

Recovery Curriculum Overview for Year 7

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Curriculum Content:</p> <p>Priority Essential knowledge and skills that will be taught.</p>	<p>7E: Acids and alkalis</p> <ul style="list-style-type: none"> - Hazards and acids in foods - Indicators - Making an indicator - pH scale - Neutralisation <p><i>Scientific skills covered in 7E: writing a method, identifying suitable equipment, risks involved in exp't</i></p> <p>7F: Reactions</p> <ul style="list-style-type: none"> - Using a Bunsen burner and combustion - Physical and chemical reactions - Metals and acids - Metal carbonates <p>Metals and oxygen</p>	<p>7A: Cells</p> <ul style="list-style-type: none"> - Cells, tissues and organs - Using microscopes - Plant and animal cells - Cell division - Specialised cells - Animal and plant organ systems <p><i>Scientific skills covered in 7A: writing a method, conversion of units</i></p> <p>7B: Reproduction</p> <ul style="list-style-type: none"> - Reproductive organs - Sexual reproduction - Puberty and the menstrual cycle - Fertility treatment - Being pregnant and giving birth - Plant reproduction and seed dispersal. 	<p>7I/9G: Pollution</p> <ul style="list-style-type: none"> - Renewable and non-renewable energy - Benefits and disadvantages of renewable energy - Burning foods - Composition of atmosphere and Acid rain - Global warming - The Carbon Cycle - Recycling <p>7J: Electricity</p> <ul style="list-style-type: none"> - Current and circuit symbols and models - Measuring current and voltage with $V=IR$ 	<p>7J: Electricity cont</p> <ul style="list-style-type: none"> - Current and circuit symbols and models - Measuring current and voltage with $V=IR$ - Series circuits - Parallel circuits - Interpreting a fuel bill and power ratings of appliances. - Resistance in a wire <p>7G: States of matter</p> <ul style="list-style-type: none"> - States of matter - Particle diagrams - Pressure - Diffusion 	<p>8E: Separation techniques</p> <ul style="list-style-type: none"> - Filtration - Solubility - Evaporation - Chromatography - Distillation 	<p>7C/D: Classification and ecology.</p> <ul style="list-style-type: none"> - Adaptation + habitat - Food chains - Food webs - Bioaccumulation of toxic chemicals - Classification <p>7L: Space</p> <ul style="list-style-type: none"> - Day and night - Seasons - Solar system - Gravity
<p>Assessment:</p>	<p>End of Unit on 7F</p> <p>End of Unit on 7E</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 7A</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>PPE which retrieves knowledge from 7F, 7E, 7A and 7B</p> <p>End of Unit on 7I/9G</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 7J and 7G</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 7G</p> <p>EOY PPE on 7F, 7E, 7A, 7B, 7I/9G, 7J, 7G, 8E</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>

Recovery Curriculum Overview for Year 8

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Curriculum Content:</p> <p>Priority Essential knowledge and skills that will be taught.</p>	<p>8F/G: Elements, compounds and mixtures.</p> <ul style="list-style-type: none"> - Elements and the periodic table - History of the periodic table. - Atomic and electron structure - Differences between compounds and mixtures. - Metals and non-metals properties <p>9F: Reactivity series.</p> <ul style="list-style-type: none"> - Reactivity Series/ Displacement - Thermal decomposition - Metal extraction a. 	<p>9F: Reactivity series cont...</p> <ul style="list-style-type: none"> - Endothermic and exothermic reactions - Properties of ceramics, polymers and composites <p>8A: Digestion</p> <ul style="list-style-type: none"> - Food tests - Balanced diets - Digestive system - Enzymes - Small intestine and villi <p>8B/9C: Respiration and exercise</p> <ul style="list-style-type: none"> - Structure of lungs and role of lungs/heart in respiration. - Breathing disease - Aerobic respiration and pulse rate - Anaerobic respiration in animals and yeast - Effects of recreational drugs - Photosynthesis - structure of the leaf 	<p>8K/8L: Light and sound</p> <ul style="list-style-type: none"> - Light and sound wave properties - Pitch and frequency - Ultrasound - Reflection and the eye/pin hole cameras - Refraction - Dispersion and colours. 	<p>9A: Inheritance</p> <ul style="list-style-type: none"> - DNA, chromosomes and genes - Variation (continuous/discontinuous) - Natural selection - Extinction - Selective breeding <p>7K: Forces and speed</p> <ul style="list-style-type: none"> - Contact and non-contact forces with weight - Resultant forces + work done - Force and extension (Hooke's Law) - Distance time graphs - Speed time graphs - Terminal velocity 	<p>8J: Magnets, moments and density .</p> <ul style="list-style-type: none"> - Magnets - Electromagnets - Moments - Levers - Density, floating and sinking 	<p>8I: Energy transfer</p> <ul style="list-style-type: none"> - Energy transfers - Heat and temperature - Changes of state - Radiation - Conduction and convection <p>8H: Rock cycle</p> <ul style="list-style-type: none"> - Structure and composition of the Earth - Formation of sedimentary, igneous and metamorphic rocks - Rock cycle and efficacy of recycling.
<p>Assessment:</p>	<p>End of Unit on 8F/G</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 9F End of Unit on 8A End of Unit on 8B/9C</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>PPE which retrieves knowledge from 8F/G, 9F, 8A, 8B9C, 8KL</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 9A End of Unit on 7K</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Unit on 9A EOY PPE on 8F/G, 9F, 8A, 8B/9C, 8K/8L, 9A, 7K and 8J.</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>

