

AUTUMN 1

Cell Structure

Plant, animal, bacterial cells, microscopes, specialised cells.

Prior Learning
Students have studied basic cell structure and organisation during year 7.

AUTUMN 2

Cell Transport

Diffusion, Osmosis, Active transport.

Prior Learning
Students have studied diffusion only during year 7 particle model but lacking the biological context.

SPRING 1

Enzymes & Digestion

Enzymes, factors affecting enzyme action, digestion, food tests.

Prior Learning
Students have studied the human digestive system and enzymes in year 8 digestion and breathing.

SPRING 2

Breathing & Respiration

Lung structure, gas exchange, aerobic and anaerobic respiration.

Prior Learning
Students have studied the basics of gas exchange and breathing in year 8, along with the basics of respiration.

SUMMER 1

Breathing & Respiration

Respiration in plants.

Plant Biology

Plant organs and tissues, leaf structures.

Prior Learning
Students have studied the basics of gas exchange and breathing in year 8 along with the basics of respiration. Plant organisation in year 7 & specialised cells in year 7.

SUMMER 2

Plant Biology

Xylem, phloem, stomata, transpiration.

Prior Learning
Students have studied plant organisation & specialised cells in year 7.

CAREERS LINKS

Microbiologist, research scientist, laboratory technician, teacher, doctor, dentist, nurse, biomedical researcher, immunologist, phlebotomist, vet, environmental scientist, zoo keeper, marine biologist, podiatrist, physiotherapist.

CHARACTER LINKS

Motivation, resilience and teamwork (performance virtues).
Confidence and determination
Listening, critical thinking and problem solving (intellectual virtues).
Consideration and construction of moral and ethical arguments in science (moral virtues).

KEY ASSESSMENT DATES

Summative and synoptic testing in October, February and May.