	Yea	r 12	Year 13		
	CLP	JAD	CLP	JAD	
Week 1 (w/b Wed 7 <sup>th</sup> Sep)		Lesson 1: 2.1.1 (a) – The features of light, TEM, SEM and laser scanning confocal microscopes  Lesson 2: 2.1.1 (c) – The use of different stains to identify different cellular components and cell types  Lesson 3: 2.1.1 (d) – Representing cell structure from a light microscope using drawings and annotations	Lesson 1: X Lesson 2: X Lesson 3: 5.2.1 (a) – The interrelationship between photosynthesis and respiration Lesson 4: 5.2.1 (b) – The structure of a chloroplast	Lesson 1: X Lesson 2: 4.2.1 (a) How biodiversity may be considered at different levels Lesson 3: 4.2.1 (b) i – How sampling is used in measuring the importance of sampling	
Key Words Level 2 Level 3		Identify, describe, explain, explore, compare, evaluate Electron micrograph, magnification, organelle, photomicrograph, resolution, graticule, rough/smooth endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosome, cilia, undulipodia, ribosome, centriole, cytoskeleton, prokaryotic, eukaryotic	Identify, describe, explain, explore, compare, evaluate Granum, photosystem, stroma, thylakoid, electron carrier, photophosphorylation	Identify, describe, explain, explore, compare, evaluate Biodiversity, habitat, species, allele, locus, polymorphic gene locus, monoculture, keystone species, conservation <i>in situ</i> , conservation <i>ex situ</i>	
Common Misconceptions		That RER and SER have the same function	That chlorophyll (green) is the only pigment	That all data should be represented by line graphs	
Homework		Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this half-term		PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct	
Career opportunities Employment Links		LIFE SKILLS: Identifying equipment appropriate to the task EMPLOYMENT: Microbiologist, biomedical scientist	LIFE SKILLS: Understanding how plants make glucose EMPLOYMENT: Horticulturist, farmer	LIFE SKILLS: Understanding how & why biodiversity has to be considered EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency	
Employability Skills		Aiming high Creativity Numeracy Leadership Listening Presenting Teamwork Problem solving Literacy Numeracy Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Listening Presenting Teamwork Problem solving Staying positive	
Week 2 (w/b 12 <sup>th</sup> Sep)	Lesson 1: 2.1.2 (c) – The chemical elements that make up biomolecules Lesson 2: 2.1.2 (b) – Condensation and hydrolysis reactions between monomers and polymers Lesson 3: 2.1.2 (d) – The structure and properties of glucose (α and β) and ribose	Lesson 1: 2.1.1 (b) — Examination of pre-prepared microscope slides in light microscopy (cell drawings and annotations) Lesson 2: 2.1.1 (b) — Examination of pre-prepared microscope slides in light microscopy (cell drawings and annotations) Lesson 3: 2.1.1 (b) — Demonstration for how to prepare a slide and use an eye piece graticule and stage micrometre	Lesson 1: 5.2.1 (c) – The importance of photosynthetic pigments  Lesson 2: 5.2.1 (c) – Separation of photosynthetic pigments by TLC – can be done during HT2 for PAG 6  Lesson 3: 5.2.1 (d) – The light dependent stage  Lesson 4: 5.2.1 (d) – The light dependent stage	Lesson 1: PAG 3 Lesson 2: PAG 3 Lesson 3: PAG 3	
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Condensation reaction, hydrolysis, monomer, polymer, glycosidic bond, macromolecule, phospholipid, amino acid, peptide bond, primary structure, secondary structure, tertiary structure, quaternary structure, fibrous protein, globular protein, prosthetic group, colorimeter	Identify, describe, explain, explore, compare, evaluate Electron micrograph, magnification, organelle, photomicrograph, resolution, graticule, rough/smooth endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosome, cilia, undulipodia, ribosome, centriole, cytoskeleton, prokaryotic, eukaryotic	Identify, describe, explain, explore, compare, evaluate Granum, photosystem, stroma, thylakoid, electron carrier, photophosphorylation, chromatography	Identify, describe, explain, explore, compare, evaluate Biodiversity, habitat, species, allele, locus, polymorphic gene locus, monoculture, keystone species, conservation in situ, conservation ex situ, independent variable, dependent variable, control variable, validity, reliability, reproducibility	
Common Misconceptions	Students often forget about alternate rotations to line up glucose	That microscope drawings have to be artistic	That all chlorophyll is green	Students confuse habitat and niche. Some will still get their variables the wrong way around	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Research PAG	
Assessment this half-term	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct	
Career opportunities Employment Links	LIFE SKILLS: Understanding how structure and function are related EMPLOYMENT: Biomedical scientist	LIFE SKILLS: Identifying equipment appropriate to the task EMPLOYMENT: Microbiologist, biomedical scientist	LIFE SKILLS: Understanding how plants make glucose EMPLOYMENT: Horticulturist, farmer	LIFE SKILLS: Understanding how & why biodiversity has to be considered EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency	

Employability Skills	Aiming high	<u>Literacy</u>	Aiming high	<u>Literacy</u>	Aiming high	Literacy	Aiming high	Literacy
	Creativity	Numeracy	Creativity	Numeracy	Creativity	Numeracy	•	Numeracy
	Leadership	Independence Communication	Leadership	Independence	Leadership	Independence	Leadership	Independence
	Listening Presenting	Teamwork	Listening Presenting	Communication Teamwork	Listening Presenting	<mark>Communication</mark> Teamwork	Listening Presenting	Communication Teamwork
	Problem solving	Staying positive	Problem solving	Staying positive	Problem solving	Staying positive		Staying positive
IT Skills				54478 positive		ota,g postare		priate research for PAG
Notes							PAG 3: Ecology f	•
							33 33 30,	
Week 3	Lesson 1: 2 1 2 (a) -	The synthesis and breakdown of	Lesson 1: 2 1 1 (a)	- The use and manipulation of the	Lesson 1: 5 2 1 (a)	The light independent stage	Lesson 1: PAG 3	
(w/b 19 <sup>th</sup> Sep)		olysaccharides (sucrose, lactose,	magnification form			- The light independent stage - The light independent stage	Lesson 2: PAG 3	
(w/b 19 3ep)	maltose)	01/300011011003 (3001030) 1001030,	_	The differences between magnification		The uses of triose phosphate	Lesson 3: PAG 3	
	Lesson 2: 2.1.2 (f) –	The structure of starch, cellulose and	and resolution	Ç		- Factors affecting photosynthesis	Lesson 3. FAG 5	
	glycogen			- The ultrastructure of eukaryotic cells				
		How the structures and properties of	and the functions of	f their components				
		cogen and cellulose relate to their						
Koy Words	functions in living or		Idontify doscribo	ovnlain ovnlara compara ovaluato	Idontify doscribo	ovalaja ovaloro comparo ovaluato	Identify describe	o ovalaja ovaloro comparo ovaluato
Key Words Level 2		explain, explore, compare, evaluate ction, hydrolysis, monomer, polymer,		, explain, explore, compare, evaluate uph, magnification, organelle,		, explain, explore, compare, evaluate stem, stroma, thylakoid, electron		e, explain, explore, compare, evaluate pitat, species, allele, locus, polymorphic
Level 3		nacromolecule, phospholipid, amino		, resolution, graticule, rough/smooth	carrier, photopho			oculture, keystone species,
Level 3		d, primary structure, secondary		culum, golgi apparatus, mitochondria,	carrier, photopho	sphorylation		situ, conservation ex situ, independent
		structure, quaternary structure,		ome, cilia, undulipodia, ribosome,				dent variable, control variable, validity,
		obular protein, prosthetic group,		eleton, prokaryotic, eukaryotic			reliability, repro	
	colorimeter	obalai protein, prostnetie group,	certariore, ey toske	ictori, prokaryotic, cakaryotic			rendomey, repro-	ducibility
Common		get about alternate rotations to line	Students struggle	to explain how to improve focus of	Students struggle	to link the LDS & the LIS	Students confuse	e habitat and niche. Some will still get
Misconceptions	up glucose		an image		Statements of applie to minimize 250 at the 210		ne wrong way around	
Homework	Review book chapter and answer in book questions		Review book chapter and answer in book questions  Review book chapter and answer in book questions		oter and answer in book questions	Research PAG	0 1,111	
	·		The state of the s		C. L			
Assessment this half-term	Sub section assess	sments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub se 10 <sup>th</sup> Oct	ction assessments w/b 26 <sup>th</sup> Sept &	Sub section asses	sments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section	assessment w/b 17 <sup>th</sup> Oct
Career	LIFE SKILLS: Under	standing how structure and function		rstanding how to rearrange formulae	LIFE SKILLS: Unde	rstanding how plants make glucose	LIFE SKILLS: Unde	erstanding how & why biodiversity has
opportunities	are related			ellular biologist, pathologist		orticulturist, farmer	to be considered	. ,
Employment Links	EMPLOYMENT: Bio	omedical scientist						Zoologist, surveyor, DEFRA
F - 7							Environment Age	-
<b>Employability Skills</b>	Aiming high	<b>Literacy</b>	Aiming high	Literacy	Aiming high	Literacy	Aiming high	<u>Literacy</u>
	Creativity	Numeracy	Creativity	<mark>Numeracy</mark>	Creativity	Numeracy	Creativity	<mark>Numeracy</mark>
	Leadership	Independence	Leadership	Independence Property of the Independence	Leadership	Independence	Leadership	<mark>Independence</mark>
	Listening	Communication	Listening	Communication	Listening	Communication	Listening	Communication -
	Presenting Problem solving	Teamwork Staying positive	Presenting Problem solving	Teamwork Staying positive	Presenting Problem solving	Teamwork Staying positive	Presenting Problem solving	Teamwork Staying positive
IT Skills	1 TODICIII SOLVIIIG	Staying positive	1 TODICITI SOLVING	Staying positive	1 TODICITI SOLVING	Staying positive		priate research for PAG
Notes							PAG 3: Ecology f	•
							2. 2. 2. 2. 2. 2. 2. 3. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.	
Week 6	Leaner 4: 2.4.2.4.3	Harrisha abunakan anda a a a a	1000004:2444	The other should be a first of the state of	Lacons 4: 5		1000114 42 44	
Week 4	,	How the structures and properties of cogen and cellulose relate to their		- The ultrastructure of eukaryotic cells fheir components	Lesson 1: Section re Lesson 2: Mini asso		•	c) – How to measure species richness
(w/b 26 <sup>th</sup> Sep)	functions in living or	=		- Interpretation of photomicrographs of	Lesson 3: Feedback		-	nness in a habitat
		The structure of a triglyceride and a		m light, TEM and SEM	Lesson 4: Improven		,	d) – The use and interpretation of of Diversity (D) to calculate biodiversity
		aturated and unsaturated fats)	Lesson 3: Mini asse				of a habitat	or prversity (p) to calculate blodiversity
	Lesson 3: Mini asses	ssment						e) – How genetic biodiversity may be
							assessed (includi	
Key Words	Identify, describe	explain, explore, compare, evaluate	Identify, describe	, explain, explore, compare, evaluate				e, explain, explore, compare, evaluate
Level 2		ction, hydrolysis, monomer, polymer,		ph, magnification, organelle,				itat, species, allele, locus, polymorphic
Level 3		nacromolecule, phospholipid, amino		, resolution, graticule, rough/smooth				oculture, keystone species,
		d, primary structure, secondary		culum, golgi apparatus, mitochondria,				situ, conservation ex situ
		structure, quaternary structure,		ome, cilia, undulipodia, ribosome,				
				leton, prokaryotic, eukaryotic				
	•				•			

	fibrous protein, globular protein, prosthetic group, colorimeter			
Common Misconceptions	Identified from assessment	Identified from assessment	Identified from assessment	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct
Career opportunities Employment Links	LIFE SKILLS: Resilience & organisation EMPLOYMENT: Biomedical scientist, doctor, nurse	LIFE SKILLS: Resilience & organisation EMPLOYMENT: Cellular biologist	LIFE SKILLS: Resilience & organisation EMPLOYMENT: Ecologist	LIFE SKILLS: Understanding how to determine how biodiverse an area is EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Presenting Teamwork Problem solving  Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Preamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive
Week 5 (w/b 3 <sup>rd</sup> Oct)	Lesson 1: 2.1.2 (h) – The synthesis and breakdown of triglycerides by esterification and the breaking of ester bonds  Lesson 2: 2.1.2 (i) – How the properties of triglycerides, phospholipids and cholesterol relate to their functions in living organisms (linked to eukaryotes and prokaryotes)  Lesson 3: 2.1.2 (a) – How hydrogen bonding occurs between water molecules and the role of water in living organisms (linked to eukaryotes and prokaryotes)	Lesson 1: 2.1.1 (i) — The interrelationship between organelles involved in the production and secretion of proteins (not method of protein synthesis)  Lesson 2: 2.1.1 (k) — Cytoskeleton  Lesson 3: End of section review	Lesson 1: 5.2.1 (g) — Practical investigation into the factors affecting photosynthesis Lesson 2: 5.2.1 (g) — Practical investigation into the factors affecting photosynthesis Lesson 3: 5.2.2 (a) — The need for cellular respiration Lesson 4: 5.2.2 (b) — The structure of the mitochondrion	<b>Lesson</b> 1: 4.2.1 (f) – The factors affecting biodiversity <b>Lesson</b> 2: 4.2.1 (g) – The ecological, economic and aesthetic reasons for maintaining biodiversity <b>Lesson</b> 3: 4.2.1 (h) – <i>in situ</i> and <i>ex situ</i> methods of maintaining biodiversity
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Condensation reaction, hydrolysis, monomer, polymer, glycosidic bond, macromolecule, phospholipid, amino acid, peptide bond, primary structure, secondary structure, tertiary structure, quaternary structure, fibrous protein, globular protein, prosthetic group, colorimeter	Identify, describe, explain, explore, compare, evaluate Electron micrograph, magnification, organelle, photomicrograph, resolution, graticule, rough/smooth endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosome, cilia, undulipodia, ribosome, centriole, cytoskeleton, prokaryotic, eukaryotic	Identify, describe, explain, explore, compare, evaluate Granum, photosystem, stroma, thylakoid, electron carrier, photophosphorylation, independent variable, dependent variable, control variable, validity, reliability, reproducibility Glycolysis, cristae, mitochondrial matrix, decarboxylation, dehydrogenation, substrate-level phosphorylation, respiratory substrate, respirometer	Identify, describe, explain, explore, compare, evaluate Biodiversity, habitat, species, allele, locus, polymorphic gene locus, monoculture, keystone species, conservation in situ, conservation ex situ
Common Misconceptions	That cholesterol is only found in the blood/heart  That protein synthesis only occurs in the ribosomes		Only light affects photosynthesis	Conservation is only in zoos and Africa
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct
Career opportunities Employment Links	LIFE SKILLS: Understanding how structure and function are related  EMPLOYMENT: Biomedical scientist, researcher  LIFE SKILLS: Understanding the role of cells  EMPLOYMENT: Biomedical scientist, researcher		LIFE SKILLS: Understanding the role of respiration in releasing energy EMPLOYMENT: Doctor, physiotherapist, personal trainer	LIFE SKILLS: Understanding how conservation projects work EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency
Employability Skills	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Listeracy Independence Communication Presenting Teamwork Problem solving  Staying positive	Aiming high Creativity Leadership Literacy Leadership Lindependence Listening Presenting Teamwork Problem solving Staying positive

