quiz, written assessments per topic All topics conclude with careers based investigation	Assessment task(s)/title(s)	<ul style="list-style-type: none"> Science Skills Particles and their Behaviour Cells 	<ul style="list-style-type: none"> Forces Atoms, Elements and Compounds The Body Midpoint assessment 	<ul style="list-style-type: none"> Energy Types of Reactions 	<ul style="list-style-type: none"> Human Reproduction Plant Reproduction Midpoint assessment 	<ul style="list-style-type: none"> Acids and Alkalis Light and Sound 	<ul style="list-style-type: none"> Space End of year assessment
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	Science skills <ul style="list-style-type: none"> <i>What is science?</i> <i>Safety</i> <i>Equipment</i> <i>Measuring</i> <i>Variables</i> <i>Presenting data (tables and graphs)</i> <i>Conclusions</i> Cells <ul style="list-style-type: none"> <i>Cells</i> <i>Plant and animal cells</i> <i>Specialised cells</i> <i>Multicellular and unicellular</i> 	Atoms, elements and compounds <ul style="list-style-type: none"> <i>Atoms</i> <i>Elements</i> <i>Compounds</i> <i>Mixtures</i> <i>Pure substances</i> Forces <ul style="list-style-type: none"> <i>Forces</i> <i>Balanced and unbalanced forces</i> <i>Friction</i> The body <ul style="list-style-type: none"> <i>Body structure</i> <i>Circulatory system</i> <i>Digestion</i> 	Energy <ul style="list-style-type: none"> <i>Energy transfers</i> <i>Efficiency</i> <i>Renewable/non-renewable energy</i> Types of reaction <ul style="list-style-type: none"> <i>Reactions</i> <i>Types of reaction</i> <i>Combustion</i> <i>Conservation of mass</i> 	Human Reproduction <ul style="list-style-type: none"> <i>Systems</i> <i>Puberty and the Menstrual Cycle</i> <i>Fertilisation</i> <i>Pregnancy</i> Plant Reproduction <ul style="list-style-type: none"> <i>Flowers</i> <i>Pollination</i> <i>Seed dispersal</i> 	Acids and alkalis <ul style="list-style-type: none"> <i>pH</i> <i>Acids</i> <i>Alkalis</i> <i>Neutralisation</i> Light and Sound <ul style="list-style-type: none"> <i>Waves</i> <i>Light</i> <i>Colours</i> <i>Sound</i> 	Space <ul style="list-style-type: none"> <i>The Universe</i> <i>The planets</i> <i>The earth</i> <i>The moon</i> <i>Mass vs weight</i>

		<ul style="list-style-type: none"> • Diffusion Particles and their behaviour <ul style="list-style-type: none"> • Solids, liquids and gases • Properties • Changes of state 	<ul style="list-style-type: none"> • Respiratory system 				
Year 8 Assessments: End of topic quiz, written assessments per topic All topics conclude with careers based investigation	Assessment task(s)/title(s)	<ul style="list-style-type: none"> • Health and Lifestyle • Motion and Pressure • The Periodic table 	<ul style="list-style-type: none"> • The Periodic table (cont.) • Separating Techniques • Adaptation and Inheritance • Midpoint assessment 	<ul style="list-style-type: none"> • Respiration • Energy 	<ul style="list-style-type: none"> • Earth Structure • Photosynthesis 	<ul style="list-style-type: none"> • Metals and their Reactions • Electricity and Electromagnetism 	<ul style="list-style-type: none"> • End of year assessment • Science skills booster
