The Fisher Way: Curriculum

The Fisher Way aims to educate and inspire with joy, faith an
love because we are an inclusive Catholic community.

Successful and resilient learners who aspire to and achieve excellence

Confident individuals who can explore and communicate effectively

Responsible citizens who are active, loving and wise in all their endeavours

Subject	Biology
Year Group	Year 8
Intent	Successful and resilient learners: who use biological knowledge and scientific skills to investigate the living world and solve problems. Confident individuals: who explain how cells, organ systems and ecosystems function, communicate their reasoning and evaluate biological evidence. Responsible citizens: who consider the ethical and environmental implications of biology and use evidence to make informed decisions about health, biodiversity and sustainability.

Narrative	Learners study breathing and gas exchange before explaining aerobic and anaerobic respiration, fermentation and photosynthesis. They then consider smoking, alcohol, drugs, microorganisms and how the spread of disease can be reduced. The final unit introduces variation, DNA, inheritance, natural selection, evolution and biodiversity. The sequence builds on Year 7 cells, organ systems and ecosystems. Learners connect cell processes to the needs of whole organisms and use evidence to evaluate claims about health and the environment. This prepares them for Year 9 cell biology, circulation, digestion and respiration, and later GCSE work on infection, inheritance and ecology.					
Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge (topics studied)	Photosynthesis and respiration: lungs, gas exchange, ventilation and aerobic respiration.	Anaerobic respiration; fermentation; photosynthesis, plant minerals and starch testing.	Healthy lifestyles: smoking, alcohol, drugs and their effects.	Microorganisms; aseptic technique; spreading disease and preventing infection.	Genes: variation, DNA and inheritance; Darwin and natural selection.	Evolution, extinction and preserving biodiversity; investigations and consolidation.
Key skills	Interpret lung models; distinguish breathing from respiration; explain gas exchange.	Compare respiration pathways; investigate fermentation and photosynthesis; control variables.	Interpret health data; distinguish association from cause; evaluate the reliability of claims.	Apply safe microbiology procedures; model transmission; interpret evidence about disease prevention.	Collect and graph variation data; use models of DNA and inheritance; explain selection.	Evaluate evidence for evolution; explain extinction; justify conservation choices using evidence.

Half term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Cultural capital and careers	Respiratory healthcare and sports science; the effects of exercise.	Food production, brewing and horticulture; the importance of plants.	Public health and informed lifestyle decisions; pharmacy and healthcare.	The history of infection control; microbiology, nursing and epidemiology.	Darwin and changing scientific explanations; genetics and research.	Conservation, seed banks and biodiversity; ecology and environmental management.
Assessment	Retrieval and short topic checks; practical feedback.	Cumulative assessment and recovery.	Short topic checks; practical and data questions.	Cumulative assessment and recovery.	Topic checks and targeted revision.	End-of-year assessment; feedback and recovery.