Week 6 (w/b 10 <sup>th</sup> Oct)	Lesson 1: 2.1.2 (j) – The structure of an amino acid Lesson 2: 2.1.2 (k) – The synthesis and breakdown of dipeptides and polypeptides Lesson 3: Mini assessment	Lesson 1: End of section review Lesson 2: End of section assessment Lesson 3: Exemplar answers	Lesson 1: 5.2.2 (c) – The process and site of glycolysis Lesson 2: 5.2.2 (d) – The link reaction Lesson 3: 5.2.2 (e) – The Krebs Cycle Lesson 4: Mini assessment	Lesson 1: 4.2.1 (i) — international and local conservation agreements made to protect species and habitats  Lesson 2: 4.2.1 (i) — international and local conservation agreements made to protect species and habitats — students research for presentations  Lesson 3: .2.1 (i) — international and local conservation agreements made to protect species and habitats — students presentations
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Condensation reaction, hydrolysis, monomer, polymer, glycosidic bond, macromolecule, phospholipid, amino acid, peptide bond, primary structure, secondary structure, tertiary structure, quaternary structure, fibrous protein, globular protein, prosthetic group, colorimeter	Identify, describe, explain, explore, compare, evaluate Electron micrograph, magnification, organelle, photomicrograph, resolution, graticule, rough/smooth endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosome, cilia, undulipodia, ribosome, centriole, cytoskeleton, prokaryotic, eukaryotic	Identify, describe, explain, explore, compare, evaluate Glycolysis, cristae, mitochondrial matrix, decarboxylation, dehydrogenation, substrate-level phosphorylation, chemiosmosis, oxidative phosphorylation, respiratory substrate, respirometer	Identify, describe, explain, explore, compare, evaluate Biodiversity, habitat, species, allele, locus, polymorphic gene locus, monoculture, keystone species, conservation in situ, conservation ex situ
Common Misconceptions	Identified from assessment	Identified from assessment	Identified from assessment	Conservation is only in zoos and Africa
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Research types of conservation agreements and prepare presentation
Assessment this half-term	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct
Career opportunities Employment Links	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Researcher	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Researcher	LIFE SKILLS: Understanding the role of respiration in releasing energy EMPLOYMENT: Doctor, physiotherapist, personal trainer	LIFE SKILLS: Understanding how conservation projects work EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Presenting Teamwork Problem solving  Literacy Numeracy Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive	Aiming high Creativity Numeracy Leadership Listening Presenting Problem solving  Literacy Communication Teamwork Problem solving  Staying positive
Week 7 (w/b 17 <sup>th</sup> Oct)	Lesson 1: 2.1.2 (m) – The levels of protein structure Lesson 2: 2.1.2 (n) – The structure and function of globular and conjugated proteins Lesson 3: 2.1.2 (o) – The properties and functions of fibrous proteins	Lesson 1: PAG 1 Lesson 2: PAG 1 Lesson 3: PAG 1	Lesson 1: 5.2.2 (f) – Coenzymes in cellular respiration Lesson 2: 5.2.2 (g) – Oxidative phosphorylation Lesson 3: 5.2.2 (h) – Chemiosmotic theory Lesson 4: 5.2.2 (i) – Anaerobic respiration in eukaryotes	Lesson 1: End of section review Lesson 2: End of section assessment Lesson 3: Exemplar answers
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Condensation reaction, hydrolysis, monomer, polymer, glycosidic bond, macromolecule, phospholipid, amino acid, peptide bond, primary structure, secondary structure, tertiary structure, quaternary structure, fibrous protein, globular protein, prosthetic group, colorimeter	Identify, describe, explain, explore, compare, evaluate Electron micrograph, magnification, organelle, photomicrograph, resolution, graticule, rough/smooth endoplasmic reticulum, golgi apparatus, mitochondria, chloroplast, lysosome, cilia, undulipodia, ribosome, centriole, cytoskeleton, prokaryotic, eukaryotic	Identify, describe, explain, explore, compare, evaluate Glycolysis, cristae, mitochondrial matrix, decarboxylation, dehydrogenation, substrate-level phosphorylation, chemiosmosis, oxidative phosphorylation, respiratory substrate, respirometer, coenzyme	Identify, describe, explain, explore, compare, evaluate
Common	Students often forget that enzymes are proteins with a	Students often confuse the conversation calculation	That respiration is breathing	Identified from assessment
Misconceptions Homework	Review book chapter and answer in book questions	for μm. Research PAG	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 1 and sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	Sub section assessments w/b 26 <sup>th</sup> Sept & 10 <sup>th</sup> Oct	PAG 3 & section assessment w/b 17 <sup>th</sup> Oct
Career opportunities Employment Links	LIFE SKILLS: Understanding the roles of different proteins EMPLOYMENT: Nutritionist, personal trainer, body builder	LIFE SKILLS: Understanding how things work together to create a 'bigger picture' EMPLOYMENT: Biomedical scientist, researcher	LIFE SKILLS: Understanding the role of respiration in releasing energy EMPLOYMENT: Doctor, physiotherapist, personal trainer	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Zoologist, surveyor, DEFRA Environment Agency
Employability Skills	Aiming high Creativity Numeracy	Aiming high Creativity Numeracy	Aiming high Creativity Numeracy	Aiming high Creativity  Numeracy

	Landaushin Indonesidasa Listania	Landaushia tadausudausa Listauisa	Landouskin Indonesiana Lieksuina	Leadaushin Indonesias Listanias	
	Leadership Independence Listening Communication	Leadership Independence Listening  Communication	Leadership Independence Listening  Communication	Leadership Independence Listening  Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving	Problem solving	Problem solving	Problem solving	
	Staying positive	Staying positive	Staying positive	Staying positive	
IT Skills		IT1 & IT2: Appropriate research to prepare			
		presentation			
Notes		PAG 1: Microscopy			
Week 8	<b>Lesson 1:</b> 2.1.2 (p) – The key inorganic ions involved in	<b>Lesson 1:</b> 2.1.3 (a) – The structure of a nucleotide as the	<b>Lesson</b> 1: 5.2.2 (j) – The differences in energy values of	<b>Lesson 1:</b> 4.2.2 (a) – The biological classification of species	
(w/b Mon 31st Oct)	biological processes  Lesson 2: PAG 10	monomer from which nucleic acids are made <b>Lesson 2:</b> 2.1.3 (b) – The synthesis and breakdown of	respiratory substrates	<b>Lesson 2:</b> 4.2.2 (b) – The binomial system of naming species and the advantages of such a system	
	Lesson 3: PAG 10	polynucleotides by the formation and breakage of	<b>Lesson 2</b> : 5.2.2 (k) – Use and interpretation of RQ <b>Lesson 3</b> : Section review	<b>Lesson 3:</b> 4.2.2 (c) – The features used to classify the 5	
		phosphodiester bonds	Lesson 4: Mini assessment	kingdoms	
		Lesson 3: 2.1.3 (c) – The structure of ADP and ATP as	Lesson 4. Willi assessment		
		phosphorylated nucleotides			
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Independent variable, dependent variable, control	Double helix, monomer, nucleotide, polynucleotide,	Glycolysis, cristae, mitochondrial matrix,	Binomial system, classification, phylogeny, natural	
Level 3	variable, validity, reproducibility, reliability	helicase. Polymerase, semi-conservative replication,	decarboxylation, dehydrogenation, substrate-level	selection, continuous variation, discontinuous	
		gene, polypeptide, protein, transcription, translation	phosphorylation, chemiosmosis, oxidative	variation, interspecific, intraspecific, correlation	
			phosphorylation, respiratory substrate, respirometer	coefficient, anatomical, behavioural, physiological,	
Common	Identified from PAG	Energy is created	Identified from assessment	adaptation That there are only 2 kingdoms – plant and animal	
Misconceptions	I defitified from PAG	Ellergy is created	identified from assessment	That there are only 2 kinguonis – plant and animal	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Homework	Neview book chapter and answer in book questions	Neview book chapter and answer in book questions	Neview book chapter and answer in book questions	Neview book chapter and answer in book questions	
Assessment this	Unit assessment w/b 12 <sup>th</sup> Dec	Unit assessment w/b 21st Nov	Section assessment w/b 31st Oct	Unit assessment w/b 14th Nov and 5th Dec	
half-term	PAG 10/PAG 9/PAG 5/PAG 6	PAG 8	PAG 11/PAG 4/PAG 10	Presentations w/b 28 <sup>th</sup> Nov	
Career	LIFE SKILLS: To understand how to identify food groups	LIFE SKILLS: To understand the structure of DNA	LIFE SKILLS: To understand how basal metabolic rate is	LIFE SKILLS: Understanding how species are classified	
opportunities	EMPLOYMENT: Food scientist	EMPLOYMENT: Geneticist	linked to respiration	EMPLOYMENT: Evolutionary biologist, anthropologist,	
Employment Links			EMPLOYMENT: Research scientist	forensic scientist	
<b>Employability Skills</b>		Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	
	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence Listening Communication	Leadership Independence  Listening Communication	Leadership Independence Listening Communication	Leadership Independence Listening Communication	
	Listening Communication  Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
IT Skills	IT1 & IT2: research PAG using appropriate sites				
Notes	PAG 10 – computer modelling to investigate the levels				
	of protein structure within a molecule				
Week 9	<b>Lesson 1:</b> 2.1.2 (q) – How to carry out and interpret results	<b>Lesson 1:</b> 2.1.3 (d) – The structure of DNA	Lesson 1: PAG 11	<b>Lesson 1:</b> 4.2.2 (c) – The evidence that has led to new	
(w/b 7 <sup>th</sup> Nov)	of chemical tests	Lesson 2: 2.1.3 (d) – The extraction of DNA by precipitation	Lesson 2: PAG 11	classification systems, such as the 3 domains of life	
	Lesson 2: PAG 9	<b>Lesson 3:</b> 2.1.3 (e) – Semi-conservative DNA replication	Lesson 3: PAG 11	<b>Lesson 2:</b> 4.2.2 (d) – The relationship between classification	
	Lesson 3: PAG 9		Lesson 4: PAG 11	and phylogeny Lesson 3: 4.2.2 (e) – The evidence for the theory of evolution	
				by natural selection	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Independent variable, dependent variable, control	Double helix, monomer, nucleotide, polynucleotide,	Independent variable, dependent variable, control	Binomial system, classification, phylogeny, natural	
Level 3	variable, validity, reproducibility, reliability	helicase. Polymerase, semi-conservative replication,	variable, validity, reproducibility, reliability	selection, continuous variation, discontinuous	
		gene, polypeptide, protein, transcription, translation		variation, interspecific, intraspecific, correlation	
				coefficient, anatomical, behavioural, physiological,	
				adaptation	
Common	Identified from PAG		Identified from PAG		
Misconceptions					
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	