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	Health and lifestyle <ul style="list-style-type: none"> • Food groups • Diet • Enzymes • Drugs and smoking Motion and pressure <ul style="list-style-type: none"> • Pressure • Gas pressure • Moments • Motion 	Adaptation and inheritance <ul style="list-style-type: none"> • Inheritance • Types of variation • Natural selection • Biodiversity Separating techniques <ul style="list-style-type: none"> • Mixtures • Solubility • Filtration and evaporation • Distillation 	Energy <ul style="list-style-type: none"> • Efficiency • Work done • Temperature Respiration <ul style="list-style-type: none"> • Respiration • Anaerobic and aerobic • Fermentation 	Earth structure <ul style="list-style-type: none"> • The Earth • The rock cycle • Types of rock • The carbon cycle Photosynthesis <ul style="list-style-type: none"> • Photosynthesis • Plant structure • Rate of photosynthesis • Food webs 	Electricity and electromagnetism <ul style="list-style-type: none"> • Static electricity • Current electricity • Resistance • Magnetism • Electromagnets Metals and their reactions <ul style="list-style-type: none"> • Metals + water 	

			<ul style="list-style-type: none"> Chromatography <p>The periodic table</p> <ul style="list-style-type: none"> The periodic table Group 1 Group 7 Group 0 			<ul style="list-style-type: none"> Burning metals The reactivity series Displacement reactions Ceramics, polymers and composites 	
Year 9 Assessment: End of topic tests	Assessment task(s)/title(s)	<ul style="list-style-type: none"> C1 Atoms, Compounds and States of Matter B1 Cells, Genetics, Inheritance and Modification P1 Forces, Movement and Energy 	<ul style="list-style-type: none"> P1 Forces, Movement and Energy (cont.) C3 Acids and Metals B2 Health, Disease and Medicine 	<ul style="list-style-type: none"> P2 Waves and Radiation C2 Separating Techniques B4 Human Biology 	<ul style="list-style-type: none"> C4 Elements and Chemical Reactions P3 Electricity and Magnetism 	<ul style="list-style-type: none"> B3 Plants and Ecosystems C5 Fuels and Environmental Science 	<ul style="list-style-type: none"> P4 Energy and Particles End of year assessment Exams skills KS4 booster
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	<p>C1</p> <ul style="list-style-type: none"> States of matter Atomic structure Periodic table Metals and the periodic table Ionic bonding 	<p>C3</p> <ul style="list-style-type: none"> Acids and alkalis Neutralisation Making salts Extracting metals Recycling metals <p>B2</p> <ul style="list-style-type: none"> Health and disease 	<p>B4</p> <ul style="list-style-type: none"> hormones homeostasis menstrual cycle enzymes exchange and transport circulatory system respiration 	<p>C4</p> <ul style="list-style-type: none"> Group 1 Group 7 Group 0 Energy changes Measuring rates of reaction Collision theory <p>P3</p>	<p>C5</p> <ul style="list-style-type: none"> Hydrocarbons Combustion Fuel pollution Cracking Early earth Today's atmosphere <p>B3</p>	<p>P4</p> <ul style="list-style-type: none"> Work and power Density Change in state Stretching

		<ul style="list-style-type: none"> • <i>Covalent bonding</i> • <i>Giant covalent</i> • <i>Metallic bonding</i> <p>B1</p> <ul style="list-style-type: none"> • <i>Cell structure</i> • <i>Stem cells and specialised cells</i> • <i>Growth</i> • <i>Nervous system</i> • <i>DNA</i> • <i>Inheritance</i> • <i>Variation</i> • <i>Evolution and natural selection</i> • <i>Selective breeding</i> • <i>Genetic engineering</i> <p>P1</p> <ul style="list-style-type: none"> • <i>Stopping distances</i> • <i>Balanced and unbalanced</i> • <i>Measuring quantities</i> • <i>Distance/speed time graphs</i> 	<ul style="list-style-type: