

Subject: Biology **Year:** 11 **Ability:** All
Separate Science



	Half-term 1	Half-term 2		Half-term 3
Topic	Inheritance, Variation and Evolution	Reteach Paper 1	Revision and mock exams	Ecology
Topic overview Pupils will learn...	<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>	<p>Reteach and revisit to prepare students for mock examinations.</p>		<p>This section will now look at how the Sun is a source of energy that passes through ecosystems.</p> <p>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.</p> <p>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>

	Half-term 4	Half-term 5
Topic	Ecology	<h2>RETEACH and Public Examination Period</h2>
Topic overview	<p>This section will now look at how the Sun is a source of energy that passes through ecosystems.</p>	
Pupils will learn...	<p>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.</p> <p>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>	