

# Biology Knowledge Journey

## Reproduction Genetics and Evolution

- Reproduction
- DNA
- Cell Division

## Adaptations, Biodiversity and Diversity

- Communities
- Abiotics and Biotic Factors
- Adaptations for Hot and Cold Environments
- Distribution of Organisms
- Food Production
- Food Chains and Webs
- Global Warming

REVISION & EXAMS

## Career Paths

Biology can open the doors to future careers in medicine and the life sciences

## Skills

Analysis • Attention to Detail • Communication • Cultural Understanding • Empathy • Literacy • Organisation  
Problem solving • Research • Patience • Logical Thinking

## Interest

A continued passion and love of learning about Science

Continued Targeted Support

## Hormones and Homeostasis

- The Menstrual Cycle
- Kidney
- Hormone
- Darwin and Evolution

YEAR 11

## Evolution and Organising an Ecosystem

- Evolution
- Cloning
- Rates of Decomposition
- Variation
- The Carbon Cycle

## The Human Nervous System

- Homeostasis
- Reflex Arc
- The Brain
- The Eye

## B3 Organisation and the Digestive System

- The Chemistry of Food
- Making Digestion Efficient
- Digestive Systems
- Factors Affecting Enzymes
- Tissues and Organs
- Catalysts and Enzymes

## B4 Organising Animals and Plants

- Breathing and Gas Exchange
- The Blood
- The Heart
- Blood Vessels
- Tissue and Organ Systems in Plants

YEAR 10

## Disease and Bioenergetics

- Communicable Disease
- Non-Communicable Disease
- Health and Disease
- Cardiovascular Disease
- Aerobic Respiration
- Cancer
- Antibiotics
- Photosynthesis
- Virus Bacteria
- Fungi and Protists

## B2 Cell Division

- Differentiation
- Stem Cell Dilemmas
- Stem Cells
- Growth
- Cell Division

## Cell Structure and Transport

- Prokaryotes
- Eukaryotes
- Specialised Cells
- Microscopy
- Exchanging Materials
- Osmosis
- Osmosis in Plants
- Active Transport

YEAR 9

## Inheritance

- Variation
- Competition and Adaptation
- Plant Distribution
- Natural Selection
- Variation
- Distinction

## Ecosystem

- Aerobic + Anaerobic Respiration
- Food Chains and Webs
- Disruption to chains

## Processes

- Photosynthesis
- Leaves
- Plant Minerals
- Aerobic Respiration

## Health

- Bacteria and Enzymes in Digestion
- Digestive System
- Drugs and Smoking
- Healthy Diet

## Reproduction

- Adolescence
- Fertilisation and Implantation
- The menstrual system
- Reproductive Systems
- Flowers and pollination
- Development of a foetus
- Fertilisation and Germination
- Seed Dispersal

YEAR 8

## Introduction

- Data
- Communication
- Evidence

## Body Systems

- Gas exchange
- Levels of Organisation
- Breathing
- Skeleton
- Movement: Muscles and joints

## Cells

- Observing Cells
- Unicellular Organisms
- Specialised Cells
- Cell Division
- Movement of Substances

## An Introduction to Science

- Scientific Questions
- Recording Results
- Data
- Analysis and Evaluating

YEAR 7

