

Curriculum map overview for Year 7 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)	Forces (3)	This unit focuses on quantifying and comparing energy transfers in different processes, such as motion changes, electrical circuits, and fuel burning. It examines forces as interactions between objects, using diagrams and measurements, including contact and non-contact forces.	End of unit test
	Solid, liquid, gas states and changes of state (3)	This unit covers the properties of solids, liquids, and gases using the particle model, including gas pressure. It explains changes of state in terms of the particle model while developing skills in using appropriate techniques, apparatus, and materials in lab work.	End of unit test
Autumn 2	Cells (3)	This unit explores cell structures, their functions,	End of unit

(7)		and differences between plant and animal cells. It includes adaptations of unicellular organisms and the organisation of multicellular organisms. Skills in using safe techniques, recording data, and evaluating methods in lab work are developed.	test
	Our solar system and beyond (3)	This unit explores gravity as the force between masses, including weight calculation using gravitational field strength. It covers the relationship between Earth, the Moon, and the Sun, the concept of light years, and seasonal changes due to Earth's tilt.	End of unit test
Spring 1 (6)	Solutions (3)	This unit explores the concepts of pure substances, mixtures, and diffusion in liquids and gases. It emphasises accuracy, precision, and the use of appropriate techniques during investigations. The focus is on making predictions and recording reliable observations.	End of unit test
	Ecosystems (3)	This unit explores the interdependence of organisms in ecosystems, including food webs and insect-pollinated crops. It examines how organisms interact with their environment and the impact of toxic materials. It also highlights the importance of biodiversity and preserving genetic material.	End of unit test
Spring 2 (6)	Sound, light and vision (3)	This unit explores sound and light waves, including frequencies, echoes, reflection, absorption, and the need for a medium for sound to travel. It also compares light and matter waves, investigates light transmission and colour, and examines wave properties and effects.	End of unit test
	Reproduction in humans (3)	This unit explores human reproduction, covering the structure and function of male and female reproductive systems, the menstrual cycle, gametes, fertilisation, gestation, and birth. It also examines how maternal lifestyle impacts the foetus through the placenta.	End of unit test
Summer 1 (5)	Separation techniques (2)	This unit covers techniques for separating mixtures, including filtration, evaporation, distillation, and chromatography, as well as identifying pure substances. Conduct experiments safely, record observations, evaluate methods, and suggest improvements.	End of unit test

	Human skeleton and muscles (2)	This unit investigates the structure and functions of the human skeleton, including support, protection, movement, and blood cell production. Explore biomechanics, the interaction of muscles and the skeleton, and antagonistic muscles while measuring muscle force.	End of unit test
Summer 2 (6)	Heating and Cooling (3)	This unit explains energy transfer between objects due to temperature differences, through conduction or radiation, the role of insulators, and thermal equilibrium. It covers particle arrangements and motions in solids, liquids, and gases and Brownian motion.	End of unit test
	Diffusion (1)	This unit explores diffusion's role in material movement in and between cells and involves making predictions, observations and measurements with various methods.	End of unit test
	Climate change and living sustainably (2)	This unit introduces the greenhouse effect, global warming and the impact of climate change on weather events. It explores some actions that can be taken to use resources, and to live, in a sustainable way.	End of unit test