none"> • <i>Lifestyle diseases</i> • <i>Pathogens</i> • <i>Spread and control of pathogens</i> • <i>STI's</i> • <i>Protection against infection</i> • <i>medicines</i> 	<p>C2</p> <ul style="list-style-type: none"> • <i>separating mixtures</i> • <i>chromatography</i> • <i>distillation</i> • <i>electrolysis</i> <p>P2</p> <ul style="list-style-type: none"> • <i>describing waves</i> • <i>wave speed</i> • <i>EM waves</i> • <i>Refraction</i> • <i>Inside atoms</i> • <i>Radioactive decay</i> • <i>Half life</i> • <i>Dangers of radiation</i> 	<ul style="list-style-type: none"> • <i>Circuits</i> • <i>Resistance</i> • <i>Components and resistance</i> • <i>Power</i> • <i>Magnets</i> • <i>Electricity in the home</i> • 	<ul style="list-style-type: none"> • <i>Photosynthesis</i> • <i>Limiting factors</i> • <i>Movement of substances</i> • <i>Osmosis</i> • <i>Transpiration and translocation</i> • <i>Ecosystems</i> • <i>Sampling</i> • <i>Biotic factors</i> • <i>Biodiversity</i> • <i>Natural cycles</i> 	
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		<ul style="list-style-type: none"> • <i>Calculating speed and acceleration</i> • <i>Mass, weight and acceleration</i> • <i>Energy transfers</i> • <i>Wasted energy</i> • <i>Energy resources</i> • <i>Using energy resources</i> 					
Year 10 Combined Science Assessment: End of topic tests	Assessment task(s)/title(s)	<ul style="list-style-type: none"> • CC3-4 atomic structure and the periodic table • CB1 key concepts in biology • CP1-2 forces and motion 	<ul style="list-style-type: none"> • CC5-7 Bonding and types of substance • CB2 cells and control • CP3 conservation of energy 	<ul style="list-style-type: none"> • CC9 calculations involving masses • CB3 Genetics • CP4-5 waves and the EM spectrum 	<ul style="list-style-type: none"> • CC13-15 Groups, rates and energy changes • CB4 Natural selection and genetic modification 	<ul style="list-style-type: none"> • CP6 Radioactivity • CC16-17 Fuels and the atmosphere 	<ul style="list-style-type: none"> • CB5 Health, disease and the development of medicine • End of year PPE
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	CC3-4 <ul style="list-style-type: none"> • <i>Structure of an atom</i> • <i>Atomic number and mass number</i> • <i>Isotopes</i> 	CC5-7 <ul style="list-style-type: none"> • <i>Ionic bonds</i> • <i>Ionic lattices</i> • <i>Properties of ionic compounds</i> • <i>Covalent bonds</i> 	CC9 <ul style="list-style-type: none"> • <i>Masses and empirical formulae</i> • <i>Conservation of mass</i> • <i>Moles</i> CB3 <ul style="list-style-type: none"> • <i>Meiosis</i> 	CC13-15 <ul style="list-style-type: none"> • <i>Group 1</i> • <i>Group 7</i> • <i>Halogen reactivity</i> • <i>Group 0</i> • <i>Rates of reaction</i> 	CC16-17 <ul style="list-style-type: none"> • <i>Hydrocarbons in crude oil and natural gas</i> • <i>Fractional distillation of crude oil</i> 	CB5 <ul style="list-style-type: none"> • <i>Health and disease</i> • <i>Non-communicable diseases</i>

