

	Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
<b>Year 11 Biology &amp; Combined Science Biology</b>	<b>Content delivered:</b> <b>Unit 7: Ecology</b> Communities Biotic & abiotic factors Biodiversity Animal adaptations Plant adaptations HSW: Ecology practical work How materials are cycled Waste management	<b>Content delivered:</b> <b>Unit 7: Ecology</b> Land use Deforestation Global warming Trophic levels (Biology only) Food security (Biology only) Farming techniques (Biology only) Fisheries (Biology only) Biotechnology (Biology only) <b>Unit 6: Genetics</b> Sexual & asexual reproduction Meiosis Variation Evolution	<b>Content delivered:</b> <b>Unit 6: Genetics</b> Genetic inheritance Inherited disorders Sex determination Variation Evolution Selective breeding Genetic engineering Evidence for evolution Fossils Extinction Resistant bacteria Classification	<b>Content delivered:</b> <b>Unit 5: Homeostasis and response</b> The nervous system The brain (Biology only) The eye (Biology only) Thermoregulation (Biology only) Endocrine system Controlling blood sugars Controlling water levels (Biology only) Reproduction & contraception Treating infertility Plant hormones (Biology only)	<b>Content delivered:</b> Unit 1 content review and exam prep Unit 2 content review and exam prep Unit 3 content review and exam prep Unit 4 content review and exam prep Unit 5 content review and exam prep Unit 6 content review and exam prep Unit 7 content review and exam prep	
	<b>Key Words</b> Level 2 Level 3	Structural, behavioural, functional, adaptation, quadrat, transect, biotic, abiotic, behavioural, structural, functional, adaptation, nutrient, detritivore, recycle	deforestation, global warming, ozone, biodiversity, trophic level, consumer, producer, herbivore, carnivore, biomass, quota, sustainable, biotechnology, anaerobic, sexual, variation, inheritance, asexual, anther, pollen, sperm, chromosome, meiosis, genome, chromosome, inheritance, gamete, homozygous, heterozygous, Darwin, Lamarck, survival, favourable, inherited, fertile,	Gamete, inheritance, heterozygous, homozygous, dominant, recessive, carrier, Darwin, Lamarck, survival, speciation, favourable, inherited, fertile, fossil, sedimentary, extinction, natural selection, favourable, reproduce, plasmid, extinction, evolution, kingdom, phylum, class, order, family, genus, species	Homeostasis, sensory, relay, motor, neurone, synapse, receptor, effector, response, myopia, hyperopia, concave, convex, sclera, pupil, suspensory ligaments, retina, optic nerve, impulse, hormone, insulin, glucagon, glycogen, pancreas, osmoregulation, dialysis, infertility, oestrogen, progesterone, testosterone, FSH, LH, menstrual cycle, condom, IUD, hormone, secrete, auxin, ethene, gibberellin, phototropism	
<b>Where previous knowledge has occurred and future development</b> KS2 → KS3 → <b>KS4</b> → KS5	KS2: Adaptations of living things KS3: Year 8 – adaptation to change KS4: Unit 1 – plant cells KS5: Ecological relationships	KS2: The role of flowers; constructing & using food chains KS3: Year 7 – Food security KS4: Unit 1 – specialised cells KS4: Unit 7 – adaptations KS5: Cell cycle & Hardy-Weinberg equation	KS2: Classification of living things KS3: Year 8 – variation KS4: Unit 1 – specialised cells KS4: Unit 7 – adaptations KS5: Monohybrid/dihybrid crosses and Hardy-Weinberg equation	KS2: Changes as humans age KS3: Reproduction KS4: Unit 1 – specialised cells KS4: Unit 2 – diet KS4: Unit 4 – respiration KS5: Action potentials, thermoregulatory systems, hormones	KS2: All relevant content KS3: All relevant content KS4: All taught units from Y10 & Y11 KS5: Used in all units	
<b>Common Misconceptions</b>	All adaptations are beneficial	Global warming and climate change are the same thing	That some people have more chance of having a baby boy or girl	Brain injuries result in death	Identified and addressed from mock exams	
<b>Literacy</b>	Scientific writing (HSW): Ecology NHTW reviews as starter activities	Ethical arguments: deforestation and land use NHTW reviews as starter activities	Writing to compare and evaluate: the work of Darwin and Lamarck NHTW reviews as starter activities	Writing to describe: blood glucose control Writing to describe: Thermoregulation NHTW reviews as starter activities	NHTW reviews as starter activities	
<b>Numeracy</b>	Drawing and interpreting graphs Calculating means	Interpreting different types of graphs	Calculating probabilities	Calculating percentages	Graphs skills Calculating means	
<b>Homework</b>	Completion of kerboodle/everlearner section quizzes	Completion of kerboodle/everlearner section quizzes	Completion of kerboodle/everlearner section quizzes	Completion of kerboodle/everlearner section quizzes	Completion of kerboodle/everlearner section quizzes	
<b>Assessment this half-term</b>	Unit 7 test with elements of units 1-4	Mock exam – paper 1 & 2	Mock exam – paper 2	Unit 5 test with elements of units 1-7	Exam style questions	
<b>Career opportunities</b> <b>Employment Links</b>	LIFE SKILLS: Understanding how species interact EMPLOYMENT: Conservationist	LIFE SKILLS: Understanding how population growth affects resources EMPLOYMENT: Farmer, fisherman	LIFE SKILLS: Understanding how characteristics are passed on EMPLOYMENT: Archaeologist	LIFE SKILLS: Understanding how to correct vision defects EMPLOYMENT: Optometrist	LIFE SKILLS: Resilience and organisation EMPLOYMENT: You can do anything with science!	
<b>Enrichment</b>				Nancy Rothwell Award		
<b>Practical activities/HSW</b>	Ecology fieldwork % cpver Effect of abiotic factor on distribution	Darwin's finches – testing beak size	Extracting DNA Cloning	Ruler drop test	RP reviews	
<b>Employability Skills</b>	<b>Aiming high</b> Creativity Leadership Listening Presenting Problem solving Staying positive <b>Literacy</b> <b>Numeracy</b> Independence <b>Communication</b> Teamwork	<b>Aiming high</b> Creativity Leadership Listening Presenting Problem solving Staying positive <b>Literacy</b> <b>Numeracy</b> Independence <b>Communication</b> Teamwork	<b>Aiming high</b> Creativity Leadership Listening Presenting Problem solving Staying positive <b>Literacy</b> <b>Numeracy</b> Independence <b>Communication</b> Teamwork	<b>Aiming high</b> Creativity Leadership Listening Presenting Problem solving Staying positive <b>Literacy</b> <b>Numeracy</b> Independence <b>Communication</b> Teamwork	<b>Aiming high</b> Creativity Leadership Listening Presenting Problem solving Staying positive <b>Literacy</b> <b>Numeracy</b> Independence <b>Communication</b> Teamwork	
<b>IT Skills</b>	IT1 & IT2: Appropriate websites and research for homework as well as recall quizzes	IT1 & IT2: Appropriate websites and research for homework as well as recall quizzes	IT1 & IT2: Appropriate websites and research for homework as well as recall quizzes	IT1 & IT2: Appropriate websites and research for homework as well as recall quizzes	IT1 & IT2: Appropriate websites and research for homework as well as recall quizzes	
<b>Notes/developments /standardisation comments</b>	Unit 7 taught out of sequence to allow for practical work to occur during better weather				Key focus on areas of weakness identified from mock exams	

# Summer exams

