

Curriculum Overview for Science - Year 8

When?	What?	Why?	How?	Support
Autumn Half Term - 1	Food and Nutrition	To learn about what our food contains, why we need to eat a balanced diet and what happens to food inside our bodies.	Using food tests, modelling digestion and finding out why certain foods are good to eat.	BBC Bitesize Key Stage 3 Science: Digestive System
	The Periodic Table	To learn more about the elements and how they are arranged in Mendeleev's periodic table, according to their properties and trends.	Models, chemical experiments and visual aids.	BBC Bitesize Key Stage 3 Science: The Periodic Table
Autumn Half Term - 2	Reactivity	To learn about physical and chemical changes, the reactivity series and the prevention of rust, energy changes during reactions and the extraction of metals.	Using class experiments and demonstrations with acids, metals and metal ores.	BBC Bitesize Key Stage 3 Science: Chemistry Metals
	Combustion	To understand about the role of oxygen when a fuel burns, and what is done to reduce the damage caused by fires and the causes of global warming.	Practical experiments with different fuels, models to explain combustion.	BBC Bitesize Key Stage 3 Science: Types of Reaction

Spring Half Term - 1	Unicellular Organisms	To understand how bacteria, protocists and microscopic fungi can help or harm us and other organisms.	Using microscopes and bio-viewers, investigating the science of sewage, food production and good hygiene.	BBC Bitesize Key Stage 3 Science: Health
	Metals and Their Uses	To understand the chemical and physical properties of metals and alloys and what happens when they corrode and react with acids or water.	Practical experiments and demonstrations with metals and chemicals, extended reading and research.	BBC Bitesize Key Stage 3 Science: Metals
Spring Half Term - 2	Fluids	To learn about density, drag forces, how particles in different materials behave, pressure in fluids and what happens when things float, melt, freeze and boil.	Experiments with solids, liquids and gases, models and simulations of particles.	BBC Bitesize Key Stage 3 Science: Physical Changes
	Energy Transfers	To understand about internal energy, conduction, convection, radiation and efficiency.	Investigation work, research using the internet and books.	BBC Bitesize Key Stage 3 Science: Energy Stores and Transfers
Summer Half Term - 1	Plants and Their Reproduction	To understand how living things are classified and how new plants are made.	Experiments and extended reading.	BBC Bitesize Key Stage 3 Science: Plant Reproduction
	Breathing and Respiration	To learn about oxygen, how animals breathe and what happens during aerobic and anaerobic respiration.	Using models, practical work and simulations.	BBC Bitesize Key Stage 3 Science: Respiration

<p>Summer Half Term - 2</p>	<p>Force Fields and Electromagnetics</p>	<p>To build upon previous work on magnets and gravity to learn about static electricity, electrical resistance and electromagnetism.</p>	<p>Experimenting with circuits and electrical devices to study everyday effects as well as abstract ideas</p>	<p>BBC Bitesize Key Stage 3 Science: Physics Electromagnetism and Magnetism</p>
	<p>Forces and Motion</p>	<p>To learn about speed, energy and simple machines.</p>	<p>Demonstrations and experiments to look at forces and their effects.</p>	<p>BBC Bitesize Key Stage 3 Science: Physics Motion</p>