		<ul style="list-style-type: none"> • <i>Elements and the periodic table</i> • <i>Atomic number and the periodic table</i> • <i>Electronic configuration and the periodic table</i> <p>CB1</p> <ul style="list-style-type: none"> • <i>Microscopes</i> • <i>Plant and animal cells</i> • <i>Specialised cells</i> • <i>Inside bacteria</i> • <i>Enzymes and nutrition</i> • <i>Enzyme action</i> • <i>Enzyme activity</i> • <i>Transporting substances</i> <p>CP1-2</p> <ul style="list-style-type: none"> • <i>Vectors and scalars</i> • <i>Distance/time graphs</i> 	<ul style="list-style-type: none"> • <i>Molecular compounds</i> • <i>Allotropes of carbon</i> • <i>Properties of metals</i> • <i>Bonding models</i> <p>CB2</p> <ul style="list-style-type: none"> • <i>Mitosis</i> • <i>Growth in plants and animals</i> • <i>Stem cells</i> • <i>The nervous system</i> • <i>Neurotransmission speeds</i> <p>CP3</p> <ul style="list-style-type: none"> • <i>Energy stores and transfers</i> • <i>Energy efficiency</i> • <i>Keeping warm</i> • <i>Stored energies</i> • <i>Non-renewable resources</i> • <i>Renewable resources</i> 	<ul style="list-style-type: none"> • <i>DNA</i> • <i>DNA extraction</i> • <i>Alleles</i> • <i>Inheritance</i> • <i>Gene mutation</i> • <i>Variation</i> <p>CP4-5</p> <ul style="list-style-type: none"> • <i>Describing waves</i> • <i>Wave speed</i> • <i>Refraction</i> • <i>Electromagnetic waves</i> • <i>The electromagnetic spectrum</i> • <i>EM radiation dangers</i> 	<ul style="list-style-type: none"> • <i>Factors affecting rate</i> • <i>Catalysts and activation energy</i> • <i>Exothermic and endothermic reactions</i> • <i>Energy changes in reactions</i> <p>CB4</p> <ul style="list-style-type: none"> • <i>Evidence for human evolution</i> • <i>Darwin</i> • <i>Classification</i> • <i>Breeds and varieties</i> • <i>Genes in agriculture and medicine</i> 	<ul style="list-style-type: none"> • <i>The alkane homologous series</i> • <i>Complete and incomplete combustion</i> • <i>Combustible fuels and pollution</i> • <i>Breaking down hydrocarbons</i> • <i>The early atmosphere</i> • <i>The changing atmosphere</i> • <i>The atmosphere today</i> • <i>Climate change</i> <p>CP6</p> <ul style="list-style-type: none"> • <i>Atomic models</i> • <i>Inside atoms</i> • <i>Electrons and orbits</i> • <i>Background radiation</i> • <i>Types of radiation</i> • <i>Radioactive decay</i> • <i>Half life</i> 	<ul style="list-style-type: none"> • <i>Cardiovascular disease</i> • <i>Pathogens</i> • <i>Spreading pathogens</i> • <i>Physical and chemical barriers</i> • <i>The immune system</i> • <i>Antibiotics</i>
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		<ul style="list-style-type: none"> • <i>Acceleration</i> • <i>Velocity/time graphs</i> • <i>Resultant forces</i> • <i>Newton's laws</i> • <i>Mass and weight</i> • <i>Momentum</i> • <i>Stopping distances</i> • <i>Crash hazards</i> 				<ul style="list-style-type: none"> • <i>Dangers of radioactivity</i> 	
Year 10 Triple Biology Assessment: End of topic tests	Assessment task(s)/title(s)	<ul style="list-style-type: none"> • SB1 key concepts in biology 	<ul style="list-style-type: none"> • SB2 Cells and control 	<ul style="list-style-type: none"> • SB3 Genetics 	<ul style="list-style-type: none"> • SB4 Natural Selection and Genetic engineering 	<ul style="list-style-type: none"> • SB5 Health, disease and the development of medicine 	<ul style="list-style-type: none"> • End of year PPE