Assessment this	Unit assessment w/b 12 <sup>th</sup> Dec	Unit assessment w/b 21st Nov	Section assessment w/b 31st Oct	Unit assessment w/b 14 <sup>th</sup> Nov and 5 <sup>th</sup> Dec	
half-term	PAG 9/PAG 5/PAG 6	PAG 8	PAG 11/PAG 4/PAG 10	Presentations w/b 28 <sup>th</sup> Nov	
Career	LIFE SKILLS: Choosing equipment that is fit for purpose	LIFE SKILLS: To understand the structure of DNA	LIFE SKILLS: Choosing equipment that is fit for purpose	LIFE SKILLS: Understanding how species are classified	
opportunities	EMPLOYMENT: Research scientist	EMPLOYMENT: Geneticist	EMPLOYMENT: Research scientist	EMPLOYMENT: Evolutionary biologist, anthropologist,	
Employment Links	LIVIT LOTIVILIVIT. Nescarcii scientist		EWI LOTWENT: Nescaren scientist	forensic scientist	
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	
Limployability 5kills	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence	Leadership Independence	Leadership Independence	Leadership Independence	
	Listening Communication	Listening Communication	Listening Communication	Listening Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
IT Skills	IT1 & IT2: research PAG using appropriate sites		IT1 & IT2: research PAG using appropriate sites		
Notes	PAG 9: Biuret, Benedicts, reagent test strips, iodine		Mock exams during this week – there may be some		
	and emulsion tests		disruption to lessons		
			PAG 11: The effect of exercise on heart rate		
Week 10	Lesson 1: PAG 9	<b>Lesson 1:</b> 2.1.3 (f) – The nature of the genetic code	Lesson 1: PAG 4	Lesson 1: Mini assessment	
(w/b 14 <sup>th</sup> Nov)	Lesson 2: PAG 9	<b>Lesson 2:</b> 2.1.3 (g) – Transcription and translation of genes	Lesson 2: PAG 4	Lesson 2: Exemplars	
	Lesson 3: PAG 9	resulting in the synthesis of polypeptides	Lesson 3: PAG 4	<b>Lesson 3:</b> 4.2.2 (f) – The different types of variation	
		<b>Lesson 3:</b> 2.1.3 (g) – Transcription and translation of genes	Lesson 4: PAG 4		
Vov Morda	Identify describe emploin employe compare control	resulting in the synthesis of polypeptides	Identify describe evaluin evalure common evaluation	Identify describe explain explara common and extra	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Independent variable, dependent variable, control	Double helix, monomer, nucleotide, polynucleotide,	Independent variable, dependent variable, control	Binomial system, classification, phylogeny, natural	
Level 3	variable, validity, reproducibility, reliability	helicase. Polymerase, semi-conservative replication,	variable, validity, reproducibility, reliability	selection, continuous variation, discontinuous	
		gene, polypeptide, protein, transcription, translation		variation, interspecific, intraspecific, correlation	
				coefficient, anatomical, behavioural, physiological,	
Common	Identified from PAG	That protein synthesis only occurs in ribosomes	Identified from PAG	adaptation Identified from assessment	
Misconceptions	Identified from PAG	That protein synthesis only occurs in ribosomes	luentinea from PAG	identified from assessment	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this	Unit assessment w/b 12 <sup>th</sup> Dec	Unit assessment w/b 21st Nov	Section assessment w/b 31st Oct	Unit assessment w/b 14 <sup>th</sup> Nov and 5 <sup>th</sup> Dec	
half-term	PAG 9/PAG 5/PAG 6	PAG 8	PAG 11/PAG 4/PAG 10	Presentations w/b 28 <sup>th</sup> Nov	
	LIFE SKILLS: Choosing equipment that is fit for purpose	LIFE SKILLS: To understand the structure of DNA		LIFE SKILLS: Resilience and organisation	
Career opportunities	EMPLOYMENT: Research scientist	EMPLOYMENT: Geneticist	LIFE SKILLS: Choosing equipment that is fit for purpose EMPLOYMENT: Research scientist	EMPLOYMENT: Evolutionary biologist, anthropologist,	
Employment Links	EMPLOTIVIENT. Research scientist	EMI ESTMENT. GENERICISE	EIVIPLOTIVIENT. Research scientist	forensic scientist	
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	
Limployability Skills	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening	
	Communication	Communication	Communication	Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
IT Skills	IT1 & IT2: research PAG using appropriate sites		IT1 & IT2: research PAG using appropriate sites		
Notes	PAG 9: Biuret, Benedicts, reagent test strips, iodine		PAG 4: Investigating respiration rates in yeast		
	and emulsion tests				
Week 11	<b>Lesson 1:</b> 2.1.2 (r) – Using quantitative methods to	Lesson 1: Section review	Lesson 1: PAG 6	<b>Lesson 1:</b> 4.2.2 (f) – The different types of variation: use of	
(w/b 21 <sup>st</sup> Nov)	determine concentration of a substance in solution	Lesson 2: Section assessment	Lesson 2: PAG 6	statistics (s.d/t-test/SR)	
	Lesson 2: PAG 5	Lesson 3: Exemplars	Lesson 3: PAG 6	<b>Lesson 2:</b> 4.2.2 (g) – The different types of adaptations of	
	Lesson 3: PAG 5		Lesson 4: PAG 6	organisms to their environment	
				<b>Lesson 3:</b> 4.2.2 (g) – The different types of adaptations of	
				organisms to their environment – student research for presentation	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Independent variable, dependent variable, control	Double helix, monomer, nucleotide, polynucleotide,	Independent variable, dependent variable, control	Binomial system, classification, phylogeny, natural	
Level 3	variable, validity, reproducibility, reliability	helicase. Polymerase, semi-conservative replication,	variable, validity, reproducibility, reliability	selection, continuous variation, discontinuous	
	randole, validity, reproductionity, reliability	gene, polypeptide, protein, transcription, translation	randale, validity, reproductionity, reliability	variation, interspecific, intraspecific, correlation	
		Bene, polypeptide, protein, transcription, translation		coefficient, anatomical, behavioural, physiological,	
				adaptation	
				auaptation	

Misconceptions	nt w/b 5 <sup>th</sup> Dec w/b 28 <sup>th</sup> Nov ganisation : Research scientist, conservationist,  Literacy Numeracy Independence Listening  Teamwork
Assessment this half-term PAG 5/PAG 6 PAG 5/PAG 6 PAG 1/PAG	entations  nt w/b 5 <sup>th</sup> Dec  w/b 28 <sup>th</sup> Nov  ganisation : Research scientist, conservationist,  Literacy Numeracy Independence Listening  Teamwork Staying positive
PAG 5/PAG 6	w/b 28 <sup>th</sup> Nov ganisation : Research scientist, conservationist,  Literacy Numeracy Independence Listening  Teamwork Staying positive
LIFE SKILLS: Choosing equipment that is fit for purpose EMPLOYMENT: Research scientist  Employability Skills  Aiming high  Literacy  Creativity  Numeracy  Leadership  Independence  Listening  Communication  Presenting  Feamwork  Problem solving  Staying positive  Problem solving  Taying positive  Problem solving  Total Tt2: research PAG using appropriate sites  IT1 & IT2: research PAG u	ganisation : Research scientist, conservationist,  Literacy Numeracy Independence Listening  Teamwork Staying positive
EMPLOYMENT: Research scientist   Statistician	: Research scientist, conservationist,  Literacy Numeracy Independence Listening  Teamwork Staying positive
Employability Skills   Alming high   Literacy   Creativity   Numeracy   Creativity   Numeracy   Creativity   Leadership   Independence   Listening   Communication   Communication   Presenting   Teamwork   Presenting   Teamwork   Presenting   Teamwork   Problem solving   Staying positive   Staying positive   Problem solving   Staying positive   Staying positive   Problem solving   Staying positive   Staying p	Literacy Numeracy Independence  Teamwork Staying positive
Employability Skills Aiming high Creativity Numeracy Leadership Independence Listening Communication Communication Presenting Teamwork Problem solving Staying positive Presenting Teamwork Problem solving Staying positive Problem solving IT1 & IT2: research PAG using appropriate sites IT1 & IT2: research PAG using appropriate sites IT1 & IT2: research PAG using appropriate sites Sites  Notes PAG 5: Determining sugar concentration by colorimetry  Week 12 Lesson 1: PAG 5 Lesson 2: 2.1.2 (r) — The principles of paper and TLC to analyse biological samples Lesson 3: PAG 5 Lesson 3: PAG 6 Lesson 3: PAG 6 Lesson 3: 2.1.5 (c) — Factors affecting structure and permeability of a membrane  Lesson 3: A.1.1 (c) — Plant defences against pathogens Lesson 3: A.1.2 (d) — The primary non-specific defences itime Lesson 3: A.2.2 (d) — The primary non-specific defences itime Lesson 3: A.2.2 (d) — The primary non-specific defences itime Lesson 3: A.2.2 (d) — The primary non-specific defences against pathogens Lesson 3: A.2.2 (d) — The primary non-specific defences against pathogens Lesson 3: A.2.2 (d) — The primary non-specific defences against pathogens Lesson 3: A.2.2 (d) — The primary non-specifi	Numeracy Independence Listening  Teamwork  Staying positive
Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive  IT Skills  IT 1 & IT2: research PAG using appropriate sites  PAG 5: Determining sugar concentration by colorimetry  Week 12 (w/b 28th Nov)  Week 12 (w/b 28th Nov)  Lesson 1: PAG 5 Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6  Lesson 3: PAG 6  Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive  III & IT2: research PAG using appropriate sites  III &	Numeracy Independence Listening  Teamwork  Staying positive
Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive  IT Skills  IT1 & IT2: research PAG using appropriate sites  Notes  PAG 5: Determining sugar concentration by colorimetry  Week 12 (w/b 28 <sup>th</sup> Nov)  Lesson 1: 2.1.5 (a) – The role of membranes within cells analyse biological samples Lesson 3: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: 2.1.5 (c) – Factors affecting structure and permeability of a membrane  Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive Problem solving Staying po	Independence Listening  Teamwork  Staying positive
Listening Communication Presenting Teamwork Problem solving Staying positive  IT1 & IT2: research PAG using appropriate sites  Notes  PAG 5: Determining sugar concentration by colorimetry  Week 12 (w/b 28 <sup>th</sup> Nov)  Lesson 1: PAG 5 Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6 Lesson 3: 4.1.1 (a) – The means of transmission of animal and part communicable pathogens Lesson 3: 4.1.1 (b) – The means of transmission of animal and part communicable pathogens Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 3: 4.1.2 (c) – Pla	Teamwork Staying positive
Presenting Teamwork Problem solving Staying positive  IT Skills  IT1 & IT2: research PAG using appropriate sites  IT1 & IT2: research P	Staying positive
IT1 & IT2: research PAG using appropriate sites  Notes  PAG 5: Determining sugar concentration by colorimetry  PAG 6: Investigating the pigments in leaves  Lesson 1: PAG 5  Lesson 1: PAG 5  Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples  Lesson 3: PAG 6  Lesson 3: PAG 6  Lesson 3: 2.1.5 (c) – Factors affecting structure and permeability of a membrane  Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 3: 4.1.1 (d) – The primary non-specific defences  Lesson 3: 4.2.2 implications for	
Notes PAG 5: Determining sugar concentration by colorimetry  Week 12 (w/b 28 <sup>th</sup> Nov) Lesson 3: PAG 6 Lesson 3: 2.1.2 (r) - The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6 Lesson 3: 2.1.5 (a) - The role of membranes within cells Lesson 4: 4.1.1 (b) - The means of transmission of animal path communicable pathogens Lesson 3: 4.1.1 (c) - Plant defences against pathogens Lesson 3: 4.1.1 (d) - The primary non-specific defences  sites  PAG 6: Investigating the pigments in leaves  Lesson 1: 4.1.1 (a) - The different types of pathogen that can cause communicable disease Lesson 2: 4.1.1 (b) - The means of transmission of animal and plant communicable pathogens Lesson 3: 4.1.1 (c) - Plant defences against pathogens Lesson 3: 4.1.1 (d) - The primary non-specific defences	arch presentation using appropriate
Week 12 (w/b 28 <sup>th</sup> Nov)  Lesson 1: PAG 5 Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: 2.1.5 (c) – Factors affecting structure and permeability of a membrane  Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 3: 4.1.1 (d) – The primary non-specific defences  Lesson 3: 4.2.2 (a) – The role of membranes within cells Lesson 1: 4.1.1 (a) – The different types of pathogen that can cause communicable disease  Lesson 2: 4.1.1 (b) – The means of transmission of animal and plant communicable pathogens Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 3: 4.1.1 (d) – The primary non-specific defences	
Week 12 (w/b 28 <sup>th</sup> Nov)  Lesson 1: PAG 5 Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6  Lesson 3: 2.1.5 (a) – The role of membranes within cells Lesson 4: 4.1.1 (a) – The different types of pathogen that can cause communicable disease Lesson 2: 4.1.1 (b) – The means of transmission of animal permeability of a membrane  Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 3: 4.2.2 implications for	
(w/b 28 <sup>th</sup> Nov)  Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6  Lesson 2: 2.1.5 (b) – The fluid mosaic model Lesson 3: 2.1.5 (c) – Factors affecting structure and permeability of a membrane  Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 4: 4.1.1 (d) – The primary non-specific defences  Lesson 3: 4.2.2 (implications for an analyse biological samples and plant communicable disease Lesson 2: 4.1.1 (b) – The means of transmission of animal and plant communicable pathogens Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 4: 4.1.1 (d) – The primary non-specific defences	
(w/b 28 <sup>th</sup> Nov)  Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: PAG 6  Lesson 2: 2.1.2 (r) – The principles of paper and TLC to analyse biological samples Lesson 3: 2.1.5 (b) – The fluid mosaic model Lesson 3: 2.1.5 (c) – Factors affecting structure and permeability of a membrane  Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 4: 4.1.1 (d) – The primary non-specific defences  Lesson 3: 4.2.2  Lesson 4: 4.1.1 (d) – The primary non-specific defences	(g) – The different types of adaptations of
Lesson 3: PAG 6  permeability of a membrane  and plant communicable pathogens Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 4: 4.1.1 (d) – The primary non-specific defences  implications for	eir environment – student presentations
Lesson 3: 4.1.1 (c) – Plant defences against pathogens Lesson 4: 4.1.1 (d) – The primary non-specific defences  time Lesson 3: 4.2.2	h) – The mechanism by which natural
Lesson 4: 4.1.1 (d) – The primary non-specific defences  Lesson 4: 4.1.1 (d) – The primary non-specific defences  Lesson 5: 4.2.2	ect the characteristics of a population over
implications for	i) – How evolution in some species has
	human populations
against patriogens in animals	be, explain, explore, compare, evaluate
	m, classification, phylogeny, natural
	inuous variation, discontinuous
	specific, intraspecific, correlation
	atomical, behavioural, physiological,
antibiotic adaptation	
CommonIdentified from PAGAll membranes have the same structureAll disease is infectiousEvolution is a	ast process
Misconceptions	
Preparing pre-	
	nt w/b 14 <sup>th</sup> Nov and 5 <sup>th</sup> Dec
half-term PAG 5/PAG 6 Presentations	•
	derstanding how evolution has occurred
	: Evolutionary biologist, anthropologist,
phiesocomist, research scientist, pharmaeist for chisic scient	
Employability SkillsAiming highLiteracyAiming highLiteracyAiming highLiteracyAiming highCreativityNumeracyCreativityNumeracyCreativityNumeracyCreativity	<mark>Literacy</mark> Numeracy
Leadership Independence Leadership Independence Leadership Independence Leadership	Independence
Listening Communication Listening Communication Listening Communication Listening	Communication Communication
PresentingTeamworkPresentingTeamworkPresentingTeamworkPresenting	<mark>Teamwork</mark>
Problem solving Staying positive Problem solving Staying Problem solv	
IT Skills IT1 & IT2: research PAG using appropriate sites IT1 & IT2: deli sources	ver presentation using appropriate
Notes PAG 5: Determining sugar concentration by	
colorimetry	
PAG 6: Using paper/TLC to determine amino acids in a	
protein/photosynthetic pigments	
Wook 12 Lesson 1: DAG 6	nviou
Week 13 Lesson 1: PAG 6 Lesson 2: PAG 6 Lesson 2: PAG 6 membranes Lesson 3: 2.1.5 (d) – The movement of molecules across phagocytes Lesson 2: Unit relation of phagocytes Lesson 2: Unit	

