

Holy Family Catholic High School

Curriculum and Assessment Progression Map

Year 10

Subject Leader D Wilde

Key Learning Constructs to be developed	Scheme of Learning	Scheme of Learning	Scheme of Learning
over the academic year. – Core Knowledge	Autumn Term	Spring Term	Summer Term
*Pathogens are microorganisms such as viruses and bacteria that cause infectious diseases in	Part 1	Part 3	Part 5 Homeostasis and Response – The
	Infection and Response – Defence against disease	Bioenergetics - Photosynthesis	Nervous System and Temperature
animals and plants. They depend on their host to	disease		Regulation
provide the conditions and nutrients that they need			
to grow and reproduce. They frequently produce toxins that damage tissues and make us feel ill.			
This section will explore how we can avoid			
diseases by reducing contact with them, as well as			
how the body uses barriers against pathogens.			
Once inside the body our immune system is			
triggered which is usually strong enough to destroy			
the pathogen and prevent disease. When at risk			
from unusual or dangerous diseases our body's			
natural system can be enhanced by the use of			
vaccination. Since the 1940s a range of antibiotics			
have been developed which have proved			
successful against a number of lethal diseases			
caused by bacteria. Unfortunately many groups of			
bacteria have now become resistant to these			
antibiotics. The race is now on to develop a new			
set of antibiotics			
*Plants harness the Sun's energy in photosynthesis			
in order to make food. This process liberates			
oxygen which has built up over millions of years in			
the Earth's atmosphere. Both animals and plants			
use this oxygen to oxidise food in a process called	Part 2	Part 4	Part 6
aerobic respiration which transfers the energy that	Plant Diseases and Defence	Bioenergetics - Respiration and Response to	The Endocrine System
the organism needs to perform its functions.		Exercise	Plant Hormones
Conversely, anaerobic respiration does not require			
oxygen to transfer energy. During vigorous			
exercise the human body is unable to supply the			
cells with sufficient oxygen and it switches to			
anaerobic respiration. This process will supply			
energy but also causes the build-up of lactic acid in			
muscles which causes fatigue.			
*Cells in the body can only survive within narrow			
physical and chemical limits. They require a			
constant temperature and pH as well as a constant			
supply of dissolved food and water. In order to do			
this the body requires control systems that			
constantly monitor and adjust the composition of			
the blood and tissues. These control systems			

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include receptors which sense changes and effectors that bring about changes. *The nervous system brings about fast responses. The hormonal system usually brings about much slower changes. Hormonal coordination is particularly important in reproduction since it controls the menstrual cycle. An understanding of the role of hormones in reproduction has allowed scientists to develop not only contraceptive drugs but also drugs which can increase fertility.				
Hinterland Knowledge	Real examples of the APPLICATION of the content studied (eg Irish potato famine)	Real examples of the APPLICATION of the content studied (eg brewing/wine – making)	Real examples of the APPLICATION of the content studied (eg how drugs affect the nervous system)	
Assessment: -Formative Techniques	Use of whiteboards, hinge questions, recall questions.			
-Summative Pieces	End of Topic Tests	End of Topic Tests	End of Topic Tests and End of Year Assessment	
Key Vocabulary	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied	Key scientific terminology appropriate to each topic studied	
Key Skills	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	Working Scientifically, relevant mathematical techniques (percentages, mean, mode, median etc) Graph plotting skills. Understanding variables and anomalies and their causes and effects	
Opportunities Outside the taught Curriculum.	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits	Careers, STEAM enrichment activities, educational visits	