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	CB1 <ul style="list-style-type: none"> • <i>Microscopes</i> • <i>Plant and animal cells</i> • <i>Specialised cells</i> • <i>Inside bacteria</i> • <i>Enzymes and nutrition</i> 	CB2 <ul style="list-style-type: none"> • <i>Mitosis</i> • <i>Growth in plants and animals</i> • <i>Stem cells</i> • <i>The brain</i> • <i>Brain and spinal cord problems</i> • <i>The nervous system</i> • <i>The eye</i> 	CB3 <ul style="list-style-type: none"> • <i>Sexual and asexual reproduction</i> • <i>Meiosis</i> • <i>DNA</i> • <i>DNA extraction</i> • <i>Protein synthesis</i> • <i>Genetic variants and phenotypes</i> 	CB4 <ul style="list-style-type: none"> • <i>Evidence for human evolution</i> • <i>Darwin</i> • <i>Development of Darwin's theory</i> • <i>Classification</i> • <i>Breeds and varieties</i> • <i>Tissue culture</i> 	CB5 <ul style="list-style-type: none"> • <i>Health and disease</i> • <i>Non-communicable diseases</i> • <i>Cardiovascular disease</i> • <i>Pathogens</i> • <i>Spreading pathogens</i> • <i>Virus life cycles</i> 	

		<ul style="list-style-type: none"> • <i>Testing foods</i> • <i>Enzyme action</i> • <i>Enzyme activity</i> • <i>Transporting substances</i> 	<ul style="list-style-type: none"> • <i>Neurotransmission speeds</i> 	<ul style="list-style-type: none"> • <i>Mendel</i> • <i>Alleles</i> • <i>Inheritance</i> • <i>Multiple and missing alleles</i> • <i>Gene mutation</i> • <i>Variation</i> 	<ul style="list-style-type: none"> • <i>Genes in agriculture and medicine</i> • <i>GM and agriculture</i> • <i>Fertilisers and biological control</i> 	<ul style="list-style-type: none"> • <i>Plant defences</i> • <i>Plant diseases</i> • <i>Physical and chemical barriers</i> • <i>The immune system</i> • <i>Antibiotics</i> • <i>Monoclonal antibodies</i> 		
Year 10 Triple Chemistry Assessment: End of topic tests	Assessment task(s)/title(s)	<ul style="list-style-type: none"> • SC3-4 Atomic structure and the periodic table • SC5-7 Bonding and types of substance 	<ul style="list-style-type: none"> • SC9 Calculations involving masses, electrolysis • SC17-19 Groups, rates and energy changes 	<ul style="list-style-type: none"> • SC20-21 Fuels and atmospheric science 	SC22-24 Hydrocarbons, alcohols and carboxylic acids + polymers	<ul style="list-style-type: none"> • SC25-26 Ion tests and nanoparticles 	End of year PPE	
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	<ul style="list-style-type: none"> • <i>Structure of an atom</i> • <i>Atomic number and mass number</i> • <i>Isotopes</i> • <i>Elements and the periodic table</i> • <i>Atomic number and</i> 	<ul style="list-style-type: none"> • <i>Masses and empirical formulae</i> • <i>Conservation of mass</i> • <i>Mole</i> • <i>Group 1</i> • <i>Group 7</i> • <i>Halogen reactivity</i> • <i>Group 0</i> • <i>Rates of reaction</i> 	<ul style="list-style-type: none"> • <i>Hydrocarbons in crude oil and natural gas</i> • <i>Fractional distillation of crude oil</i> • <i>The alkane homologous series</i> • <i>Complete and incomplete combustion</i> 	<ul style="list-style-type: none"> • <i>Alkanes and alkenes</i> • <i>Reactions of alkanes and alkenes</i> • <i>Ethanol production</i> • <i>Alcohols</i> • <i>Carboxylic acids</i> • <i>Addition polymerisation</i> 	<ul style="list-style-type: none"> • <i>Flame tests and photometry</i> • <i>Tests for positive ions</i> • <i>Tests for negative ions</i> • <i>Choosing materials</i> • <i>Composite materials</i> • <i>Nanoparticles</i> 		

