

Subject	Year	Term
SCIENCE	8	3
Topic		
Biology – Ecosystem Processes, Chemistry – Metals & Acids, Physics – Motion & Pressure		
Content (Intent)		
<p>Prior Learning (Topic) Adaptations and Inheritance, Acids and Alkalis, Electricity and Electromagnets</p> <p>Students will KNOW how plants produce their food through photosynthesis and chemosynthesis, know how to read graphs on speed and to calculate speed and also to recall the products of metals reacting with acids, water and oxygen.</p> <p>Students will UNDERSTAND the difference between speed, velocity and acceleration and know how explain the differences in pressure between solids, liquids and gases</p> <p>Students will use SKILLS to practically determine the effects of limiting factors for photosynthesis, to plot and read speed graphs and to work safely with metals when reacting with acids, water and oxygen.</p>		
<p>Future Learning (Topic) Biology – Cells structures and Transport, Chemistry – Atomic Structure, Physics - Waves</p>		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p>Biology - There will be a sequence of lessons which include: Photosynthesis, chemosynthesis, plant minerals, Aerobic and Anaerobic respiration, food chains and webs.</p> <p>Physics - There will be a sequence of lessons which include: Speed, motion graphs, pressure in solids, liquids and gases and turning points.</p> <p>Practical Skills – identifying essential requirements for photosynthesis</p> <p>Maths Skills – Graphical skills covering speed and linear equations covering speed calculations.</p>	<p>Formative Feedback Task (End of Unit tests)</p> <p>Pupils given formative feedback only on the topics of: Biology – Ecosystem Processes Chemistry – Metals and Acids Physics – Motion and Pressure</p> <p>Assessment 2 (June) topics covering Summative assessment including:</p> <ul style="list-style-type: none"> • Periodic table and Reactions • Adaptation and Inheritance • Acids and Alkalis • Electricity and Magnetism. <p>Cumulative assessment will include Elements, Health and Lifestyle and Energy from Years 7</p>	
<p>Chemistry - There will be a sequence of lessons which include: metals reacting with oxygen, water, acids, displacement reactions and extracting metals.</p> <p>Practical Skills – Observations from the reactions of metals experiments</p>	<p>All topics listed will also need to be recalled in: Year 9 Assessment 1 and 2.</p> <p>Pupils given a percentage, formative feedback.</p>	
How can parents help at home?		
<p>Ensure all class work is completed and homework submitted on time.</p> <p>Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers.</p> <p>Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.</p> <p>Ensure all pupils have all their resources required for science lessons, including knowledge organisers, exercise books, pens and calculators</p>		
Helpful further reading/discussion (including Reading and Vocabulary Lists)		
<p>Reading</p> <p>Use the Educake online learning platform www.educake.co.uk/ Use BBC bitesize https://www.bbc.com/bitesize/levels/z4kw2hv Use and review the Knowledge Organisers</p>	<p>Vocabulary Lists:</p> <p>Aerobic Anaerobic Chemosynthesis Photosynthesis Stomata</p>	<p>Bioaccumulation Pivot Relative Motion Acceleration Haemoglobin</p>