Recovery Curriculum Overview for Year 9

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Curriculum Content:</p> <p>Priority Essential knowledge and skills that will be taught.</p>	<p>B1 Cell Biology</p> <ul style="list-style-type: none"> - Cell structure - Cell division - Transport in cells <p><i>Required practical 1: Using a light microscope.</i></p> <p>.</p> <p>C1 Atomic structure & the periodic table</p> <ul style="list-style-type: none"> - History of the atom 	<p>C1 Atomic structure & the periodic table cont...</p> <ul style="list-style-type: none"> - Symbols & relative atomic mass - electronic charge & isotopes - The periodic table <p>C2 Bonding, structure, and the properties of matter</p> <ul style="list-style-type: none"> - Simple model of the atom and electronic charge - Chemical bonds, ionic, covalent & metallic. - How bonding and structure are related to the properties of substances. - Structure and bonding of carbon 	<p>P3 Particle model of matter</p> <ul style="list-style-type: none"> - Changes of state & particle model - Internal energy & energy transfers - Particle model & pressure <p><i>Required practical 17: Determine the density of regular & irregular shapes</i></p> <p>P4 Atomic Structure</p> <ul style="list-style-type: none"> - Atoms & isotopes - Atoms & nuclear radiation <p>B2 Organisation</p> <ul style="list-style-type: none"> - Principles or organisation 	<p>B2 Organisation cont...</p> <ul style="list-style-type: none"> - Animal tissues, organs & organ systems - Plant tissues, organs & systems <p><i>Required practical 3: Carry out food tests.</i></p> <p><i>Required practical 4: Investigate effect of pH on enzymes.</i></p> <p>C6 C8: Rate and extent of chemical changes and chemical analysis</p> <ul style="list-style-type: none"> - Rates of reaction - Reversible reactions - Le-Chatelier's principle - Chromatography - Tests for gases <p><i>Required practical: measuring rate of reaction and paper chromatography</i></p>	<p>B3 B4: Infection, response and bioenergetics</p> <ul style="list-style-type: none"> - Disease - Antibiotics and painkillers - Drug development - Photosynthesis - Metabolism <p><i>Required practical: rate of photosynthesis</i></p> <p>.</p>	<p>Revision for PPE</p>
<p>Assessment:</p>	<p>B1 End of unit test</p> <p>The first unit will be re-assessed during teaching of the second unit by using retrieval roulette in connect activities.</p>	<p>C1 End of unit test Aspects of B1 are assessed in this unit</p> <p>C2 End of unit test Aspects of C1 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>P3P4 End of unit test Aspects of C2 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>B2 End of unit test Aspects of P3P4 are assessed in this unit</p> <p>C6/C8 End of unit test Aspects of B2 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>B3B4 End of unit test Aspects of C6C8 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Year PPE re-assesses all units taught this year</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>

