

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)	Atomic structure and the periodic table (2)	This unit covers the atomic model, relative atomic mass, isotopes, and the structure of the modern periodic table.	End of unit test
	Eukaryotic and prokaryotic cells (2)	This unit covers the structure and function of sub-cellular components in eukaryotic and prokaryotic cells and explores DNA as the genetic material of organisms.	End of unit test Core Practical: Using microscopes
	Density and Pressure (1)	This unit defines density and explores how it varies between states of matter based on atomic arrangement.	End of unit test Core Practical: Investigating densities

	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
Autumn 2 (7)	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
	Measuring and calculating motion (2)	This unit covers vector-scalar distinctions in displacement, distance, velocity, and speed.	End of unit test Core practical: Investigating acceleration
	States of matter (1)	This unit covers the particle model, states of matter, and changes between them, distinguishing physical from chemical changes.	End of unit test
	Biological molecules and enzymes (1)	This unit explores the roles of sugars, amino acids, and fatty acids in the synthesis and breakdown of biological molecules.	End of unit test Core practical: pH and enzymes
	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
Spring 1 (6)	Electric fields and circuit calculations (2)	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
	Separating substances (1)	This unit explores purification techniques, including filtration, crystallisation, and distillation.	End of unit test Core practical: Investigating inks
	Hormones and	This unit explores hormonal control by the endocrine	End of unit test

	the human endocrine system (1)	system, including blood sugar regulation by insulin and glucagon, and the roles of thyroxine and adrenaline.	
	Measuring waves (2)	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
Spring 2 (6)	Photosynthesi s (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: mitosis and meiosis (1)	This unit covers mitosis and the cell cycle in growth, cancer as uncontrolled cell division, and the role of mutations in genetic variation.	End of unit test
Summer 1 (5)	Making salts (2)	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
	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	This unit covers energy changes in systems due to	End of unit test

	moving particles (1)	heating, forces, and electrical work.	
	Explaining evolution (1)	This unit explores evidence for evolution, including fossils and antibiotic resistance.	End of unit test
Summer 2 (6)	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
	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
	Revision (2)	This time will be specifically focussed on revision techniques for upcoming exams.	