

## Overview plans for academic year 2024-2025

## Subject:Biology

## Year group/cohort:11

	Knowledge and Understanding	Knowledge and Understanding	Skills	Skills	Assessment	Subject specific literacy	Cross curricular links
	Components (Key concepts)	Composite (Bigger picture)	Components (Key concepts)	Composite (Bigger picture)	What is being assessed, how, and when?	Key Vocabulary	Including Personal Development and SMSC
Autumn Term 1	Introduce to the endocrine and Nervous Systems. Explore the conditions that must be maintained linking back to previous concepts, such as enzyme activity and diabetes. Understand and explain two mechanisms are vital to support	<u>B5 Homeostasis</u>	To plan and carry out an investigation into the effect of a factor on human reaction time	<u>Required Practical</u> <u>– Reaction Time</u>	Formative Assessment – Diabetes Formative Assessment –	Adrenaline Homeostasis Reflex actions Central nervous system Gland Hormone Effector Receptor Stimulus Contraception Progesterone vasoconstriction vasodilation Phototropism	
	students in developing their comparative skills between these				Contraception (WS)	Gravitropism	

	two responses. Understand why both systems are important and think about what would happen to a person if either system was to go wrong linking back to previous content and Health.		To investigate the effect of light or gravity on the growth of newly germinated seedlings.	<u>Required Practical</u> <u>– Plants</u>	6 Mark Questions Formative Assessment – Plant Hormones	
	To understand the structure and function of the eye and brain.		Eye dissection Brain Dissection	<u>Practical</u> <u>Practical</u>	Formative Assessment – The Eye WS	
					End of Topic Assessment	
Autumn	Investigate the	B6 Variation and			7.05C05mcmc	Students get the
Term 2	implications of	evolution				opportunity to
	Asexual					study the work
	reproduction and					of famous
	the lack					scientists
	of variation it can					Mendel,
	lead to, understand and			Constiss		Lamarck and Darwin and how
	describe			<u>Genetics</u>		their discoveries

Ecosystems and	Use	e of tally charts	Formative	sh	aped the
communities.	to d	determine	Assessment –	de	evelopment of
The structure of	pro	bability	DNA	ge	enetics and
DNA is				ev	olution.
introduced					
linking this to the				Ex	plain the
Human genome				ро	otential
project where				be	enefits and
pupils discuss				ris	sks of cloning
both				in	agriculture
the positives and				an	nd in medicine
negatives with				an	nd that some
mapping the				pe	eople have
entire human				et	hical
genome and its				ob	ojections
potential					
applications.					
Investigate					
evolution and					
evaluate the					
proposed					
theories of					
Charles Darwin					
and Jean Bapiste					
Lamarck.					
Comparing both			Formative		
theories,			Assessment -		
students			Evolution		
use research					
along with					
application of					
their working					

	scientifically skills to decide why Lamarck's theory was rejected in favour of Darwin's.			End of Topic Assessment	
Spring Term 1		Preparation for GCSE Gap analysis			
Term I		and bridging			
		<u>activities</u>			
Spring		Preparation for			
Term 2		<u>GCSE</u>			
Summer					
Term 1					
Summer					
Term 2					

Subject Information including exam board details:

AQA Biology 4461

Careers linked to this subject area:

Biologist

Ecologist

Geneticist

Marine Biologist

Health Care

Paramedic

Medical Careers

**Enrichment Opportunities:** 

Science in the News : Science News Explores | News from all fields of science for readers of any age (snexplores.org)

Seneca Learning Free Homework & Revision for A Level, GCSE, KS3 & KS2 (senecalearning.com)

Focus Educational log in – Interactive Required Practicals <u>https://www.focuselearning.co.uk/u/38146/gbhzCgxzycptBrCnafDAomEiyydluFiqv</u>

BBC Bitesize GCSE Biology (Single Science) - AQA - BBC Bitesize