		<p><i>the periodic table</i></p> <ul style="list-style-type: none"> • <i>Electronic configuration and the periodic table</i> • <i>Ionic bonds</i> • <i>Ionic lattices</i> • <i>Properties of ionic compounds</i> • <i>Covalent bonds</i> • <i>Molecular compounds</i> • <i>Allotropes of carbon</i> • <i>Properties of metals</i> • <i>Bonding models</i> 	<ul style="list-style-type: none"> • <i>Factors affecting reaction rates</i> • <i>Catalysts and activation energy</i> • <i>Exothermic and endothermic reactions</i> • <i>Energy changes in reactions</i> 	<ul style="list-style-type: none"> • <i>Combustible fuels and pollution</i> • <i>Breaking down hydrocarbons</i> • <i>The early atmosphere</i> • <i>The changing atmosphere</i> • <i>The atmosphere today</i> • <i>Climate change</i> 	<ul style="list-style-type: none"> • <i>Polymer properties and uses</i> • <i>Condensation polymerisation</i> • <i>Problems with polymers</i> 		
Year 10 Triple Physics	Assessment task(s)/title(s)	SP1-2 forces and motion	SP3 conservation of energy	SP4-5 Waves and the EM spectrum	SP6 Radioactivity	SP6 cont.	SP7 Astronomy
Assessment: End of topic tests	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	<ul style="list-style-type: none"> • <i>Vectors and scalars</i> • <i>Distance/time graphs</i> • <i>Acceleration</i> 	<ul style="list-style-type: none"> • <i>Energy stores and transfers</i> • <i>Energy efficiency</i> • <i>Keeping warm</i> • <i>Stored energies</i> 	<ul style="list-style-type: none"> • <i>Describing waves</i> • <i>Wave speeds</i> • <i>Refraction</i> • <i>Waves crossing boundaries</i> 	<ul style="list-style-type: none"> • <i>Atomic models</i> • <i>Inside atoms</i> • <i>Electrons and orbits</i> 	<ul style="list-style-type: none"> • <i>Atomic models</i> • <i>Inside atoms</i> • <i>Electrons and orbits</i> 	<ul style="list-style-type: none"> • <i>The solar system</i> • <i>Gravity and orbits</i>

		<ul style="list-style-type: none"> • <i>Velocity/time graphs</i> • <i>Resultant forces</i> • <i>Newton's laws</i> • <i>Mass and weight</i> • <i>Momentum</i> • <i>Stopping distances</i> • <i>Braking distance and energy</i> • <i>Crash hazards</i> 	<ul style="list-style-type: none"> • <i>Non-renewable resources</i> • <i>Renewable resources</i> 	<ul style="list-style-type: none"> • <i>Ears and hearing</i> • <i>Ultrasound</i> • <i>Infrasound</i> • <i>Ray diagrams</i> • <i>Colour</i> • <i>Lenses</i> • <i>Electromagnetic waves</i> • <i>The EM spectrum</i> • <i>Radiation and temperature</i> • <i>EM radiation dangers</i> 	<ul style="list-style-type: none"> • <i>Background radiation</i> • <i>Types of radiation</i> • <i>Radioactive decay</i> • <i>Half life</i> • <i>Using radioactivity</i> • <i>Dangers of radioactivity</i> • <i>Nuclear energy</i> • <i>Nuclear fission</i> • <i>Nuclear fusion</i> 	<ul style="list-style-type: none"> • <i>Background radiation</i> • <i>Types of radiation</i> • <i>Radioactive decay</i> • <i>Half life</i> • <i>Using radioactivity</i> • <i>Dangers of radioactivity</i> • <i>Nuclear energy</i> • <i>Nuclear fission</i> • <i>Nuclear fusion</i> 	<ul style="list-style-type: none"> • <i>Life cycles of stars</i> • <i>Red shift</i> • <i>Origin of the universe</i>
Year 11 Combined Science Assessment: End of topic tests	Assessment task(s)/title(s)	CB6 Plant structures and their functions CB7 Animal coordination, control and homeostasis CB8 Exchange and transport in animals	CB9 Ecosystems and material cycles Bio paper 2 PPE CC1-2 States of matter and separating techniques	CC11-12 Obtaining and using metals CC8 Acids and alkalis CC10 Electrolysis Chem paper 1 PPE	CP7-8 forces and their effects CP9 Electricity and circuits CP10-11 magnetism, the motor effect and electromagnetic induction	CP12-13 particle models, forces and matter	•
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	
