

Biology

Our intent: In KS3 Science journey our core intention is to share our passion for the three separate subjects. We care deeply about the nurturing of critical thinking skills, problem solving, natural curiosity and creative thought. We aim to provide a rich, exciting, and challenging programme for our very able cohort.

Skills: Our curriculum is designed to develop the skills and knowledge we know stimulates interest and enthusiasm. The purpose is to allow each child to thrive within the scientific disciplines. Our aim is to build confidence and ability in practical science, develop social skills such as teamwork, negotiation, supporting others and working towards common goals.

Knowledge: By the end of KS3 in Biology students will have learnt ideas for keeping healthy, general health and consequences of unhealthy lifestyle choices. They will have a wide understanding and appreciation of the variety of life and levels of organisation from cells to organisms in the world. Students will recognise the interdependence within ecosystems and the importance of environmental stewardship for sustainability.

Year	Half term	Content
7	a)	Introduction to Biology and Cells (Microscopy, cell structure, organ systems, specialised cells)
	b)	Introduction to Biology and Cells (Microscopy, cell structure, organ systems, specialised cells)
	c)	Classification and Variation (Environmental and Inherited characteristics, features of living things, evolution)
	d)	Classification and Variation (Environmental and Inherited characteristics, features of living things, evolution)
	e)	Reproduction (Organs, puberty, foetal growth, birth, pregnancy care)
	f)	Ecology and practical skills (Food chains and webs, ecological sampling, keys)
8	a)	Microbes (Types of microbes, growing microbes, heroes of microbiology, immune response)
	b)	Microbes (Types of microbes, growing microbes, heroes of microbiology, immune response)
	c)	Digestion (Organs and functions, food tests, enzymes)
	d)	Digestion (Organs and functions, food tests, enzymes)
	e)	Ecological relationships
	f)	Plants
9	a)	Power to the Machine (Organ systems, respirations, smoking, bones and movement, circulatory system)
	b)	Power to the Machine (Organ systems, respirations, smoking, bones and movement, circulatory system)
	c)	Power to the Machine (Organ systems, respirations, smoking, bones and movement, circulatory system)
	d)	Cells and Microscopy (Light and electron microscope, cell ultra structure, prokaryotic cells, differentiation and stem cells.
	e)	Cells and Microscopy (Light and electron microscope, cell ultra structure, prokaryotic cells, differentiation and stem cells.
	f)	Cells and Microscopy (Light and electron microscope, cell ultra structure, prokaryotic cells, differentiation and stem cells.

We seek to use lively minds, to work hard, to develop all our talents and to grow through sharing, to be the best version of ourselves

