

	Half-term 1		
Topic	6.5 Forces	5.8 Chemical analysis	4.6 Inheritance, variation and evolution
<p>Topic overview</p> <p>Students will learn...</p>	<p>To categorise forces and apply Newton's laws.</p> <p>To describe both quantitatively and qualitatively motion in a line.</p> <p>To apply a range of formulas in various scenarios.</p> <p>To calculate momentum and apply conservation of momentum (HT).</p>	<p>To understand how qualitative tests in chemistry can be used to identify specific chemicals.</p> <p>The uses and merits of instrumental methods of analysing chemicals.</p>	<p>This section will then look at DNA, chromosomes, mutations and other aspects of genetics which will then explore variation and how that leads to evolution.</p> <p>Variation generated by mutations and sexual reproduction is the basis for natural selection; this is how species evolve.</p> <p>An understanding of these processes has allowed scientists to intervene through selective breeding to produce livestock with favoured characteristics.</p>

	Half-term 2			Half-term 3
Topic	4.7 Ecology	5.9 Chemistry of the atmosphere		6.6 Waves
Topic overview Students will learn...	<p>This section will now look at how the Sun is a source of energy that passes through ecosystems. Students will link this to how materials including carbon and water are continually recycled by the living world, being released through respiration of animals, plants and decomposing microorganisms and taken up by plants in photosynthesis. An understanding of how all species live in ecosystems composed of complex communities of animals and plants dependent on each other and that are adapted to particular conditions, both abiotic and biotic is an important underlying theme of this topic. Students will learn how in order to continue to benefit from ecosystems, humans need to engage with the environment in a sustainable way. In this section we will explore how humans are threatening biodiversity as well as the natural systems that support it. We will also consider some actions we need to take to ensure our future health, prosperity and well-being.</p>	<p>How the atmosphere of the Earth has evolved and changed over time to become the present atmosphere and then looking at problems that affect the atmosphere.</p> <p>The composition of the atmosphere in the past and now.</p> <p>How other factors affect the atmosphere's composition and the effects this has.</p>	<p>Revision and mock exams</p>	<p>To describe, with examples, the behaviour and properties of transverse and longitudinal waves.</p> <p>To explain the types and properties of electromagnetic waves.</p>

Subject: Trilogy Science / Year: 11 Ability: All
 Combined Science



	Half-term 3	Half-term 4	
Topic	5.10 Using Resources	6.7 Magnetism and electromagnetism	RETEACH and Public Examination Period
Topic overview Students will learn...	<p>How industries use the Earth's natural resources to manufacture useful products.</p> <p>Students will learn how Chemists seek to minimise the use of limited resources, use of energy, waste and environmental impact in the manufacture of these products.</p> <p>Students will evaluate the environment and ways to be sustainable and minimise the impact humans on the environment.</p>	<p>To describe the interaction of magnets on each other, magnetic materials and electromagnetic fields.</p> <p>HT: to explain the applications of electromagnetism.</p>	