ABINGDON
HOUSE SCHOOL

Curriculum map overview for Combined Science 2025/26

Term ***(Weeks)***	***Topic/Unit (weeks)***	***Key Objectives***	***Type of assessment***
Week 1 (First full week)	***Initial evaluation***	This is the time to establish routines with the children, fostering positive relationships, and gaining a clear understanding of their individual learning needs.	
Autumn 1 (7)	**DNA and the genome (1)**	This unit covers the structure and function of eukaryotic and prokaryotic cells, DNA as the genetic material, and key genetic terms.	End of unit test
	Structure and bonding (1)	This unit explores changes of state, particle kinetics, and energy transfers in relation to chemical bonding, including ionic, covalent, and metallic bonds.	End of unit test
	Health and disease (1)	This unit explores health and disease, including communicable and non-communicable types and their interactions.	End of unit test
	Transport and exchange surfaces (1)	This unit covers the human circulatory system, its link to the gas exchange system, and the adaptations of the heart, blood vessels, and blood components.	End of unit test Core practical: Osmosis in potato

			slices
	Electric fields and circuit calculations (1)	This unit covers static electricity, electric fields, and current flow in series and parallel circuits.	End of unit test
	Coordination and control: the human nervous system (1)	This unit explores the structure and function of the nervous system, including the CNS, reflex arcs, and the eye.	End of unit test
	Hormones and the human endocrine system (1)	This unit explores hormonal control by the endocrine system, including blood sugar regulation by insulin and glucagon, and the roles of thyroxine and adrenaline.	End of unit test
Autumn 2 ***(7)***	**Measuring waves (1)**	This unit covers wave motion, including amplitude, wavelength, frequency, and velocity. It explains transverse and longitudinal waves, reflection, and absorption.	End of unit test Core practical: Investigating waves
	Photosynthesis (1)	This unit explores photosynthesis as the basis for food and biomass, examines cell structure and adaptations in eukaryotic and prokaryotic cells, and covers the photosynthesis process.	End of unit test Core practical: Light intensity and photosynthesis
	Calculations involving masses (1)	This unit covers writing chemical formulae, balancing equations, and using the conservation of mass.	End of unit test
	Inheritance, genotype and phenotype (1)	This unit covers key genetic terms, single-gene inheritance, and genetic crosses, including probability and ratios.	End of unit test
	Energy of moving objects (1)	This unit covers energy changes in systems through heating, forces, and electrical work.	End of unit test
	Cell division:	This unit covers mitosis and the cell cycle in growth,	End of unit test

	mitosis and meiosis (1)	cancer as uncontrolled cell division, and the role of mutations in genetic variation.	
	Making salts (1)	This unit explores empirical formulae, balanced chemical and ionic equations, gas identification, acid reactions, and pH as a measure of hydrogen ion concentration.	End of unit test Core practicals: Preparing copper sulfate; Investigating neutralisation
Spring 1 (6)	**Stem cells and differentiation (1)**	This unit explores the function of stem cells and the importance of cell differentiation.	End of unit test
	Energy of moving particles (1)	This unit covers energy changes in systems due to heating, forces, and electrical work.	End of unit test
	Explaining evolution (1)	This unit explores evidence for evolution, including fossils and antibiotic resistance.	End of unit test
	Chemistry of carbon (1)	This unit explores how material properties relate to bonding, bond strength, and structure, focusing on carbon compounds like diamond, graphite, and graphene.	End of unit test
	Living organisms and their environments (1)	This unit explores ecosystem organisation, biotic and abiotic factors, material cycling, and the role of decomposers.	End of unit test Core practical: Quadrats and transects
	Circuit components (1)	This unit explores current, resistance, and potential difference.	End of unit test Core practical: Investigating resistance
Spring 2 (6)	**Energy changes in reactions (1)**	This unit covers bulk material properties related to bonding and intermolecular forces and explores bond breaking, bond making, activation energy, and reaction profiles.	End of unit test
	Human immune system (1)	This unit explores the body's defences and immune response against pathogens, disease prevention, and vaccines.	End of unit test

	Rate of reaction (1)	This unit explores factors influencing reaction rates, including temperature, concentration, surface area, and catalysts.	End of unit test
	Cellular respiration (1)	This unit covers cellular respiration as an exothermic reaction in all cells, comparing aerobic and anaerobic processes.	End of unit test
	Biodiversity (1)	This unit explores trophic levels, biomass pyramids, and the efficiency of biomass transfers in ecosystems.	End of unit test
	Earth's resources (1)	This unit covers crude oil, its role as a hydrocarbon source, and separation by fractional distillation.	End of unit test
Summer 1 (5)	**Transport and exchange surfaces in plants (1)**	This unit covers water and mineral uptake in plants, focusing on root hair cells, xylem, and phloem.	End of unit test
		Still to cover: Radiation, hormones & reproduction, groups of the periodic table, homeostasis, electromagnetism, atmosphere, electromagnetic spectrum, electrolysis, mains electricity,	