



YEAR 10

START

1



KEY CONCEPTS IN BIOLOGY

- Characteristics of living organisms
- Cells as the basic unit of life
- Biological molecules
- Enzymes
- Multicellularity

Key Skills: Required practicals, use of microscopes, mathematical skills

Exam Focus: Calculations, command words, interpreting data

2



CELLS AND CONTROL

- Cell structure
- Transport across cell membranes
- Cell division
- Control and regulation

Key Skills: Interpreting data, drawing and labelling, explaining processes

Exam Focus: Structure-function links, calculations, extended responses

3



GENETICS

- DNA and genes
- Inheritance
- Genetic diagrams
- Variation

Key Skills: Interpreting pedigree charts, probability, using genetic diagrams

Exam Focus: Calculations, data analysis, extended responses

4



NATURAL SELECTION AND GENETIC MODIFICATION

- Natural selection
- Evidence for evolution
- Genetic modification
- Cloning

Key Skills: Evaluating evidence, explaining processes, analysing information

Exam Focus: Extended responses, application of knowledge

YEAR 10/11

5



HEALTH, DISEASE AND THE DEVELOPMENT OF MEDICINES

- Health and disease
- Pathogens
- Immune system
- Development of drugs and medicines

Key Skills: Interpreting data, using graphs, explaining processes

Exam Focus: Calculations, extended responses, application of knowledge

6



PLANT STRUCTURES AND THEIR FUNCTIONS

- Plant tissues and organs
- Transport in plants
- Photosynthesis
- Transpiration

Key Skills: Drawing and labelling, using data, practical investigations

Exam Focus: Structure-function links, calculations, data analysis

7



ANIMAL COORDINATION, CONTROL AND HOMEOSTASIS

- Nervous system
- Hormonal control
- Homeostasis
- Response to changes

Key Skills: Explaining processes, using biological terms, analysing scenarios

Exam Focus: Extended responses, application of knowledge

8



EXCHANGE AND TRANSPORT IN ANIMALS

- Circulatory system
- Blood and blood vessels
- Gas exchange
- Transport in humans

Key Skills: Interpreting graphs, using data, drawing diagrams

Exam Focus: Calculations, data analysis, structured questions

YEAR 11

9



ECOSYSTEMS AND MATERIALS CYCLES

- Ecosystems
- Food webs and chains
- Carbon cycle
- Nutrient cycles

Key Skills: Interpreting data, explaining interactions, evaluating information

Exam Focus: Extended responses, application of knowledge

10



REVISION

- Review key topics
- Strengthen problem-solving
- Apply knowledge
- Build confidence

Key Skills: Independent study, retrieval practice, self-assessment

Exam Focus: Mastery of content and skills, exam success

11



EXAM PREPARATION

- Command words
- Extended responses
- Data analysis
- Past paper practice

Key Skills: Exam technique, timing, structured responses

Exam Focus: All topics, applying knowledge to unfamiliar contexts

READY FOR EXAMS!



KEY BIOLOGY SKILLS DEVELOPED THROUGHOUT



Practical Skills



Data Analysis



Mathematical Skills



Scientific Communication



Scientific Literacy



Critical Thinking



Problem Solving

LOOKING AHEAD

Combined Science Biology provides the essential knowledge and skills needed for further study at A Level and beyond. It opens the door to a wide range of careers in medicine, nursing, veterinary science, ecology, biotechnology, forensic science, sports science and many more.