		<b>Lesson 2:</b> 2.1.5 (d) – The movement of molecules across	<b>Lesson 3:</b> 4.1.1 (f) – The structure and mode of action of B	
		membranes	and T lymphocytes in specific immune response	
		<b>Lesson 3:</b> 2.1.5 (e) – The movement of water across membranes by osmosis	<b>Lesson 4:</b> 4.1.1 (g) – The different types of pathogen that can cause communicable disease	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Independent variable, dependent variable, control	Fluid mosaic model, glycolipid, glycoprotein, plasma	Pathogen, transmission, vector, callose, inflammation,	Binomial system, classification, phylogeny, natural
Level 3	variable, validity, reproducibility, reliability	membrane, diffusion, facilitated diffusion, osmosis,	mucous membrane, primary defences, antibodies,	selection, continuous variation, discontinuous
		water potential, plasmolysed, crenation, flaccid, turgid, endocytosis, exocytosis, active transport	clonal expansion, interleukins, regulator cells, agglutinins, opsonins, epidemic, immunity, vaccination,	variation, interspecific, intraspecific, correlation coefficient, anatomical, behavioural, physiological,
		endocytosis, exocytosis, active transport	antibiotic	adaptation
Common Misconceptions	Identified from PAG	All molecules can move across the membrane	All white blood cells do the same job	Identified from assessment
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Unit assessment w/b 12 <sup>th</sup> Dec PAG 6	PAG 8	6 mark in class question	Unit assessment w/b 5 <sup>th</sup> Dec
Career	LIFE SKILLS: Choosing equipment that is fit for purpose	LIFE SKILLS: To understand how molecules move across	LIFE SKILLS: Understanding how diseases can spread	LIFE SKILLS: Resilience and organisation
opportunities	EMPLOYMENT: Research scientist	membranes	EMPLOYMENT: Doctor, nurse, vet, virologist,	EMPLOYMENT: Research scientist
Employment Links		EMPLOYMENT: Biomedical scientist	phlebotomist, research scientist, pharmacist	
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening
	Communication	Communication	Communication  Presenting Teamwork	Communication
	Presenting Teamwork Problem solving Staying positive	Presenting Teamwork Problem solving Staying positive	Presenting Teamwork Problem solving Staying positive	Presenting Teamwork  Problem solving Staying positive
IT Skills	IT1 & IT2: research PAG using appropriate sites	Troblem solving Staying positive	Staying positive	Staying positive
Notes	PAG 6: Using paper/TLC to determine amino acids in a			
	protein/photosynthetic pigments			
	CLP	JAD	CLP	JAD
Week 14	Lesson 1: Unit review	Lesson 1: PAG 8	<b>Lesson 1:</b> 4.1.1 (h/i) – The structure and function of	<b>Lesson 1:</b> Mop up for lost lessons due to mocks/PAG write
(w/b 12 <sup>th</sup> Dec)	Lesson 2: Unit assessment Lesson 3: Exemplars	Lesson 2: PAG 8 Lesson 3: PAG 8	antibodies and action of opsonin, agglutinin and anti-toxin	ups Lesson 2: Mop up for lost lessons due to mocks/PAG write
	Lesson 3. Exemplars	Lesson 3. That	<b>Lesson 2:</b> 4.1.1 (j) – The differences between active/passive immunity and between natural/artificial immunity	ups
			<b>Lesson 3:</b> 4.1.1 (k) – Autoimmune diseases e.g. arthritis and	<b>Lesson 3:</b> Mop up for lost lessons due to mocks/PAG write
			lupus	ups
			<b>Lesson 4:</b> 4.1.1 (I) – The principles of vaccination	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2		osmosis, water potential, flaccid, turgid, independent	Pathogen, transmission, vector, callose, inflammation,	
Level 3		variable, dependent variable, control variable, valid,	mucous membrane, primary defences, antibodies,	
		reproduceable, reliable	clonal expansion, interleukins, regulator cells,	
			agglutinins, opsonins, epidemic, immunity, vaccination, antibiotic	
Common	Identified from assessment	Identified from PAG	Phagocytes 'eat' pathogens	Identified from assessments and PAGs
Misconceptions				
Homework	Davieus heads about an and an assenting heads assertions	But the book should be a set to be about the set	Review book chapter and answer in book questions	Review book chapter and answer in book questions
	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Neview book enapter and answer in book questions	
Assessment this	Unit assessment w/b 12 <sup>th</sup> Dec	PAG 8	6 mark in class question	6 mark in class question
Assessment this half-term	·		·	·
half-term Career	Unit assessment w/b 12 <sup>th</sup> Dec  LIFE SKILLS: Resilience and organisation	PAG 8  LIFE SKILLS: Choosing equipment that is fit for purpose	6 mark in class question  LIFE SKILLS: Understanding how diseases can spread	LIFE SKILLS: Organisation
half-term Career opportunities	Unit assessment w/b 12 <sup>th</sup> Dec	PAG 8	6 mark in class question  LIFE SKILLS: Understanding how diseases can spread EMPLOYMENT: Doctor, nurse, vet, virologist,	·
half-term Career	Unit assessment w/b 12 <sup>th</sup> Dec  LIFE SKILLS: Resilience and organisation	PAG 8  LIFE SKILLS: Choosing equipment that is fit for purpose	6 mark in class question  LIFE SKILLS: Understanding how diseases can spread	LIFE SKILLS: Organisation
half-term Career opportunities Employment Links	Unit assessment w/b 12 <sup>th</sup> Dec  LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	PAG 8  LIFE SKILLS: Choosing equipment that is fit for purpose EMPLOYMENT: Research scientist	6 mark in class question  LIFE SKILLS: Understanding how diseases can spread EMPLOYMENT: Doctor, nurse, vet, virologist, phlebotomist, research scientist, pharmacist	LIFE SKILLS: Organisation EMPLOYMENT: Research scientist
half-term Career opportunities	Unit assessment w/b 12 <sup>th</sup> Dec  LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	PAG 8  LIFE SKILLS: Choosing equipment that is fit for purpose	6 mark in class question  LIFE SKILLS: Understanding how diseases can spread EMPLOYMENT: Doctor, nurse, vet, virologist,	LIFE SKILLS: Organisation

	Listening	Communication	Listening	Communication	Listening	Communication	Listening	Communication
	Presenting Problem solving	Teamwork <mark>Staying positive</mark>	Presenting Problem solving	Teamwork <mark>Staying positive</mark>	Presenting Problem solving	Teamwork Staying positive	Presenting Problem solving	Teamwork <mark>Staying positive</mark>
IT Skills	Troblem solving	Starying positive		h PAG using appropriate sites	Troblem solving	staying positive	i robiem sowing	Staying positive
Notes				ng the effect of concentration on the				
			movement of wat	er across a membrane				
Week 15	<b>Lesson 1:</b> 2.1.4 (a) reactions that affect	– The role of enzymes in catalysing	Lesson 1: PAG 8		· ·	) – Possible sources of medicines	· ·	or lost lessons due to mocks/PAG write
(w/b 19 <sup>th</sup> Dec)		The role of enzymes in catalysing	Lesson 2: End of to		, ,	<ul> <li>The benefits and risks of using ge bacterial infections</li> </ul>	ups Lesson 2: End of te	ırm
End of term Wednesday 20 <sup>th</sup>		tracellular reactions	Lesson 5. End of te	31111	Lesson 3: Unit rev	_	Lesson 3: End of te	
December	<b>Lesson 3:</b> 2.1.4 (c) –	-The mechanism of enzyme action			Lesson 4: End of t		2033011 3. 2114 01 00	
Key Words	Identify, describe.	, explain, explore, compare, evaluate	Identify, describe	explain, explore, compare, evaluate		, explain, explore, compare, evaluate	Identify, describe.	explain, explore, compare, evaluate
Level 2		st, extracellular, intracellular,		otential, flaccid, turgid, independent		nission, vector, callose, inflammation,	,	
Level 3		ct, substrate, cofactor, enzyme-		ent variable, control variable, valid,		ne, primary defences, antibodies,		
	substrate complex	x, specificity, competitive inhibition,	reproduceable, re	<mark>liable</mark>	clonal expansion,	interleukins, regulator cells,		
	non-competitive i	nhibition, prosthetic group				nins, epidemic, immunity, vaccination,	,	
					antibiotic			
Common	Pupils forget that	enzymes are tertiary proteins	Identified from PA	AG	All medicines are	made in laboratories	Identified from as	sessments and PAGs
Misconceptions	Daview healt show	stor and analysis in book suppliers	Daview beek abov	stor and analysis had a supsting	Daview beek abou	ator and annuarin hand, avantings	Daview heels show	to and annuaria head avantions
Homework	Review book chapter and answer in book questions		Review book chap	eter and answer in book questions	Review book chap	oter and answer in book questions	Review book chap	ter and answer in book questions
Assessment this	6 mark in class question		PAG 8		6 mark in class question 6 mark in class		6 mark in class qu	estion
half-term								
Career	LIFE SKILLS: Under	rstanding the importance of enzymes		sing equipment that is fit for purpose	LIFE SKILLS: Unde	rstanding how diseases can spread	LIFE SKILLS: Organ	isation
opportunities	in everyday life e.g., washing powder and baby food		EMPLOYMENT: Research scientist		EMPLOYMENT: Doctor, nurse, vet, virologist,		EMPLOYMENT: Research scientist	
Employment Links		octor, nurse, research scientist,			phlebotomist, res	earch scientist, pharmacist		
- I I''' 61'''		cian, product development	A		A		A	
Employability Skills	Aiming high Creativity	<mark>Literacy</mark> Numeracy	Aiming high Creativity	<mark>Literacy</mark> Numeracy	Aiming high Creativity	Literacy Numeracy	Aiming high Creativity	<mark>Literacy</mark> Numeracy
	Leadership	Independence	Leadership	Independence	Leadership	Independence	Leadership	Independence
	<u>Listening</u>	Communication	Listening	Communication	Listening	Communication	Listening	Communication
	Presenting	Teamwork	Presenting	Teamwork	Presenting	Teamwork	Presenting	Teamwork
IT Skills	Problem solving	Staying positive	Problem solving	Staying positive h PAG using appropriate sites	Problem solving	Staying positive	Problem solving	Staying positive
Notes	Lesson 2: Include	catalase as intracellular and		ng the effect of concentration on the				
Notes	amylase/trypsin a		_	er across a membrane				
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Week 16			<b>Lesson 1:</b> 2.1.6 (a)	– The cell cycle	Lesson 1: X		Lesson 1: X	
(w/b Wed 4 <sup>th</sup> Jan)				– How the cell cycle is regulated	Lesson 2: Unit red	сар		- Types of gene mutations and their
			<b>Lesson 3:</b> 2.1.6 (c) -	The main stages of mitosis	Lesson 3: Unit ass			orotein production and function  Types of gene mutations and their
					Lesson 4: Exempl	ars		protein production and function
Vov Mords			Idontify docaribo	ovalcia cyalore compare evaluate	Idontify dosoribo	avalain avalara samaara avaluata		·
Key Words Level 2				explain, explore, compare, evaluate phase, mitosis, chromatids, haploid,		, explain, explore, compare, evaluate hission, vector, callose, inflammation,		explain, explore, compare, evaluate lent mutation, missense, nonsense,
Level 3				mosomes, prophase, metaphase,		ne, primary defences, antibodies,		exon, intron, operon, transcription
				ase, meiosis, differentiation,		interleukins, regulator cells,		conserved, homeobox sequence, <i>Hox</i>
				throcyte, neutrophil, genome, guard		nins, epidemic, immunity, vaccination,		
			cell, palisade cell		antibiotic	-		
Common			Students often fo	rget interphase as one of the stages	Identified from as	ssessment	That mutations ar	e only caused by external factors
Misconceptions								
Homework			Review book chap	eter and answer in book questions	Review book chap	oter and answer in book questions	Review book chap	ter and answer in book questions
Assessment this			Unit assessment	v/b 13 <sup>TH</sup> Feb		w/b 4 <sup>th</sup> Jan & 13 <sup>th</sup> Feb	Unit assessment v	v/b 16 <sup>th</sup> Jan
half-term			PAG 1		PAG 7			
Career				rstanding how cells replicate		ence and organisation		standing how new characteristics are
opportunities			EMPLOYMENT: Co	ellular blologist	EMPLOYMENT: R	esearch scientist	inherited	

