

<u>Overview Document</u> <u>2026/2027</u>	Curriculum Area: Science	Year Group: 7 (ACE)
	Personnel Responsible: PPR	Quality Assured by: SKO

Cycle	Topic/Unit Title – Big Question	Content Coverage	Skill development and links to other areas of this subject's curriculum
1	What are the building blocks of plants? What is everything made up of? How does forces impact objects?	<u>Biology</u> Plant Structure; Plant Systems; Plant Life Cycle. <u>Chemistry</u> Particle Model; Changing States; Water Cycle. <u>Physics</u> Space; The Solar System; Forces.	Building blocks of knowledge for all future Plant Biology. Scientific enquiry skills introduced (building on KS2 knowledge) when investigating needs of plants to survive. Students introduced to variables and importance of scientific enquiry when developing theory. Building blocks of knowledge for future Chemistry. Numeracy skills developed during practical work (recording of temperatures). Knowledge of how to use scientific apparatus (links to future chemistry). SMSC skills developed to broaden students understanding of the world/universe around them. Forces links to Year 8 Cycle 1 and Year 10 Cycle 4.
2	What are the building blocks of animals? What do different materials look like? How does light behave?	<u>Biology</u> Organs systems; Healthy Diet; Digestion; Skeleton. <u>Chemistry</u> Structure of the Earth; Types of Rock; Rock Cycle; Soil; Fossils. <u>Physics</u> Reflection; Dark; Light; light Safety; Shadows.	Building blocks for all future human Biology/anatomy. SMSC awareness of diet and impact on health. Links to Year 8 Cycle 2, Year 8 Cycle 4, Year 9 Cycle 3, Year 9 Cycle 4, Year 10 Cycle 2). Builds on knowledge of particle model from Year 7 Cycle 1 and changing states. Fossils links to Year 8 Cycle 1 and Year 11 Cycle 2 (evolution). SMSC light safety and sun exposure. Links to Year 7 Cycle 1 (sun), Year 8 Cycle 4 (energy), and Year 8 Cycle 3 (photosynthesis). Scientific enquiry skills developed when investigating how light behaves on different surfaces.
3	Where do we come from? How can we separate mixtures How do we make an electrical circuit?	<u>Biology</u> Reproduction; Puberty; Menstrual Cycle; Plant Reproduction; Seed Dispersal; Pollination. <u>Chemistry</u> Mixtures; Filtration; and Evaporation; Separating Solids. <u>Physics</u> Electricity in the Home; Circuit Components; Current; Conductors and Insulators.	Development of SMSC and the human body/development. Builds on knowledge of organ systems and plant systems (Cycle 1 and 2). Links to Year 9 Cycle 1 and Year 10 Cycle 4. Students will continue to develop practical skills including the use of scientific equipment when looking at separation techniques (links to Year 9 Cycle 1, Year 10 Cycle 4). SMSC clean drinking water. Builds on KS2 knowledge of electrical circuits, links to future learning Year 8 Cycle 4, Year 9 Cycle 1 and 2, Year 10 Cycle 1. Numeracy skills development through use of calculating current. Scientific enquiry skills developed when investigating different factors that affect brightness of a bulb.
4	How do organisms rely on each other? What does the pH scale show us? What can waves do?	<u>Biology</u> Ecosystems; Food Chains; Interdependence; Classification of Plants; Distribution. <u>Chemistry</u> Acids and Alkalis; Making Indicators. <u>Physics</u> Waves; Ultrasound; The Ear.	Builds on knowledge of animal systems (Year 7 Cycle 2). Links to Year 8 Cycle 1 and 2, Year 11 Cycle 2. SMSC development of human impact on ecosystems and food chains. Students will gain knowledge on how we can determine the pH of a substance and will develop scientific enquiry skills when investigating pH of everyday objects. SMSC of everyday use of these reactions. Links to Year 7 core. Builds on knowledge of light. Students to gain an understanding of how we can hear/see (through waves). SMSC uses of ultrasound. Links to Year 11 Cycle 1.