



Types of reproduction, inheritance, genetic disorders, variation, natural selection, selective breeding and genetic engineering.



Ecosystems & Biodiversity

food chains, food webs, cycling materials in the environment, carbon cycle, water cycle and rate of decomposition.



Exam Information

Two exam papers, 1h 45 mins each Foundation or Higher Tier





Genetics & Evolution Adaptations & Interdependence

Darwin's ideas on evolution, extinction, fossilisation, antibiotic resistant bacteria, classification, communities, competition and adaption.



Revision

Revision and examination techniques. Walking talking mock past papers in examination conditions. Long answer master classes.



Next Steps

A-Level Biology or a Level 3 Science course. Careers in Medicine, Dentistry, Healthcare Veterinary Science, Nursing, Biosciences and Child development



Homeostasis in Action

How we maintain our internal environment, including the renal system.



Structure and function of the human nervous system, the brain and the eye.



Photosynthesis

How plants produce glucose, what that glucose is used for and how to make photosynthesis efficient.



Year 10



How hormones control blood glucose, human reproduction and how plants use hormones.



Respiration

The process of respiration, aerobic and anaerobic and the uses of those products.



Non-Communicable Diseases

The diseases that aren't infectious and the factors that effect the chance of developing them.



Cell Structure & Transport

Structures of the cell and how molecules are transported between cells.



Organisation & **Human Digestive System**

Organisational Hierarchy, enzymes and the Digestive System.



Communicable Diseases

Infectious Diseases and the microorganisms that cause them.





Cell Division

Cell cycle and cell division.



Organising Animals & Plants

Blood vessels, the heart, gas exchange, tissues and organs in plants and plant transport systems.



Preventing and Treating Disease

How to prevent and treat disease e.g. vaccination, antibiotics and painkillers. How we discover and develop new drugs.



Inheritance

DNA, genetics, variation and how inheritance works including genetic diagrams.



Respiration & Breathing Aerobic and anaerobic respiration, why we need

respiration, and the role respiration plays in sport. The mechanics of ventilation and the organs involved as well as the impact of lifestyle factors.



Movement & Digestion

The skeleton, joints and muscles, how they work together to allow us to move, and problems that can occur. Looking in depth at digestion and diet.



Year 8



Evolution Natural selection and the role it plays in evolution, the importance of biodiversity and the threat of extinction



Human Reproduction

Learning about the female and male reproductive system, menstruation, fertilisation and the development of the foetus including what can affect that development.



Photosynthesis

How plants produce glucose, what it is used for, the structure and adaptations of leaves and the minerals needed by plants.





Being a Scientist

Understanding the scientific method and experimentation. Safe laboratory practice.



Organisms

Building on cells, looking at how they form tissues, organs and organisms.



Interdependence

How plants and animals co-exist and the struggles that they face.



Year 7



Cells

The fundamental building blocks of life, looking at plant, animal and bacteria cells.



Ecosystems

Studying biomes and the plants and animals that inhabit them.



Genes

Variation and Human reproduction