

Year:10 Subject: Biology

IMPLEMENTATION

	Year:10 Subject: Biology IMPLEMENTATION						
INTENT (including key concepts and skills)	Half Term 1 Context: B2 Organisation and digestion Key Vocabulary: Tissues, organs, digestive, catalysts, enzymes, efficiency, proteins, carbohydrates, lipids, metabolic, protease, amylase, glycerol, fatty acids. Prior Learning Y7 L1 Cells, tissues and organs Y8 L4 Digestion and staying healthy Cultural Capital: Knowing how organs are linked within the body and how food is digested using enzymes.	Half Term 2 Context: B2 Organising animals and plants Key Vocabulary: Blood, vessels, heart, chambers, arteries, atrium, ventricle, gas exchange, tissues, organs, evaporation, transpiration. Prior Learning Y7 L1 Cells, tissues and organs Y8 I4 Plants Cultural Capital: Understanding how the heart works and the importance of a healthy heart. Knowledge of the transport of minerals and water through plants.	Half Term 3 Context: B3 Infection and Bioenergetics Key Vocabulary: Pathogens, disease, bacteria, infections, virus, fungi, protists, human defence responses, plant defence responses, vaccinations, antibiotics and painkillers, developing drugs, monoclonal. Prior Learning Y7 I2 Classification and adaptation Y8 I3 Microbes Cultural Capital: Understanding how drugs are discovered and the importance of completing a course of antibiotics.	Half Term 4 Context: B3 Disease and Bioenergetics Key Vocabulary: Non-communicable diseases, cancer, smoking, diet, exercise, alcohol, carcinogens, Photosynthesis, glucose. Prior learning: Y8 I4 Plants L4 Digestion and staying healthy. Cultural Capital: Understanding the importance of a balanced diet and the effects or poor health choices.	Half Term 5 Context: B4 Homeostasis Key Vocabulary Respiration, aerobic, anaerobic, metabolism, homeostasis, reflex actions, nervous system, brain, eye. Prior Learning Y9 L5 Respiration Cultural Capital: Understanding how messages are sent to the brain through reflex arcs. Knowing the process of respiration and understanding the difference between breathing and respiration.	Half Term 6 Context: B4 Homeostasis Key Vocabulary: Hormonal control, diabetes, reproduction, menstrual cycle, artificial fertility control, infertility treatments, plant hormones, temperature, kidney, dialysis Prior Learning: Y7 L2 Reproduction Cultural Capital: Knowledge of how our bodies maintain a consistent temperature and blood glucose levels. Knowing how artificial fertility treatments prevent unwanted babies and how fertility treatments enable couples to conceive.	
	Applying knowledge and understanding to explain observations	X	X	X	X	X	X
	Use different types of scientific enquiry to answer scientific questions	X	X	X	X	X	X
	Use technical terminology with confidence accuracy and precisely	X	X	X	X	X	X
	Apply mathematical knowledge to scientific understanding	X	X	X	X	X	X
	Aware of some of the social and economic implications of science	X	X	X	X	X	X
IMPACT	Assessment: At the end of B2	Assessment: B2 End of topic Test	Assessment: At the end of B3	Assessment: B3 End of topic test	Assessment: At end of B4	Assessment: B4 End of topic test Summer Summative on paper 1 content	

Cultural Capital is the body of knowledge a student needs so that they can flourish in the future and not be left behind.