Employment Links				EMPLOYMENT: Geneticist
Employability Skills		Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Problem solving  Literacy Listening Listening Listening Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive
Week 17 (w/b 9 <sup>th</sup> Jan)	Lesson 1: 2.1.4 (d) – The effects of Ph, temperature and concentration on enzyme activity Lesson 2: PAG 4 Lesson 3: PAG 4	Lesson 1: 2.1.6 (d) – Sections of plant tissue showing the cell cycle and stages of mitosis Lesson 2: PAG 1 Lesson 3: PAG 1	Lesson 1: 6.2.1 (a) – Natural clones in plants and the production of natural clones for use in horticulture Lesson 2: 6.2.1 (a) – How to take plant cuttings as an example of simple cloning technique Lesson 3: 6.2.1 (b) – The production of artificial clones of plants by micropropagation and tissue culture Lesson 4: 6.2.1 (b) – Arguments for and against the artificial cloning in plants	Lesson 1: 6.1.1 (b) – The regulatory mechanisms that control gene expression at the transcriptional level, post-transcriptional level and post-transational level Lesson 2: 6.1.1 (b) – The regulatory mechanisms that control gene expression at the transcriptional level, post-transcriptional level and post-transational level Lesson 3: 6.1.1 (c) – The genetic control of the development of body plans in different organisms
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Independent variable, dependent variable, control variable, validity, reproducibility, reliability, buffer, concentration, enzyme-substrate complex, denature	Identify, describe, explain, explore, compare, evaluate Independent variable, dependent variable, control variable, validity, reproducibility, reliability, cytokinesis, interphase, mitosis, chromatids, haploid, homologous chromosomes, meiosis, prophase, metaphase, anaphase, telophase	Identify, describe, explain, explore, compare, evaluate Clones, vegetative propagation, micropropagation, tissue culture, embryo twinning, enucleation, somatic cell nuclear transfer, biotechnology, fermenter, agar, aseptic technique, closed culture, immobilised enzyme	Identify, describe, explain, explore, compare, evaluate Point mutation, silent mutation, missense, nonsense, indel, frameshift, exon, intron, operon, transcription factor, apoptosis, conserved, homeobox sequence, Hox gene
Common Misconceptions	Identified from PAG	Identified from PAG	Students may have concerns over GM	That mutations are only caused by external factors
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this	Unit assessment w/b 30 <sup>th</sup> Jan	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	Unit assessment w/b 16 <sup>th</sup> Jan
half-term Career	PAG 4/PAG 10  LIFE SKILLS: Research skills and organisation	PAG 1  LIFE SKILLS: Research skills and organisation	PAG 7  LIFE SKILLS: Understanding how to propagate plants	LIFE SKILLS: Understanding how genetic disorders are
opportunities Employment Links	EMPLOYMENT: Research scientist	EMPLOYMENT: Research scientist	EMPLOYMENT: Horticulture, farming, forestry	expressed EMPLOYMENT: Geneticist
Employability Skills	Creativity Leadership Listening Presenting Problem solving  Numeracy Independence Communication Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Teamwork Problem solving Staying positive
IT Skills	IT1 & IT2: research PAG using appropriate sites	IT1 & IT2: research PAG using appropriate sites		
Notes	PAG 4: Factors affecting the rate of an enzyme- controlled reaction	PAG 1: Microscopy – mitosis in root tips		
Week 18 (w/b 16 <sup>th</sup> Jan)	Lesson 1: PAG 4 Lesson 2: PAG 4 Lesson 3: PAG 4	Lesson 1: 2.1.6 (e) – The significance of mitosis in life cycles Lesson 2: 2.1.6 (f) – The significance of meiosis in life cycles Lesson 3: 2.1.6 (g) – The main stages of meiosis	Lesson 1: 6.2.1 (c) – Natural clones in animal species Lesson 2: 6.2.1 (d) – How artificial clones in animals can be produced by artificial embryo twinning or by SCNT Lesson 3: 6.2.1 (d) – Arguments for and against artificial cloning in animals Lesson 4: 6.2.1 (e) – The uses of microorganisms in biotechnological processes	Lesson 1: 6.1.1 (d) – The importance of mitosis and apoptosis as mechanisms controlling the development of body form Lesson 2: Unit review Lesson 3: Unit assessment
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Independent variable, dependent variable, control variable, validity, reproducibility, reliability, buffer, concentration, enzyme-substrate complex, denature	Identify, describe, explain, explore, compare, evaluate Cytokinesis, interphase, mitosis, chromatids, haploid, homologous chromosomes, prophase, metaphase, anaphase, telophase, meiosis, differentiation, epithelial cell, erythrocyte, neutrophil, genome, guard cell, palisade cell	Identify, describe, explain, explore, compare, evaluate Clones, vegetative propagation, micropropagation, tissue culture, embryo twinning, enucleation, somatic cell nuclear transfer, biotechnology, fermenter, agar, aseptic technique, closed culture, immobilised enzyme	Identify, describe, explain, explore, compare, evaluate Point mutation, silent mutation, missense, nonsense, indel, frameshift, exon, intron, operon, transcription factor, apoptosis, conserved, homeobox sequence, Hox gene
Common Misconceptions	Identified from PAG	Students often forget interphase as one of the stages	Human clones	Identified from assessment

Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this	Unit assessment w/b 30 <sup>th</sup> Jan	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	Unit assessment w/b 16 <sup>th</sup> Jan	
half-term	PAG 4/PAG 10	, , , , , , , , , , , , , , , , , , , ,	PAG 7	, , , , , , , , , , , , , , , , , , , ,	
Career	LIFE SKILLS: Research skills and organisation	LIFE SKILLS: Understanding how cells replicate	LIFE SKILLS: Understanding how alternative food	LIFE SKILLS: Resilience and organisation	
opportunities	EMPLOYMENT: Research scientist	EMPLOYMENT: Cellular biologist	sources and medicines can be made	EMPLOYMENT: Research scientist	
Employment Links			EMPLOYMENT: Research scientist		
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	
, ,	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence	Leadership Independence	<u>Leadership</u> Independence	Leadership Independence	
	Listening Communication	Listening Communication	Listening Communication	Listening Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
IT Skills	IT1 & IT2: research PAG using appropriate sites				
Notes	PAG 4: Factors affecting the rate of an enzyme-				
	controlled reaction				
Week 19	<b>Lesson 1:</b> 2.1.4 (e) – need for coenzymes, cofactors and	<b>Lesson 1:</b> 2.1.6 (h) – How cells of multicellular organisms are	<b>Lesson 1:</b> 6.2.1 (e) – The uses of microorganisms in	Lesson 1: Exemplars	
(w/b 23 <sup>rd</sup> Jan)	prosthetic groups in some enzyme-controlled reactions	specialised for particular function	biotechnological processes	<b>Lesson 2:</b> 6.1.2 (a) – The contribution of both environmental	
	<b>Lesson 2:</b> 2.1.4 (f) – The effects of inhibitors on the rate of	<b>Lesson 2:</b> 2.1.6 (i) – The organisation of cells into tissues,	<b>Lesson 2:</b> 6.2.1 (f) – The advantages and disadvantages of	and genetic factors to phenotypic variation	
	enzyme-controlled reactions  Lesson 3: Unit review	organs and organ systems  Lesson 3: 2.1.6 (j) – The features and differentiation of stem	using microorganisms to make food for human consumption	<b>Lesson 3:</b> 6.1.2 (a) – How sexual reproduction can lead to	
	LESSON 3. UTILL TEVIEW	cells	<b>Lesson 3:</b> 6.2.1 (b)/6.2.1 (c)/6.2.1 (f) – student	genetic variation within a species	
		Cens	presentation choice research into their own area of interest		
			from these sections		
			Lesson 4: 6.2.1 (b)/6.2.1 (c)/6.2.1 (f) – student		
Key Words	Identify describe explain explare compare evaluate	Identify describe explain explore compare evaluate	presentations	Identify describe explain explare compare evaluate	
Level 2	Identify, describe, explain, explore, compare, evaluate		Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 3	Active site, catalyst, extracellular, intracellular, metabolic, product, substrate, cofactor, enzyme-	Cytokinesis, interphase, mitosis, chromatids, haploid,	Clones, vegetative propagation, micropropagation, tissue culture, embryo twinning, enucleation, somatic	Genotype, phenotype, allele, heterozygous,	
Level 5	substrate complex, specificity, competitive inhibition,	homologous chromosomes, prophase, metaphase,	cell nuclear transfer, biotechnology, fermenter, agar,	homozygous, monogenic, dihybrid, codominance, autosomal linkage, epistasis, chi-squared, continuous	
				variation, discontinuous variation, directional	
	non-competitive inhibition, prosthetic group	cell, palisade cell	aseptic technique, closed culture, immobilised enzyme	selection, founder effect, genetic bottleneck, stabilising	
		ceii, paiisade ceii		selection, allopatric speciation, sympatric speciation	
Common	That temperature increases rate of reaction	Plants don't have stem cells	That Quorn is from mushrooms	Variation is either environment or genetic not both	
Misconceptions	exponentially	Flatits doll t flave stelli cells	That Quoti is non musinoons	variation is either environment of genetic not both	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions.	Review book chapter and answer in book questions	
Homework	Neview book chapter and answer in book questions	Neview book chapter and answer in book questions	Prepare presentations	Neview book chapter and answer in book questions	
Assessment this	Unit assessment w/b 30 <sup>th</sup> Jan	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	In class 6-mark question	
half-term	PAG 10	Offic assessment w/b 13 Teb	PAG 7	in class offiark question	
Career	LIFE SKILLS: Understanding how reaction speed can be	LIFE SKILLS: Understanding how cells replicate	LIFE SKILLS: Presenting to an audience	LIFE SKILLS: Interpreting data to draw conclusions	
		EMPLOYMENT: Cellular biologist	EMPLOYMENT: Project manager	EMPLOYMENT: Geneticist, research scientist	
opportunities	changed EMPLOYMENT: Research scientist	EMPLOTMENT. Celiulai biologist	EMPLOTMENT. Project manager	EMPLOTMENT. Geneticist, research scientist	
Employment Links Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	
Linpioyability Skills	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence	Leadership Independence	Leadership Independence	Leadership Independence	
	Listening Communication	Listening Communication	Listening Communication	Listening Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
IT Skills			IT1 & IT2: deliver presentation using appropriate		
			sources		
Week 20	Lesson 1: Unit assessment	<b>Lesson 1:</b> 2.1.6 (k) – The production of erythrocytes and	<b>Lesson 1:</b> 6.2.1 (g) – How to culture microorganisms	<b>Lesson 1:</b> 6.1.2 (b) – Genetic diagrams to show patterns of	
(w/b 30 <sup>th</sup> Jan)	Lesson 2: Exemplars	neutrophils derived from stem cells in bone marrow	effectively using aseptic techniques	inheritance	
	<b>Lesson 3:</b> 3.1.1 (a) – The need for specialised exchange	<b>Lesson 2:</b> 2.1.6 (I) – The production of xylem vessels and	<b>Lesson 2:</b> 6.2.1 (g) – The importance of manipulating the	<b>Lesson 2:</b> 6.1.2 (b) – Genetic diagrams to show patterns of	
	surfaces	phloem sieve tubes from meristems	growing conditions in batch and continuous fermentation in	inheritance	
		<b>Lesson 3:</b> 2.1.6 (m) – The potential uses of stem cells in	order to maximise the yield	<b>Lesson 3:</b> 6.1.2 (b) – The use of phenotypic ratios to identify	
		research and medicine	<b>Lesson 3:</b> 6.2.1 (h) – Standard growth curve of a	linkage and epistasis	
			microorganism in a closed culture  Lesson 4: PAG 7		

Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Active site, catalyst, extracellular, intracellular,	Cytokinesis, interphase, mitosis, chromatids, haploid,	Independent variable, dependent variable, control	Genotype, phenotype, allele, heterozygous,
Level 3	metabolic, product, substrate, cofactor, enzyme-substrate complex, specificity, competitive inhibition,	homologous chromosomes, prophase, metaphase, anaphase, telophase, meiosis, differentiation,	variable, validity, reproducibility, reliability, aseptic, inoculator, McCartney bottle, petri dish, agar, culture,	homozygous, monogenic, dihybrid, codominance, autosomal linkage, epistasis, chi-squared, continuous
	non-competitive inhibition, prosthetic group	epithelial cell, erythrocyte, neutrophil, genome, guard	growth medium	variation, discontinuous variation, directional
	production of the state of the	cell, palisade cell		selection, founder effect, genetic bottleneck, stabilising
				selection, allopatric speciation, sympatric speciation
Common	Identified from assessment	Plant cells don't have stem cells	Identified from PAG	Males have the dominant genes
Misconceptions				
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this	Unit assessment w/b 30 <sup>th</sup> Jan	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	In class 6-mark question
half-term	PAG 4/PAG 10		PAG 7	
Career	LIFE SKILLS: Resilience and organisation	LIFE SKILLS: Understanding how stem cells can be used	LIFE SKILLS: Research skills and organisation	LIFE SKILLS: Understanding how characteristics are
opportunities	EMPLOYMENT: Research scientist	EMPLOYMENT: Research scientist	EMPLOYMENT: Research scientist	inherited
Employment Links		A		EMPLOYMENT: Geneticist
Employability Skills	Aiming high Creativity Numeracy	Aiming high Creativity Numeracy	Aiming high Creativity Numeracy	Aiming high Literacy Creativity Numeracy
	Leadership Independence	Leadership Independence	Leadership Independence	Leadership Independence
	Listening Communication	Listening Communication	Listening Communication	Listening Communication
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive
IT Skills			IT1 & IT2: research PAG using appropriate sites	
Notes			PAG 7: Aseptic techniques and factors affecting	
			microbial growth	
Week 21	<b>Lesson 1:</b> 3.1.1 (b) – The features of an efficient exchange	Lesson 1: 2.1.6 (m) – The potential uses of stem cells in	Lesson 1: PAG 7	<b>Lesson 1:</b> 6.1.2 (c) – Using Chi squared to determine the
(w/b 6 <sup>th</sup> Feb)	surface	research and medicine – student research	Lesson 2: PAG 7	significance of the difference between observed and
(, 2 0	<b>Lesson 2:</b> 3.1.1 (c) – The structures and functions of the	<b>Lesson 2: 2.1.6</b> (m) – The potential uses of stem cells in	Lesson 3: PAG 7	expected results
	components of the mammalian gaseous exchange system	research and medicine – student presentations	Lesson 4: PAG 7	<b>Lesson 2:</b> 6.1.2 (d) – The genetic basis of continuous and
	<b>Lesson 3:</b> 3.1.1 (c) – The structures and functions of the	Lesson 3: Unit review		discontinuous variation
	components of the mammalian gaseous exchange system – Pluck			<b>Lesson 3:</b> 6.1.2 (e) – Factors that can affect the evolution of a species
Key Words		Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Surface area, alveoli, bronchi, bronchioles, diaphragm,	Cytokinesis, interphase, mitosis, chromatids, haploid,	Independent variable, dependent variable, control	Genotype, phenotype, allele, heterozygous,
Level 3	intercostal muscle, trachea, ventilation, cartilage,	homologous chromosomes, prophase, metaphase,	variable, validity, reproducibility, reliability, aseptic,	homozygous, monogenic, dihybrid, codominance,
	ciliated epithelium, elastic fibres, goblet cells, smooth	anaphase, telophase, meiosis, differentiation,	inoculator, McCartney bottle, petri dish, agar, culture,	autosomal linkage, epistasis, chi-squared, continuous
	muscle, breathing rate, tidal volume, spirometer, vital	epithelial cell, erythrocyte, neutrophil, genome, guard	growth medium	variation, discontinuous variation, directional
	capacity, buccal cavity, countercurrent flow, filament,	cell, palisade cell		selection, founder effect, genetic bottleneck, stabilising
	lamellae, operculum, spiracle, tracheal fluid			selection, allopatric speciation, sympatric speciation
Common Misconceptions	Students often confuse SA:Vol	Moral and ethical implications of stem cells	Identified from PAG	Evolution is only affected by extinction level events
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions. Prepare presentations.	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this	PAG 10	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	In class 6 mark question
half-term	LIFE CALL C. Un depote in discrete a record of the control of the	LIFE CVILLE. Dropounting to an audit of a	PAG 7	LIFE CVIII C. Handamatan dina bassata a sasa di tana
Career	LIFE SKILLS: Understanding the mechanism of	LIFE SKILLS: Presenting to an audience	LIFE SKILLS: Research skills and organisation	LIFE SKILLS: Understanding how to support theory with
opportunities	breathing EMPLOYMENT:	EMPLOYMENT: Project manager	EMPLOYMENT: Research scientist	statistics  EMPLOYMENT: Statistician geneticist
Employment Links	LIVIF LOTIVICIVI.			EMPLOYMENT: Statistician, geneticist
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
, , ,	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	1	Leadership Independence	Leadership Independence	Leadership Independence
	Leadership Independence	The state of the s		
	Listening Communication	Listening Communication	Listening Communication	Listening Communication
	Listening Communication Presenting Teamwork	Listening Communication Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
IT Skills	Listening Communication	Listening Communication		_

Notes			PAG 7: Aseptic techniques and factors affecting	
			microbial growth	
Week 22 (w/b 13th Feb)	Lesson 1: 3.1.1 (d) – The mechanism of ventilation in mammals  Lesson 2: 3.1.1 (e) – The relationship between vital capacity, tidal volume, breathing rate and oxygen uptake  Lesson 3: PAG 10	Lesson 1: Unit review Lesson 2: Unit assessment Lesson 3: Exemplars	Lesson 1: Section review Lesson 2: Section review Lesson 3: Section assessment Lesson 4: Exemplars	Lesson 1: 6.1.2 (f) – The use of Hardy-Weinberg principle to calculate allele frequencies Lesson 2: 6.1.2 (g) – The role of isolating mechanisms in the evolution of a new species Lesson 3: 6.1.2 (h) – The principles of artificial selection and its uses
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Surface area, alveoli, bronchi, bronchioles, diaphragm, intercostal muscle, trachea, ventilation, cartilage, ciliated epithelium, elastic fibres, goblet cells, smooth muscle, breathing rate, tidal volume, spirometer, vital capacity, buccal cavity, countercurrent flow, filament, lamellae, operculum, spiracle, tracheal fluid, independent variable, dependent variable, control variable, validity, reproducibility, reliability	Identify, describe, explain, explore, compare, evaluate Cytokinesis, interphase, mitosis, chromatids, haploid, homologous chromosomes, prophase, metaphase, anaphase, telophase, meiosis, differentiation, epithelial cell, erythrocyte, neutrophil, genome, guard cell, palisade cell	Identify, describe, explain, explore, compare, evaluate Clones, vegetative propagation, micropropagation, tissue culture, embryo twinning, enucleation, somatic cell nuclear transfer, biotechnology, fermenter, agar, aseptic technique, closed culture, immobilised enzyme	Identify, describe, explain, explore, compare, evaluate Genotype, phenotype, allele, heterozygous, homozygous, monogenic, dihybrid, codominance, autosomal linkage, epistasis, chi-squared, continuous variation, discontinuous variation, directional selection, founder effect, genetic bottleneck, stabilising selection, allopatric speciation, sympatric speciation
Common Misconceptions	Identified from PAG	Identified from assessment	Identified from assessment	Evolution happens quickly
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	PAG 10	Unit assessment w/b 13 <sup>TH</sup> Feb	Unit assessment w/b 13 <sup>th</sup> Feb	In class 6 mark question
Career opportunities Employment Links	LIFE SKILLS: Research skills and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: EMPLOYMENT: Evolutionary biologist, statistician
Employability Skills	Aiming high Creativity Leadership Communication Presenting Problem solving  Literacy Literacy Literacy Listening Listening Listening Listening Listening Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Leadership Communication Presenting Problem solving  Literacy Literacy Listening Li
IT Skills	IT1 & IT2: research PAG using appropriate sites			
Notes	PAG 10: Spirometry			
Week 23 (w/b 27 <sup>th</sup> Feb)	Lesson 1: PAG 10 Lesson 2: PAG 10 Lesson 3: PAG 10	Lesson 1: 3.1.3 (a) – The need for transport systems in multicellular plants Lesson 2: 3.1.3 (b) – The structure and function of the vascular system in roots, stems and leaves of herbaceous dicotyledonous plants Lesson 3: 3.1.3 (b) – The examination and drawing of stained sections of plant tissue to show the distribution of phloem and xylem	Lesson 1: 6.3.1 (a) – Ecosystems which range in size are dynamic and are influenced by both biotic and abiotic factors  Lesson 2: 6.3.1 (b) – Biomass transfers through ecosystems  Lesson 3: 6.3.1 (c) – Recycling within ecosystems – nitrogen cycle  Lesson 4: 6.3.1 (c) – Recycling within ecosystems – carbon cycle	Lesson 1: 6.1.2 (h) – The ethical considerations surrounding the use of artificial selection Lesson 2: Unit review Lesson 3: Unit assessment
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Surface area, alveoli, bronchi, bronchioles, diaphragm, intercostal muscle, trachea, ventilation, cartilage, ciliated epithelium, elastic fibres, goblet cells, smooth muscle, breathing rate, tidal volume, spirometer, vital capacity, buccal cavity, counter-current flow, filament, lamellae, operculum, spiracle, tracheal fluid, independent variable, dependent variable, control variable, validity, reproducibility, reliability	Identify, describe, explain, explore, compare, evaluate Dicotyledonous plant, meristem, phloem, vascular tissue, xylem, companion cell, sieve tube, plasmodesmata, potometer, transpiration, adhesion, cohesion, hydrophyte, xerophyte, assimilate, sink, source, translocation	Identify, describe, explain, explore, compare, evaluate Abiotic, biotic, ecosystem, biomass transfer, trophic level, productivity, saprotroph, ammonification, nitrification, denitrification, decomposition, absorption, chemo autotrophic, climax community, deflected succession, pioneer species, quadrat, transect	Identify, describe, explain, explore, compare, evaluate Genotype, phenotype, allele, heterozygous, homozygous, monogenic, dihybrid, codominance, autosomal linkage, epistasis, chi-squared, continuous variation, discontinuous variation, directional selection, founder effect, genetic bottleneck, stabilising selection, allopatric speciation, sympatric speciation
Common Misconceptions	Identified from PAG	That the phloem and xylem is in the same position in all plants	Biomass is the same as mass	Identified from assessment
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions

Assessment this	Unit test w/b 13 <sup>h</sup> Mar	Unit test w/b 27 <sup>th</sup> Mar	Unit tests w/b 13 <sup>th</sup> Mar and 27 <sup>th</sup> Mar	Unit test w/b 27 <sup>th</sup> Feb
half-term	PAG 10	PAG 5/PAG 11	,	·
Career opportunities Employment Links	LIFE SKILLS: Research skills and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Understanding how to get optimal plant growth EMPLOYMENT: Horticulture, agriculture, forestry	LIFE SKILLS: Understanding how nutrients are cycled EMPLOYMENT: Environmental scientist, ecologist, environmental chemist, farming	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist
Employability Skills	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Independence Communication Presenting Teamwork Problem solving Staying positive
IT Skills	IT1 & IT2: research PAG using appropriate sites			
Notes	PAG 10: Spirometry			
Week 24 (w/b 6 <sup>th</sup> Mar)	Lesson 1: 3.1.1 (f) – Mechanisms of ventilation and gas exchange in fish Lesson 2: 3.1.1 (f) – Mechanisms of ventilation and gas exchange in insects Lesson 3: 3.1.1 (g) – Examination of microscope slides to show the histology of exchange surfaces	Lesson 1: 3.1.3 (c) – The process of transpiration and the environmental factors that affect transpiration rate Lesson 2: PAG 5/PAG 11 Lesson 3: PAG 5/PAG 11	Lesson 1: 6.3.1 (d) – The process of primary succession in the development of an ecosystem  Lesson 2: 6.3.1 (e) – How the distribution of organisms in an ecosystem can be measured  Lesson 3: Student research presentations  Lesson 4: Student research presentation	Lesson 1: Exemplars Lesson 2: 6.1.3 (a) – The principles of DNA sequencing and the development of new DNA sequencing techniques Lesson 3: 6.1.3 (b) – The gene sequencing has allowed for genome-wide comparisons between individuals and between species
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Surface area, alveoli, bronchi, bronchioles, diaphragm, intercostal muscle, trachea, ventilation, cartilage, ciliated epithelium, elastic fibres, goblet cells, smooth muscle, breathing rate, tidal volume, spirometer, vital capacity, buccal cavity, counter-current flow, filament, lamellae, operculum, spiracle, tracheal fluid, independent variable, dependent variable, control variable, validity, reproducibility, reliability	Identify, describe, explain, explore, compare, evaluate Dicotyledonous plant, meristem, phloem, vascular tissue, xylem, companion cell, sieve tube, plasmodesmata, potometer, transpiration, adhesion, cohesion, hydrophyte, xerophyte, assimilate, sink, source, translocation	Identify, describe, explain, explore, compare, evaluate Abiotic, biotic, ecosystem, biomass transfer, trophic level, productivity, saprotroph, ammonification, nitrification, denitrification, decomposition, absorption, chemo autotrophic, climax community, deflected succession, pioneer species, quadrat, transect	Identify, describe, explain, explore, compare, evaluate DNA sequencing, bioethics, nanotechnology, polymorphism, primer, oncogenes, polymerase chain reaction, electrophoresis, DNA ligase, electroporation, plasmid, recombinant DNA, restriction enzyme, vector, electrofusion, methylated, germ line gene therapy, somatic cell gene therapy
Common	Fish and insects have lungs	Identified from PAG	Succession always leads to bigger organisms	All organisms have the same DNA
Misconceptions Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Unit test w/b 13 <sup>h</sup> Mar	Unit test w/b 27 <sup>th</sup> Mar PAG 5/PAG 11	Unit tests w/b 13 <sup>th</sup> Mar and 27 <sup>th</sup> Mar	6 mark in class question
Career opportunities Employment Links	LIFE SKILLS: Understanding how different organisms breathe EMPLOYMENT: Vet, fisheries manager, entemologist	LIFE SKILLS: Research skills and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Presenting to an audience EMPLOYMENT: Project manager	LIFE SKILLS: Understanding how gene study can influence medicine EMPLOYMENT: Forensic scientist, doctor, geneticist
Employability Skills	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Presenting Problem solving  Literacy Numeracy Literacy Communication Communication Teamwork Staying positive	Aiming high Creativity Numeracy Leadership Listening Presenting Problem solving Literacy Numeracy Independence Communication Teamwork Problem solving Staying positive	Aiming high Creativity Leadership Literacy Leadership Lindependence Listening Presenting Teamwork Problem solving Staying positive
IT Skills		IT1 & IT2: research PAG using appropriate sites	IT1 & IT2: deliver presentation using appropriate sources	5 , 5,
Notes		PAG 5/PAG 11: Investigating rates of transpiration		
Week 25 (w/b 13 <sup>th</sup> Mar)	Lesson 1: Unit review Lesson 2: Unit assessment Lesson 3: Exemplars	Lesson 1: PAG 5/PAG 11 Lesson 2: PAG 5/PAG 11 Lesson 3: PAG 5/PAG 11	Lesson 1: Student deliver presentations Lesson 2: Unit review Lesson 3: Unit assessment Lesson 4: Exemplars	Lesson 1: 6.1.3 (b) – How gene sequencing has allowed for the sequences of amino acids in polypeptides to be predicted Lesson 2: 6.1.3 (b) – How gene sequencing has allowed for the development of synthetic biology Lesson 3: 6.1.3 (c) – The principles of DNA profiling and its uses

Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Surface area, alveoli, bronchi, bronchioles, diaphragm, intercostal muscle, trachea, ventilation, cartilage, ciliated epithelium, elastic fibres, goblet cells, smooth muscle, breathing rate, tidal volume, spirometer, vital capacity, buccal cavity, counter-current flow, filament, lamellae, operculum, spiracle, tracheal fluid, independent variable, dependent variable, control variable, validity, reproducibility, reliability	Identify, describe, explain, explore, compare, evaluate Potometer, transpiration, adhesion, cohesion, independent variable, dependent variable, control variable, reliability, reproducibility, validity	Identify, describe, explain, explore, compare, evaluate Abiotic, biotic, ecosystem, biomass transfer, trophic level, productivity, saprotroph, ammonification, nitrification, denitrification, decomposition, absorption, chemo autotrophic, climax community, deflected succession, pioneer species, quadrat, transect	Identify, describe, explain, explore, compare, evaluate DNA sequencing, bioethics, nanotechnology, polymorphism, primer, oncogenes, polymerase chain reaction, electrophoresis, DNA ligase, electroporation, plasmid, recombinant DNA, restriction enzyme, vector, electrofusion, methylated, germ line gene therapy, somatic cell gene therapy
Common Misconceptions	Identified from assessment	Identified from PAG	Identified from assessment	Everyone has the same sequence of amino acids
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	Unit test w/b 13 <sup>h</sup> Mar	Unit test w/b 27 <sup>th</sup> Mar PAG 5/PAG 11	Unit tests w/b 13 <sup>th</sup> Mar and 27 <sup>th</sup> Mar	6 mark in class question
Career opportunities Employment Links	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Research skills and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Presenting to an audience EMPLOYMENT: Project manager	LIFE SKILLS: Understanding how forensics uses DNA EMPLOYMENT: Forensic scientist, doctor, geneticist
Employability Skills	Aiming high Creativity Numeracy Leadership Listening Presenting Problem solving  Literacy Communication Communication Presenting Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Problem solving Staying positive
IT Skills	and the second s	IT1 & IT2: research PAG using appropriate sites	IT1 & IT2: deliver presentation using appropriate sources	Trestement and starting posture
Notes		PAG 5/PAG 11: Investigating rates of transpiration		
Week 26 (w/b 20 <sup>th</sup> Mar)	Work experience week	Work experience week	Lesson 1: 6.3.2 (a) – The factors that determine the size of a population Lesson 2: 6.3.2 (b) – Interactions between populations Lesson 3: 6.3.2 (c) – The reasons for and differences between, conservation and preservation Lesson 4: 6.3.2 (d) – How the management of an ecosystem can provide resources in a sustainable way	Lesson 1: 6.1.3 (d) – The principles of PCR and its application in DNA analysis Lesson 2: 6.1.3 (e) – The principles and uses of electrophoresis for separating nucleic acid fragments or proteins Lesson 3: 6.1.3 (f) – The principles of genetic engineering
Key Words Level 2 Level 3			Identify, describe, explain, explore, compare, evaluate Carrying capacity, limiting factor, interspecific competition, intraspecific competition, conservation, preservation	Identify, describe, explain, explore, compare, evaluate DNA sequencing, bioethics, nanotechnology, polymorphism, primer, oncogenes, polymerase chain reaction, electrophoresis, DNA ligase, electroporation, plasmid, recombinant DNA, restriction enzyme, vector, electrofusion, methylated, germ line gene therapy, somatic cell gene therapy
Common Misconceptions			Conservation and preservation are the same thing	GM foods
Homework			Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term			Unit test w/b 27 <sup>th</sup> Mar	6 mark in class question
Career opportunities Employment Links			LIFE SKILLS: Understanding how to conserve an ecosystem EMPLOYMENT: Ecologist, zoologist, environmental chemist	LIFE SKILLS: Understanding how forensics uses DNA EMPLOYMENT: Forensic scientist, doctor, geneticist
Employability Skills			Aiming high Creativity Leadership Literacy Leadership Lindependence Listening Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive

Week 27 (w/b 27 <sup>th</sup> Mar)	Lesson 1: 3.1.2 (a) – The need for transport systems in multicellular organisms Lesson 2: 3.1.2 (b) – The different types of circulatory systems Lesson 3: 3.1.2 (c) – The structure and functions of arteries, arterioles, capillaries, venules and veins	Lesson 1: 3.1.3 (d) – The transport of water into the plant, through the plant and to the air surrounding leaves Lesson 2: 3.1.3 (e) – Adaptations of plants to the availability of water in their environment Lesson 3: Unit review	Lesson 1: 6.3.2 (e) – The management of environmental resources and the effects of human activities Lesson 2: Unit review Lesson 3: Unit assessment Lesson 4: Exemplars	Lesson 1: 6.1.3 (f) – The techniques used in genetic engineering Lesson 2: 6.1.3 (g) – The ethical issues relating to genetic manipulation of animals, plants and microorganisms Lesson 3: 6.1.3 (h) – The principles of, and potential for, gene therapy in medicine
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Double circulatory system, single circulatory system, transport, arteries, arteriole, capillaries, closed circulatory system, open circulatory system, veins, venules, ostia, peristalsis, blood, hydrostatic pressure, lymph, oncotic pressure, plasma, tissue fluid, AV valves, cardiac muscle, SL valve, myocardial, septum, systemic circulation, cardiac cycle, systole, diastole	Identify, describe, explain, explore, compare, evaluate Dicotyledonous plant, meristem, phloem, vascular tissue, xylem, companion cell, sieve tube, plasmodesmata, potometer, transpiration, adhesion, cohesion, hydrophyte, xerophyte, assimilate, sink, source, translocation	Identify, describe, explain, explore, compare, evaluate Carrying capacity, limiting factor, interspecific competition, intraspecific competition, conservation, preservation	Identify, describe, explain, explore, compare, evaluate DNA sequencing, bioethics, nanotechnology, polymorphism, primer, oncogenes, polymerase chain reaction, electrophoresis, DNA ligase, electroporation, plasmid, recombinant DNA, restriction enzyme, vector, electrofusion, methylated, germ line gene therapy, somatic cell gene therapy
Common	All circulatory systems are the same	Plants need lots of water	Identified from assessment	GM foods
Misconceptions Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions.  Xerophytic adaptations of plants essay	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term	6 mark in class question	Unit test w/b 27 <sup>th</sup> Mar	Unit test w/b 27 <sup>th</sup> Mar	6 mark in class question
Career opportunities Employment Links	LIFE SKILLS: Understanding how the heart works EMPLOYMENT: Cardiovascular surgeon	LIFE SKILLS: Understanding how water volumes affects plants EMPLOYMENT: Horticulture, agriculture, farming	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	LIFE SKILLS: Understanding how GM foods are made and used EMPLOYMENT: Forensic scientist, doctor, geneticist
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Presenting Teamwork Problem solving Staying positive	Aiming high Creativity Numeracy Leadership Listening Communication Presenting Problem solving Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Teamwork Problem solving  Staying positive	Aiming high Creativity Numeracy Leadership Listening Presenting Teamwork Problem solving Staying positive
Week 28 (w/b 17 <sup>th</sup> Apr)	Lesson 1: 3.1.2 (d) – The formation of tissue fluid from plasma Lesson 2: 3.1.2 (e) – The external and internal structures of the heart Lesson 3: 3.1.2 (f) – The cardiac cycle	Lesson 1: Unit review Lesson 2: Unit assessment Lesson 3: Exemplars	Lesson 1: PAG 12 Lesson 2: PAG 12 Lesson 3: PAG 12 Lesson 4: PAG 12	Lesson 1: Unit review Lesson 2: Unit assessment Lesson 3: Exemplars
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Double circulatory system, single circulatory system, transport, arteries, arteriole, capillaries, closed circulatory system, open circulatory system, veins, venules, ostia, peristalsis, blood, hydrostatic pressure, lymph, oncotic pressure, plasma, tissue fluid, AV valves, cardiac muscle, SL valve, myocardial, septum, systemic circulation, cardiac cycle, systole, diastole	Identify, describe, explain, explore, compare, evaluate Dicotyledonous plant, meristem, phloem, vascular tissue, xylem, companion cell, sieve tube, plasmodesmata, potometer, transpiration, adhesion, cohesion, hydrophyte, xerophyte, assimilate, sink, source, translocation	Identify, describe, explain, explore, compare, evaluate Independent, dependent, control, variable, validity, reproducibility, repeatability, precise, accurate	Identify, describe, explain, explore, compare, evaluate DNA sequencing, bioethics, nanotechnology, polymorphism, primer, oncogenes, polymerase chain reaction, electrophoresis, DNA ligase, electroporation, plasmid, recombinant DNA, restriction enzyme, vector, electrofusion, methylated, germ line gene therapy, somatic cell gene therapy
Common Misconceptions	All hearts are the same	Identified from assessment	Identified through active questioning and students' individual plans	Identified in assessment
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this half-term Career opportunities Employment Links	Unit assessment w/b 15 <sup>th</sup> May PAG 2  LIFE SKILLS: Understanding how the heart works EMPLOYMENT: Cardiovascular surgeon	Unit assessment w/b 17 <sup>th</sup> Apr PAG 6  LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	PAG 12  LIFE SKILLS: Independence and being able to critically evaluate one's own work EMPLOYMENT: Research scientist	Unit assessment w/b 17 <sup>th</sup> Apr PAG 12  LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist
Employability Skills	Aiming high Creativity Numeracy Leadership Independence Communication	Aiming high Creativity Numeracy Leadership Independence Communication	Aiming high Creativity Numeracy Leadership Independence Communication	Aiming high Creativity Leadership Communication  Literacy  Numeracy  Listening  Communication

	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive
IT Skills			IT1 & IT2: Appropriate research for PAG	
Notes			<b>PAG 12:</b> Research skills – students devise investigation	
			of their choice	
W 1.00	4 242/)	4.534/) This his his his	1 1000	
Week 29	<b>Lesson 1:</b> 3.1.2 (g) – How heart action is initiated and coordinated	<b>Lesson 1:</b> 5.2.1 (a) – The interrelationship between photosynthesis and respiration	Lesson 1: PAG 12	Lesson 1: PAG 12
(w/b 24 <sup>th</sup> Apr)	<b>Lesson 2:</b> 3.1.2 (h) – The use and interpretation of ECG	<b>Lesson 2:</b> 5.2.1 (b) – The structure of a chloroplast	Lesson 2: PAG 12	Lesson 2: PAG 12
	traces	<b>Lesson 3:</b> 5.2.1 (c) – The importance of photosynthetic	Lesson 3: PAG 12	Lesson 3: PAG 12
	Lesson 3: PAG 2	pigments	Lesson 4: PAG 12	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Double circulatory system, single circulatory system,	Autotrophic nutrition, granum, photosynthetic	Independent, dependent, control, variable, validity,	Independent, dependent, control, variable, validity,
Level 3	transport, arteries, arteriole, capillaries, closed	pigment, photosystem, stroma, thylakoid, chlorophyll,	reproducibility, repeatability, precise, accurate	reproducibility, repeatability, precise, accurate
	circulatory system, open circulatory system, veins,	photolysis, photophosphorylation, electron carrier,		
	venules, ostia, peristalsis, blood, hydrostatic pressure,	RuBisCo, light intensity, water stress,		
	lymph, oncotic pressure, plasma, tissue fluid, AV	photosynthometer, potometer		
	valves, cardiac muscle, SL valve, myocardial, septum,			
	systemic circulation, cardiac cycle, systole, diastole			
Common	That tachycardia means slow	That chlorophyll (green) is the only pigment	Identified through active questioning and students'	Identified through active questioning and students'
Misconceptions			individual plans	individual plans
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this	Unit assessment w/b 15 <sup>th</sup> May	PAG 6	PAG 12	PAG 12
half-term	PAG 2			
Career	LIFE SKILLS: Understanding how the heart works and	LIFE SKILLS: Understanding how plants make glucose	LIFE SKILLS: Independence and being able to critically	LIFE SKILLS: Independence and being able to critically
opportunities	how to read an ECG	EMPLOYMENT: Horticulturist, farmer	evaluate one's own work	evaluate one's own work
Employment Links	EMPLOYMENT: Cardiac doctor/nurse, anaesthetist		EMPLOYMENT: Research scientist	EMPLOYMENT: Research scientist
<b>Employability Skills</b>	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
	Creativity   Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	Leadership Independence Listening  Communication	Leadership Independence Listening	Leadership Independence Listening  Communication	Leadership Independence Listening  Communication
	Presenting Teamwork	Communication Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
	Problem solving Staying positive	Problem solving	Problem solving Staying positive	Problem solving Staying positive
	, 51	Staying positive	, , ,	, , ,
IT Skills	IT1 & IT2: Appropriate research for PAG		IT1 & IT2: Appropriate research for PAG	IT1 & IT2: Appropriate research for PAG
Notes	PAG 2: Heart dissection		PAG 12: Research skills – students devise investigation	<b>PAG 12:</b> Research skills – students devise investigation
			of their choice	of their choice
Week 30	Lesson 1: PAG 2	Lesson 1: PAG 6	Lesson 1: PAG catch ups	Lesson 1: 2.1.1 Cell structure review and walk through
(w/b Tues 2 <sup>nd</sup> May)	Lesson 2: PAG 2	Lesson 2: PAG 6	Lesson 2: PAG catch ups	<b>Lesson 2:</b> 2.1.2 Biomolecules review and walk through
	Lesson 3: PAG 2	Lesson 3: PAG 6	Lesson 3: PAG catch ups	<b>Lesson 3:</b> 2.1.3 Nucleotides and nucleic acids review and
			Lesson 4: PAG catch ups	walk through
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Double circulatory system, single circulatory system,	Autotrophic nutrition, granum, photosynthetic	Independent, dependent, control, variable, validity,	
Level 3	transport, arteries, arteriole, capillaries, closed	pigment, photosystem, stroma, thylakoid, chlorophyll,	reproducibility, repeatability, precise, accurate	
	circulatory system, open circulatory system, veins,	photolysis, photophosphorylation, electron carrier,		
	venules, ostia, peristalsis, blood, hydrostatic pressure,	RuBisCo, light intensity, water stress,		
	lymph, oncotic pressure, plasma, tissue fluid, AV	photosynthometer, potometer		
	valves, cardiac muscle, SL valve, myocardial, septum,			
	systemic circulation, cardiac cycle, systole, diastole			
Common	Identified within PAG	Identified within PAG	Identified within PAG	Identified through active questioning
Misconceptions				
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions

