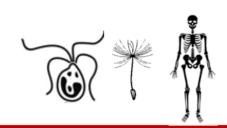
Science Learning Journey



The purpose of the Science curriculum is to provide high-quality science education as a foundation for understanding the world by teaching knowledge, methods, processes and uses of science. Students are encouraged to recognise the power of rational explanation and develop a sense of excitement and curiosity about natural phenomena, understanding how science can be used to explain what is occurring, predict how things will behave, and analyse causes.

The Science curriculum aims to ensure that all pupils develop scientific knowledge and conceptual understanding of the nature, processes and methods of science enabling them to answer scientific questions about the world around them. They will be equipped with the scientific knowledge required to understand the uses and implica-





tions of science, today and for the future.



BIOLOGY UNIT 1

CHEMISTRY UNIT 1

PHYSICS UNIT 1

Cells, reproduction, skeletal and muscular system

Separating techniques, reactions, acids and alkalis Energy, waves, sound and light













CHEMISTRY UNIT 2

BIOLOGY UNIT 2



Ecosystems and inheritance

Earth chemistry and metal reactions

Breathing and digestion















B2 ORGANISATION

B7 ECOLOGY

Structural differences between types of cells, mitosis and stem cells. Transport in cells Required Practical 1,2 and 3

Organ systems in plants and animals Health and non communicable diseases Required Practical 4 and 5

Adaptations, competition, ecosystems, biodiversity and effect of humans Required Practical 9 and 10











B5 HOMEOSTASIS

B3 INFECTION & RESPONSE

B4 BIOENERGETICS



KS4: Year 11

Nervous system, hormonal coordination and plant hormones. Required Practical 7 and 8

Communicable diseases, human defense systems, vaccination, medication and plant diseases.

Photosynthesis, aerobic and anaerobic spiration, response to exercise and metabolism Required Practical 6













B6 INHERITANCE

SCIENTIFIC ENQUIRY

EXAM TECHNIQUE

Reproduction, meiosis, inheritance, variation and evolution

Development of scientific thinking, experimental skills, analysis and evaluation

Knowledge consolidation Exam preparation and exam skills

Where will your **Biology Qualifica**tions take you?

Next Steps: A-levels in Biology, Chem-

istry and Physics. BTECS in Animal care, Sports Science **Further Education:**

Degrees in Biology, Sports Science, Health Care, Veterinarian Career:

Nutritionist, Animal Researcher, Zookeeper, Food Scientist.