Curriculum Overview: Triple Biology
Year group 10

What your child will learn each half term
This overview shows the key topics, skills, and knowledge your child will be learning in Triple Biology in Year 10. It helps families understand what's being taught, how it builds on previous learning, and how you can support your child at home.

- **What we are learning**: The topic or focus for the half term.
- **Key knowledge & skills**: What students should understand and be able to do.
- **How we assess learning**: knowledge checks, practical tasks, written responses and formal assessments.
- **Key words to know**: Vocabulary students will learn and use.

- **How science works skills**
- Link graphs and data to scientific models, drawing conclusions from evidence.
- Develop skills in planning, carrying out, and analysing required practicals.
- Apply practical skills: selecting equipment, measuring accurately, and identifying variables to control in an investigation.
- Communicate scientific ideas clearly in extended written answers, using correct terminology.

Half term	What we are learning	Key knowledge and skills	How we will assess learning in this unit	Homework	Key vocabulary for these units
HT 1 and 2	B1a Cell biology B1b Cell division and stem cells B2a Organisation and the digestive system B2b Organising animals and plants B3a Communicable Diseases	Cell biology (B1a): structure and function of plant/animal cells, use of microscopes, transport by diffusion, osmosis, and active transport. Cell division & stem cells (B1b): mitosis, cell cycle, stem cells in medicine, ethical considerations. Organisation & digestive system (B2a): structure of digestive system, role of enzymes, effect of temperature and pH. Organising animals & plants (B2b): structure of the heart, blood vessels, blood components, transport in plants (xylem and phloem).	Continuous formative assessment in lessons. End of topic tests. Question level analysis and feedback. Required practical assessment booklets.	Homework is set on a Monday and is due the following Sunday. Homework will be set online using a website 'Educake' which pupils will receive their login details for.	**Cell, nucleus, cytoplasm, mitochondria, chloroplast, prokaryote, eukaryote, magnification, diffusion, osmosis, active transport** **Mitosis, stem cell** **Enzyme, active site, substrate, denature, bile**

		Communicable diseases (B3a): types of pathogens and some diseases they can cause, how to reduce or prevent the spread of disease, human defence responses, the immune system, plant diseases			**Artery, vein, capillary, plasma, red blood cell, xylem, phloem** **Bacteria, fungus, protist, virus, pathogen, white blood cell, antibody, antigen, antitoxin, phagocytosis, vector.**