



Year 10 Biology curriculum overview for 2025 – 2026

	Key content (knowledge)	Key skills	Assessments	Challenge and enrichment
Autumn half term 1	<p>Enzymes and the digestive system</p> <p>Mass transport in animals - the blood, the heart and circulatory system and gas exchange in the lungs</p> <p>Transport in plants</p>	<p>Required practical 4 – testing for carbohydrates, lipids and proteins</p> <p>Required practical 5 – the effect of pH on amylase</p>		<p>Cambridge Biology Challenge, run by Homerton College.</p>
Autumn half term 2	<p>Photosynthesis</p> <p>Respiration</p>	<p>Required practical 6 – investigate the effect of light intensity on the rate of photosynthesis.</p> <p>Inverse square law.</p>	<p>Test 1: Enzymes, the digestive system and mass transport</p>	<p>Wider reading – Biological Sciences review article “The future of food: Growing plants without soil”.</p>

Spring half term 1	Human nervous system – Brain and Eye function.	Required practical 7 - Investigating human reaction times.	Test 2: Photosynthesis and respiration	Microbiology in Schools Advisory Committee (MiSAC) annual poster competition. TED talk: How to look inside the brain.
Spring half term 2	Hormonal coordination – Control of blood glucose, negative feedback, reproductive hormones. Plant hormones.	Required practical 8 – Investigating the effect of gravity of newly germinated seeds.		Wider reading – Biological Sciences review article “Hijacking Hormones to Regulate Fertility”.
Summer half term 1	Homeostasis, kidneys and temperature regulation. Adaptations, interdependence and competition.		Test 3: Nervous system hormones and homeostasis	UKBC: Biology Challenge competition. Wider reading – Biological Sciences review article “Wolves: Yellowstone's missing link”.
Summer half term 2	Feeding relationships. Material cycling, decomposition and rates of decay.	Required practical 9 – Measuring populations size (ecology field work). Required practical 10 Investigating effect of	END OF YEAR 10 exams	<ul style="list-style-type: none"> • Royal Society of Biology Nancy Rothwell Prize biological drawing competition.

		temperature on rates of decay.		<ul style="list-style-type: none">• Visit to the Royal Society Summer Science Exhibition.
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