Recovery Curriculum Overview for Year 10

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Curriculum Content:</p> <p>Priority Essential knowledge and skills that will be taught.</p>	<p>B7 Ecology</p> <ul style="list-style-type: none"> - Adaptations, interdependence & competition - Organisation of an ecosystem - Biodiversity & the effect of human interaction on ecosystems <p><i>Required practical activity</i> <i>Sampling</i></p> <p>P1 Energy</p> <ul style="list-style-type: none"> - Types of energy - KE and GPE calculations - Work done - Weight and gravity 	<p>P1 Energy cont</p> <ul style="list-style-type: none"> - SHC - Power/efficiency - Renewable/non-renewable energy - Reducing energy transfers <p><i>Required practical activity</i> <i>specific heat capacity</i></p> <p>B3 B4: Infection, response and bioenergetics</p> <ul style="list-style-type: none"> - Disease - Antibiotics and painkillers - Drug development - Photosynthesis - Metabolism <p><i>Required practical: rate of photosynthesis</i></p>	<p>C7 C9 C10: organic chemistry, chemistry of the atmosphere and using resources</p> <ul style="list-style-type: none"> - Finite and renewable resources - Water treatment <p><i>Required practical: water purity</i></p> <p>B5: Homeostasis and response</p> <ul style="list-style-type: none"> - Homeostasis - Nervous system - Puberty and menstrual cycle - Controlling fertility 	<p>C4 – Chemical changes</p> <ul style="list-style-type: none"> - Acids and bases - Strong and weak acids - neutralisation - acid reactions - separating metals - redox - electrolysis <p>Required practical activity <i>Preparation of a pure, dry sample of a salt</i></p> <p>Required practical activity <i>Investigate what happens when aqueous solutions are electrolysed using inert electrodes.</i></p>	<p>P5: Forces</p> <ul style="list-style-type: none"> - Contact and non-contact forces - Acceleration - Newton’s laws - Momentum <p><i>Required practical: extension of a spring, investigating motion</i></p>	<p>P2 Electricity to begin finish in year 11</p> <ul style="list-style-type: none"> - Current, potential difference & resistance - Series & parallel circuits <p><i>Required practical 15: Investigate resistance in circuits.</i> <i>Required practical 16: Investigate I-V characteristics.</i></p>
<p>Recovery: Essential Knowledge from previous term that needs revisiting.</p>	<p>Topics missed in Year 9 due to Covid are carried over into year 10. (B7)</p>					
<p>Assessment:</p>	<p>B7 End of unit test</p> <p>The first unit will be re-assessed during teaching of the second unit by using retrieval roulette in connect activities.</p>	<p>P1 End of unit test Aspects of B7 are assessed in this unit</p> <p>B3B4 End of unit test Aspects of P1 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>C7C9C10 End of unit test Aspects of B3B4 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>P1 End of unit test Aspects of C6C8 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>C4 End of unit test Aspects of P1 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>End of Year PPE re-assesses all units taught this year</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>

Recovery Curriculum Overview for Year 11

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Curriculum Content:</p> <p>Priority Essential knowledge and skills that will be taught.</p>	<p>B5: Homeostasis and response</p> <ul style="list-style-type: none"> - Homeostasis - Nervous system - Puberty and menstrual cycle - Controlling fertility <p>B6: Inheritance, evolution and variation</p> <ul style="list-style-type: none"> - Reproduction - Variation and evolution - Genetics and evolution - Classification 	<p>C3 C5: Quantitative chemistry and energy changes</p> <ul style="list-style-type: none"> - Chemical measurements, conservation of mass and the quantitative interpretation of chemical equations - Use of amount of substance in relation to masses of pure substances - Exothermic and endothermic reactions <p><i>Required practical on temperature change.</i></p> <p>B7 Ecology</p> <ul style="list-style-type: none"> - Adaptations, interdependence & competition - Organisation of an ecosystem - Biodiversity & the effect of human interaction on ecosystems <p><i>Required practical activity Sampling</i></p>	<p>P6 P7: Waves and magnets</p> <ul style="list-style-type: none"> - Waves in air, fluids and solids - Electromagnetic waves - Permanent and induced magnetism, magnetic forces and fields - The motor effect <p><i>Required practical on measuring waves</i></p>	<p>Preparing for GCSE Examinations in summer term.</p>	<p>Preparing for GCSE Examinations in summer term.</p>	<p>Preparing for GCSE Examinations in summer term.</p>
<p>Recovery: Essential Knowledge from previous term that needs revisiting.</p>	<p>Topics missed in Year 10 due to Covid are carried over into year 11. (B5)</p>					
<p>Assessment:</p>	<p>B5 End of unit test Aspects of C1 are assessed in this unit</p> <p>B6 End of unit test Aspects of P2 are assessed in this unit</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>C3C55 End of unit test Aspects of P3P4 are assessed in this unit</p> <p>PPE wave 1 on Bio paper 2, Chem paper 1, Physics paper 1</p> <p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette and exam style questions in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette and exam style questions in connect activities.</p>	<p>Previous units will be re-assessed during teaching of the current unit by using retrieval roulette and exam style questions in connect activities.</p>