

Willow Park School - Long Term Plan - GCSE Biology – Sheaf (KS4)



Cycle	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1 2024 - 2025	<u>Unit 1 - Cell Biology</u> Cell basics and functions, specialised cells, sub-structure of eukaryotic and prokaryotic cells, stem cells Stem cells and meristems in plants Enzymes and factors affecting enzymic reactions. Microscopy, Osmosis, Enzymes Required practical. (RP)		<u>Unit 2 – Organisation</u> Transport Systems in multicellular organisms including plants. The relationship between the structure and the function of the human circulatory system Reaction Time RP	<u>Unit 3 – Infection and response</u> Health, disease and the development of medicines, Transmittable diseases, pathogens virus and bacteria in animals and plants. Immune system Microbiology RP decay	<u>Unit 5 Homeostasis and Response</u> Coordination and control the human nervous system. reflex arc, hormones control and coordination homeostasis Reaction time Practical	<u>Unit 4 Bioenergetics</u> Photosynthesis function and process of photosynthesis rates of photosynthesis Plant responses, Photosynthesis practical
	<u>Unit 4 Bioenergenetics</u> The importance of cellular respiration anaerobic and aerobic Recap Unit 1& 2 carbohydrates, proteins nucleic acids lipids Food Tests practical	<u>Unit 6 - Evolution, inheritance and variation</u> Genomes single gene dominant and recessive genes genomes and environmental influence sex determination in human’s genetic variation in populations natural selection ethics of selective 1-V characteristics breeding and gene technology		<u>Unit 7 - Ecosystems</u> Levels of organisation in an ecosystem abiotic and biotic factors affecting communities, Interdependency diversity Measuring frequency distribution and abundance Fieldwork practical	Revision & Exam	