	Subject-specific strand(s)	CP6 <ul style="list-style-type: none"> • <i>Photosynthesis</i> • <i>Factors that affect photosynthesis</i> • <i>Absorbing water and mineral ions</i> • <i>Transpiration and translocation</i> 	CB9 <ul style="list-style-type: none"> • <i>Ecosystems</i> • <i>Abiotic factors</i> • <i>Biotic factors</i> • <i>Parasitism and mutualism</i> • <i>Biodiversity and humans</i> • <i>Preserving biodiversity</i> 	CC11-12 <ul style="list-style-type: none"> • <i>Reactivity</i> • <i>Ores</i> • <i>Oxidation and reduction</i> • <i>Lifecycle assessments</i> • <i>Dynamic equilibrium</i> CC8	CP7-8 <ul style="list-style-type: none"> • <i>Work and power</i> • <i>Objects affecting each other</i> • <i>Vector diagrams</i> CP9 <ul style="list-style-type: none"> • <i>Electric circuits</i> 	CP12-13 <ul style="list-style-type: none"> • <i>Particles and density</i> • <i>Energy and changes of state</i> • <i>Energy calculations</i> • <i>Gas temperatur</i> 	

		<p>CP7</p> <ul style="list-style-type: none"> Hormones Hormonal control of metabolic rate The menstrual cycle Hormones and the menstrual cycle Control of blood glucose Type 2 diabetes <p>CB8</p> <ul style="list-style-type: none"> Efficient transport and exchange The circulatory system The heart Cellular respiration 	<ul style="list-style-type: none"> The water cycle The carbon cycle The nitrogen cycle <p>CC1-2</p> <ul style="list-style-type: none"> States of matter Mixtures Filtration and crystallisation Paper chromatography Distillation Drinking water 	<ul style="list-style-type: none"> Acids, alkalis and indicators Looking at acids Bases and salts Alkalis and balancing equations Alkalis and neutralisation Reactions of acids with metals and carbonates Solubility <p>CC10</p> <ul style="list-style-type: none"> Electrolysis Products from electrolysis 	<ul style="list-style-type: none"> Current and potential difference Current, charge and energy Resistance Transferring energy Power Transferring energy by electricity Electrical safety <p>CP10-11</p> <ul style="list-style-type: none"> Magnets and magnetic fields Electromagnetism Magnetic forces Transformers Transformers and energy 	<p>e and pressure</p> <ul style="list-style-type: none"> Bending and stretching Extension and energy transfers 	
Year 11 Triple Biology	Assessment task(s)/title(s)	SB6 plant structures and their function	SB9 ecosystems and material cycles	SB8 exchange and transport in animals	SB7 animal coordination, control and homeostasis	Exam prep	
Assessment: End of topic tests	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	

	Subject-specific strand(s)	<ul style="list-style-type: none"> • <i>Photosynthesis</i> • <i>Factors that affect photosynthesis</i> • <i>Absorbing water and mineral ions</i> • <i>Transpiration and translocation</i> • <i>Plant adaptations</i> • <i>Plant hormones</i> • <i>Uses of plant hormones</i> 	<ul style="list-style-type: none"> • <i>Ecosystems</i> • <i>Energy transfer</i> • <i>Abiotic factors</i> • <i>Biotic factors</i> • <i>Assessing pollution</i> • <i>Parasitism and mutualism</i> • <i>Biodiversity and humans</i> • <i>Preserving biodiversity</i> • <i>Food security</i> • <i>The water cycle</i> • <i>The carbon cycle</i> • <i>The nitrogen cycle</i> • <i>Rates of decomposition</i> 	<ul style="list-style-type: none"> • <i>Efficient transport and exchange</i> • <i>Factors affecting diffusion</i> • <i>The circulatory system</i> • <i>The heart</i> • <i>Cellular respiration</i> 	<ul style="list-style-type: none"> • <i>Hormones</i> • <i>Hormonal control of metabolic rate</i> • <i>The menstrual cycle</i> • <i>Hormones and the menstrual cycle</i> • <i>Control of blood glucose</i> • <i>Type 2 diabetes</i> • <i>Thermoregulation</i> • <i>Osmoregulation</i> • <i>The kidneys</i> 	
