



	Autumn Term 1	Autumn Term 2
Topic	<p>8S / 8O / 8E: Rates of Reaction / Motion 8T / 8W: Genetics & Inheritance / Force & Pressure</p> <p>PLEASE SEE TERM 1 OR 2 FOR CONTENT DEPENDENT ON STUDENTS SPECIFIC TOPICS.</p> <p>Rates of Reaction: Collision Theory and Activation Energy, Effect of Temperature, Effect of Concentration, Effect of Catalysts, Effect of Surface Area, Calculating Rate, Reversible Reactions.</p> <p>Motion: Speed Distance Time, Using Units, Distance Time Graphs, Relative Motion Vectors, Change in Speed, Velocity Time Graphs, Gradient of a Straight Line.</p>	<p>8S / 8O / 8E: Genetics & Inheritance / Force & Pressure 8T / 8W: Rates of Reaction / Motion</p> <p>PLEASE SEE TERM 1 OR 2 FOR CONTENT DEPENDENT ON STUDENTS SPECIFIC TOPICS.</p> <p>Genetics and Inheritance: DNA, Genetic Crosses & Keywords, Genetic Inherited Diseases, Stem Cells and Ethical Issues, Selective Breeding, Genetic Engineering, Cloning.</p> <p>Force & Pressure: What is Force?, Comparing Forces, Upthrust Buoyancy and Gravity, Adding Forces, Resultant Force and Acceleration, Pressure on Fluids, Pressure on Gases, Pressure on Solids.</p>
Assessment	<p><u>Progress Check 1 & 2</u></p> <p>Approximate Date of Assessment: WK6 (Oct)</p> <p>Science students will receive 2 progress checks in this half term; one for each Science teacher. 8S, O and E will receive progress checks on Rates of Reaction and Motion. 8T and W will receive progress checks on Genetics & Inheritance and Force. Each of these tests will be roughly 20 minutes long and comprise roughly of 20 marks. These questions will be a mixture of short response questions, multiple choice and extended literacy questions. These will be similar format to GCSE examination questions.</p>	<p><u>MILESTONE 1 & 2</u></p> <p>Approximate Date of Assessment: WK12 (Nov)</p> <p>Science students will receive 2 milestone assessments in this half term; one for each Science teacher.</p> <p>Milestone 1: Rates of Reaction, Genetics & Inheritance (comb). Milestone 2: Motion, Force (Comb).</p> <p>Students should refer to their progress check targets to ensure they are fully prepared for their milestone assessments.</p>



	Spring Term 1	Spring Term 2
Topic	<p>8S / 8O / 8E: Variation / Energy 8T / 8W: Digestion & Enzymes / Bonding</p> <p>PLEASE SEE TERM 1 OR 2 FOR CONTENT DEPENDENT ON STUDENTS SPECIFIC TOPICS.</p> <p>Variation: Variation, Variation Graphs, Adaptation & Competition, Evolution, Fossilisation, Extinction, Speciation.</p> <p>Energy: What is Energy?, Energy Transfer, Kinetic Energy, Gravitational Potential Energy, Elastic Energy, Work Done, Heat as Energy.</p>	<p>8S / 8O / 8E: Digestion & Enzymes / Bonding 8T / 8W: Variation / Energy</p> <p>PLEASE SEE TERM 1 OR 2 FOR CONTENT DEPENDENT ON STUDENTS SPECIFIC TOPICS.</p> <p>Enzymes & Digestion: A Balanced Diet, The Chemistry of Food, The Digestive System, Food for Energy, Catalysts and Enzymes, Enzymes in Digestion, Factors Affecting Enzyme Action.</p> <p>Bonding: Ionic Bonding, Giant Ionic Bonding, Covalent Bonding, Simple Molecular Structures, Metallic Bonding & Alloys, Nanoparticles.</p>
Assessment	<p><u>Progress Check 3 & 4</u></p> <p>Approximate Date of Assessment: WK18 (Jan)</p> <p>Science students will receive 2 progress checks in this half term; one for each Science teacher. 8S, O and E will receive progress checks on Variation and Energy. 8T and W will receive progress checks on Digestion/Enzymes and Bonding. Each of these tests will be roughly 20 minutes long and comprise roughly of 20 marks. These questions will be a mixture of short response questions, multiple choice and extended literacy questions. These will be similar format to GCSE examination questions.</p>	<p><u>MILESTONE 3 & 4</u></p> <p>Approximate Date of Assessment: WK24 (Mar)</p> <p>Science students will receive 2 milestone assessments in this half term; one for each Science teacher.</p> <p>Milestone 3: Rates of Reaction, Genetics & Inheritance, Variation, Digestion & Enzymes (comb).</p> <p>Milestone 4: Motion, Force, Bonding, Energy (Comb).</p> <p>Students should refer to their progress check targets to ensure they are fully prepared for their milestone assessments.</p>



	Summer Term 1	Summer Term 2
Topic	<p>All Groups: Disease / Chemistry Calculations</p> <p>Disease: Pathogens & Disease, Growing Bacteria, Preventing Infections, Bacterial/Fungi/Protist Diseases, Antibiotics, Preventing Bacterial Growth, Vaccines.</p> <p>Chemistry Calculations: Relative Atomic Mass, Percentage by Mass, Moles, Balanced Equations, Percentage Yield, Atom Economy, Expression of Concentrations.</p>	<p>All Groups: Electrolysis / Electricity & Magnetism</p> <p>Electrolysis: Electrolysis; The Basics, Changes at the Electrodes, Extracting Aluminium, Exothermic Reactions, Endothermic Reactions, Endothermic & Ectothermic Reaction Uses, Bond Energy Calculations.</p> <p>Electricity & Magnetism: Static Charge & Electric Field, Current & Potential Difference, Resistance, Series & Parallel Circuits, Magnetism, Geomagnetism, Electromagnetism.</p>
Assessment	<p><u>Milestone 5 & 6 (Summer Term Science Assessments)</u></p> <p>Approximate Date of Assessment: WK31 (May)</p> <p>Science students will receive 2 milestone assessments in this half term; one for each Science teacher.</p> <p>Milestone 5: Rates of Reaction, Genetics & Inheritance, Variation, Digestion & Enzymes, Disease (comb).</p> <p>Milestone 6: Motion, Force, Bonding, Energy, Chemistry Calculations (Comb).</p> <p>Students should refer to their progress check targets to ensure they are fully prepared for their milestone assessments.</p>	

SUBJECT: Science



	Topic	Assessment
Autumn Term 1	8S / 8O / 8E: Rates of Reaction / Motion 8T / 8W: Genetics & Inheritance / Force & Pressure	Progress Check 1 & 2
Autumn Term 2	8S / 8O / 8E: Genetics & Inheritance / Force & Pressure 8T / 8W: Rates of Reaction / Motion	Milestone 1 & 2
Spring Term 1	8S / 8O / 8E: Variation / Energy 8T / 8W: Digestion & Enzymes / Bonding	Progress Check 3 & 4
Spring Term 2	8S / 8O / 8E: Digestion & Enzymes / Bonding 8T / 8W: Variation / Energy	Milestone 3 & 4
Summer Term 1	All Groups: Disease / Chemistry Calculations	Milestone 5 & 6
Summer Term 2	All Groups: Electrolysis / Electricity & Magnetism	