# <u>Year 11 Biology Curriculum Overview – Term 3</u>

Welcome to the Year 11 Biology curriculum overview. This term, both Combined and Triple Science students will focus on revision to prepare for their upcoming Biology GCSE exams. The revision will include topic reviews, exam practice, and a focus on required practicals.

### **Combined and Triple Science: GCSE Exam Revision**

### **Topic Overviews**

Students will revise the key topics covered throughout the Biology course:

- 1. **Cell Biology**: Structure and function of cells, transport mechanisms (osmosis, diffusion, active transport).
- 2. **Organisation**: Digestive system, heart, and lungs.
- 3. Infection and Response: Pathogens, immune system, vaccination, and antibiotic resistance.
- 4. **Bioenergetics**: Photosynthesis, respiration, and the factors affecting these processes.
- 5. **Ecology**: Ecosystems, energy transfer, and human impact on the environment.
- 6. **Genetics and Evolution**: Inheritance, variation, natural selection, and genetic disorders.

For **Triple Science only**, additional topics include cloning, biotechnology, and more advanced genetic processes.

## **Exam Practice and Techniques**

- **Practice Questions**: Students will practice answering a variety of exam questions, including multiple-choice, short answer, and extended response questions.
- **Time Management**: Guidance on managing time during exams and allocating appropriate time to each section.
- **Command Words**: Students will learn how to approach different types of questions (e.g., "explain," "describe," "evaluate").
- **Past Papers**: Reviewing past GCSE papers to familiarize students with the exam format and question style.

#### **Reviewing the Required Practicals**

Students will revise the key required practicals from the course, including:

• **Cell Biology**: Microscopy and investigating osmosis.

- **Bioenergetics**: Investigating the factors affecting photosynthesis.
- **Ecology**: Studying the distribution of organisms in ecosystems.
- **Genetics**: Exploring inheritance patterns through genetic crosses.

Students will practice analyzing data from these experiments and understand how to present their findings.

This term is focused on ensuring all students are well-prepared for their upcoming Biology GCSE exams, with strong support in both content and exam techniques.