Year 11 Triple Chemistry Assessment: End of topic tests	Assessment task(s)/title(s)	<ul style="list-style-type: none"> • SC8 Acids and alkalis 	<ul style="list-style-type: none"> • SC10-13 Electrolysis, Obtaining and Using Metals, Reversible Reactions & Equilibria and Transition Metals 	<ul style="list-style-type: none"> • SC14-16 Quantitative analysis, dynamic equilibria, gas volumes, chemical and fuel cells 	SC1-2 States of matter and separating techniques	<ul style="list-style-type: none"> • Exam prep
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines
	Subject-specific strand(s)	<ul style="list-style-type: none"> • <i>Acids, alkalis and indicators</i> • <i>Looking at acids</i> • <i>Bases and salts</i> 	<ul style="list-style-type: none"> • <i>Electrolysis</i> • <i>Products from electrolysis</i> • <i>Reactivity</i> • <i>Ores</i> • <i>Oxidation and reduction</i> 	<ul style="list-style-type: none"> • <i>Yields</i> • <i>Atom economy</i> • <i>Concentration</i> 	<ul style="list-style-type: none"> • <i>States of matter</i> • <i>Mixtures</i> • <i>Filtration and crystallisation</i> 	

		<ul style="list-style-type: none"> Alkalis and balancing equations Alkalis and neutralisation Reactions of acids with metals and carbonates solubility 	<ul style="list-style-type: none"> Life cycle assessments Dynamic equilibrium Transition metals Corrosion Electroplating alloying Uses of metals and their alloys 	<ul style="list-style-type: none"> Titrations and calculations Molar volume of gases Fertilisers and the Haber process Factors affecting equilibrium Chemical cells and fuel cells 	<ul style="list-style-type: none"> Paper chromatography Distillation Drinking water 		
Year 11 Triple Physics Assessment: End of topic tests	Assessment task(s)/title(s)	SP8-9 energy forces doing work	SP10-11 electricity, circuits and static electricity	SP12-13 magnetism, the motor effect and electromagnetic induction	SP14-15 Particle models, forces and matter	Exam preparation	
	Key knowledge	See PLC's	See PLC's	See PLC's	See PLC's	See PLC's	
	Vocabulary instruction	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	See curriculum outlines	
	Subject-specific strand(s)	<ul style="list-style-type: none"> Work and power Objects affecting each other Vector diagrams Rotational forces (start SP10-11) 	<ul style="list-style-type: none"> Electric circuits Current and potential difference Current, charge and energy Resistance More about resistance Transferring energy Power 	<ul style="list-style-type: none"> Magnets and magnetic fields Electromagnetism Magnetic forces Electromagnetic induction The national grid Transformers and energy 	<ul style="list-style-type: none"> Energy and changes of state Energy calculations Gas temperature and pressure Gas pressure and volume Bending and stretching Extension and energy transfers Pressure in fluids 		

			<ul style="list-style-type: none">• <i>Transferring energy by electricity</i>• <i>Electrical safety</i>• <i>Charges and static electricity</i>• <i>Dangers and uses of static electricity</i>• <i>Electric fields</i>		<ul style="list-style-type: none">• <i>Pressure and up thrust.</i>		
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