Assessment this	Unit assessment w/b 15 <sup>th</sup> May	PAG 6	PAG 1-12	6 mark in class questions
half-term	PAG 2			
Career	LIFE SKILLS: Understanding how thee hearts structure	LIFE SKILLS: Understanding how to separate pigment	LIFE SKILLS: Independence and being able to critically	LIFE SKILLS: Organisation and resilience
opportunities	is related to its function	EMPLOYMENT: Biomedical scientist	evaluate one's own work	EMPLOYMENT: Cellular biologist, geneticist, biomedical
<b>Employment Links</b>	EMPLOYMENT: Cardiac doctor/nurse, anaesthetist,		EMPLOYMENT: Research scientist	scientist
	pathologist			
<b>Employability Skills</b>	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening	Leadership Independence Listening
	Communication	Communication	Communication	Communication
	Presenting Teamwork Problem solving Staying positive	Presenting Teamwork  Problem solving Staying positive	Presenting Teamwork Problem solving Staying positive	Presenting Teamwork Problem solving Staying positive
IT Skills	IT1 & IT2: Appropriate research for PAG	IT1 & IT2: Appropriate research for PAG	IT1 & IT2: Appropriate research for PAG	Staying positive
Notes	PAG 2: Heart dissection	PAG 6: Separating and identifying photosynthetic	PAG 1-12: Students may have different PAGs that they	
Notes	PAG 2. Fledit dissection	pigments using TLC	need to catch up on	
		piginents using the	need to catch up on	
Week 31	<b>Lesson 1:</b> 3.1.2 (i) – The role of haemoglobin in transporting	Lesson 1: PAG 6	<b>Lesson 1:</b> 4.1.1 Communicable diseases, disease prevention	Lesson 1: 2.1.4 Enzymes review and walk through
	oxygen and carbon dioxide	Lesson 1: PAG 6 Lesson 2: 5.2.1 (d) – The light dependent stage	and the immune system review and walk through	Lesson 2: 2.1.5 Biological membranes review and walk
(w/b 8 <sup>th</sup> May)	Lesson 2: 3.1.2 (j) – The oxygen dissociation curves for foetal	Lesson 3: 5.2.1 (d) – The light dependent stage	<b>Lesson 2:</b> 4.1.1 Communicable diseases, disease prevention	through
	and adult human haemoglobin	- 1000011 01 01212 (a) The light dependent stage	and the immune system review and walk through	Lesson 3: 2.1.6 Cell division, diversity and cellular
	Lesson 3: Unit review		Lesson 3: 4.2.1 Biodiversity review and walk through	organisation review and walk through
			<b>Lesson 4:</b> 4.2.2 Classification and evolution review and walk	
			through	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	, , , , , , , , , , , , , , , , , , ,	Autotrophic nutrition, granum, photosynthetic	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
Level 3		pigment, photosystem, stroma, thylakoid, chlorophyll,		
		photolysis, photophosphorylation, electron carrier,		
		RuBisCo, light intensity, water stress,		
		photosynthometer, potometer		
Common	That adult and foetal haemoglobin is the same	Identified from PAG	Identified through active questioning	Identified through active questioning
Misconceptions				
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
A	List account with 45th Mari	DAC C	Consulting along properties of	Consulting along acceptions
Assessment this half-term	Unit assessment w/b 15 <sup>th</sup> May PAG 2	PAG 6	6 mark in class questions	6 mark in class questions
		LIEF CVIII C. Hadenston din a bass albata abata substantin	LIEE CKILLO. On a minetic of and a military a	LIFE CVILLE. Opposition and positions
Career	LIFE SKILLS: Understanding how oxygen is loaded and	LIFE SKILLS: Understanding how plants photosynthesise	LIFE SKILLS: Organisation and resilience	LIFE SKILLS: Organisation and resilience
opportunities	unloaded	EMPLOYMENT: Horticulture, agriculture, farming,	EMPLOYMENT: Virologist, public health advisor,	EMPLOYMENT: Cellular biologist, geneticist, biomedical
Employment Links	EMPLOYMENT: Respiratory specialist	forestry	ecologist	scientist
Employability Skills	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
Employability Skills	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	Leadership Independence	Leadership Independence	Leadership Independence	Leadership Independence
	Listening Communication	Listening Communication	Listening Communication	Listening Communication
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive
IT Skills		IT1 & IT2: Appropriate research for PAG		
Notes		PAG 6: Separating and identifying photosynthetic	PAG submission	deadline 15 <sup>th</sup> May
		pigments using TLC		,
Wash 22	Laces 4. Unit review	Leasen 4. F. 2.4 (a). The light independent	Lancar Av5 4.4.0	Lesson 4: 2.4.4 Evalues
Week 32	Lesson 1: Unit review	Lesson 1: 5.2.1 (e) – The light independent stage	<b>Lesson 1:</b> 5.1.1 Communication and homeostasis review	Lesson 1: 3.1.1 Exchange surfaces review and walk through
(w/b 15 <sup>th</sup> May)	Lesson 2: Unit assessment Lesson 3: Exemplars	<b>Lesson 2:</b> 5.2.1 (e) – The light independent stage <b>Lesson 3:</b> 5.2.1 (f) – The uses of triose phosphate	and walk through	<b>Lesson 2:</b> 3.1.2 Transport in animals review and walk through
	Lesson 9. Exemplais	Lesson 3. 3.2.1 (i) The uses of those phosphate	<b>Lesson 2:</b> 5.1.2 Excretion as an example of homeostatic control review and walk through	Lesson 3: 3.1.3 Transport in plants review and walk through
			Lesson 3: 5.1.3 Neuronal communication review and walk	or orzio manapore in planta review and want anough
			through	
			<b>Lesson 4:</b> 5.1.4 Hormonal communication and homeostasis	
			review and walk through	
	1	1	1 concor and want an ough	

Key Words Level 2 Level 3	Identify, describe, exp	olain, explore, compare, evaluate	Autotrophic nutriti pigment, photosys	the state of the s	Identify, describe	, explain, explore, compare, evaluate	Identify, describe,	explain, explore, compare, evaluate
Common Misconceptions	Identified from assess	sment	•	,	Identified through	h active questioning	Identified through	active questioning
Homework	Review book chapter a	and answer in book questions	Review book chapt	ter and answer in book questions	Review book char	pter and answer in book questions	Review book chapt	ter and answer in book questions
Assessment this half-term	Unit assessment w/b 2 PAG 2	15 <sup>th</sup> May	6 mark in class que	estions	6 mark in class qu	uestions	6 mark in class que	estions
Career opportunities Employment Links	LIFE SKILLS: Organisati EMPLOYMENT: Resea		LIFE SKILLS: Unders EMPLOYMENT: Ho	standing how plants make glucose rticulturist, farmer		nisation and resilience eurosurgeon, physiotherapist, fertility urse	_	sation and resilience Ilular biologist, geneticist, biomedical
Employability Skills	Creativity Nu Leadership Inc Listening Cor Presenting Tea	teracy umeracy dependence mmunication amwork aying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive
Week 33 (w/b 22 <sup>nd</sup> May)	multicellular organisms <b>Lesson 2:</b> 5.1.1 (b) – The cell signalling	e need for communication systems in e communication between cells by e principles of homeostasis	Lesson 2: 5.2.1 (g) – affecting photosynth	Practical investigation into the factors	through Lesson 2: 5.1.5 Pla through Lesson 3: 5.2.2 Re	ant and animal responses review and walk ant and animal responses review and walk spiration review and walk through spiration review and walk through	<b>Lesson 2:</b> 5.2.1 Photo	cosynthesis review and walk through osynthesis review and walk through osynthesis review and walk through
Key Words Level 2 Level 3	Cell signalling, stimulu	plain, explore, compare, evaluate us, response, effector, r, ectotherm, endotherm,	Autotrophic nutriti pigment, photosys	the state of the s		, explain, explore, compare, evaluate	Identify, describe,	explain, explore, compare, evaluate
Common Misconceptions Homework	temperature changes	oe with a wide range of internal and answer in book questions		ter and answer in book guestions		h active questioning pter and answer in book questions	Identified through	active questioning ter and answer in book questions
Assessment this half-term	6 mark in class question	· 	6 mark in class que	·	6 mark in class qu		6 mark in class que	·
Career opportunities Employment Links	LIFE SKILLS: Understar itself EMPLOYMENT:	nding how the body regulates	LIFE SKILLS: Resilier EMPLOYMENT: Eco	_		nisation and resilience nimal behaviourist, doctor	_	sation and resilience rticulture, agriculture, farming
Employability Skills	Creativity Nu Leadership Inc Listening Col Presenting Tea	teracy umeracy dependence <mark>mmunication</mark> amwork aying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive
Week 34 (w/b 5 <sup>th</sup> Jun)	responses to temperatu Lesson 2: 5.1.2 (a) – The in maintaining metabolis	ucture and function of the	Lesson 1: Unit review Lesson 2: Unit assess Lesson 3: Exemplars	sment	Lesson 2: Exam q Lesson 3: Exam q	uestion practice prep uestion practice prep uestion practice prep uestion practice prep		

Va., 14/l -	Identify describe contain and an	Identify, describe evaluity and an	Idoutify describe explain surface assure.	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Excretion, metabolic waste, hepatic artery, hepatic	Autotrophic nutrition, granum, photosynthetic	Linked directly to paper section	
Level 3	portal vein, ornithine cycle, catalase, cytochrome,	pigment, photosystem, stroma, thylakoid, chlorophyll,		
	detoxification, urea, deamination, nephron,	photolysis, photophosphorylation, electron carrier,		
	ultrafiltration, selective reabsorption,	RuBisCo, light intensity, water stress,		
	descending/ascending limb, Loop of Henle,	photosynthometer, potometer		
	osmoreceptor, glomerulus			
Common	Excretion is just faeces and urine	Identified from assessment	Identified from active questioning	
Misconceptions	•		·	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
	The first seek shapter and another in seek queeks.	The first seek enapter and allower in seek queeks.	The state of the s	
Assessment this	w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul	w/b 5 <sup>th</sup> Jun & 3 <sup>rd</sup> Jul	Exam season	
half-term	W/D 20 Juli Q 17 Juli	W/D 3 Juli & 3 Juli	Exam season	
	LIFE CKILLS, Understanding how different species stay	LIFE CVILLE, Deciliones 9 organisation	LIFE CKILL C. Deciliones & organisation	
Career	LIFE SKILLS: Understanding how different species stay	LIFE SKILLS: Resilience & organisation	LIFE SKILLS: Resilience & organisation	
opportunities	warm	EMPLOYMENT: Ecologist	EMPLOYMENT: <u>www.rsb.org.uk/careers-and-</u>	
Employment Links	EMPLOYMENT: Zoologist, herpetophile		<u>cpd/careers</u>	
Employability Skills		Aiming high Literacy	Aiming high Literacy	
	Creativity Numeracy	Creativity Numeracy	<u>Creativity</u> <u>Numeracy</u>	
	Leadership Independence	Leadership Independence	Leadership Independence_	
	Listening Communication	Listening Communication	<u>Listening</u> Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
1	1.510() 0: : : : : : : : : : : : : : : : : : :			
Week 35	<b>Lesson 1:</b> 5.1.2 (c) – Structure, mechanisms of action and	<b>Lesson 1:</b> 5.1.3 (a) – The roles of mammalian sensory	Lesson 1: Exam question practice prep	
(w/b 12 <sup>th</sup> Jun)	functions of mammalian kidney	receptors in converting different types of stimuli into nerve	Lesson 2: Exam question practice prep	
	<b>Lesson 2:</b> 5.1.2 (d) – The control of water potential in the	impulses – Pacinian corpuscle	Lesson 3: Exam question practice prep	
	blood	<b>Lesson 2:</b> 5.1.3 (a) – The roles of mammalian sensory	Lesson 4: Exam question practice prep	
	<b>Lesson 3:</b> 5.1.2 (d) – The control of water potential in the	receptors in converting different types of stimuli into nerve		
	blood	impulses – Rods and cones		
	of action and functions of mammalian kidney	<b>Lesson 3:</b> 5.1.3 (b) – The structure and function of sensory,		
Vo. Mondo	Identify describe combine combine according to	relay and motor neurones	Identify describe combine combine as a serious conducto	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	
Level 2	Excretion, metabolic waste, hepatic artery, hepatic	Pacinian corpuscle, receptor, transducer,	Linked directly to paper section	
Level 3	portal vein, ornithine cycle, catalase, cytochrome,	depolarisation, neurone, myelinated, node of Ranvier,		
	detoxification, urea, deamination, nephron,	action potential, resting potential, generator potential,		
	ultrafiltration, selective reabsorption,	saltatory conduction, cholinergic synapse,		
	descending/ascending limb, Loop of Henle,	neurotransmitter, summation		
	osmoreceptor, glomerulus			
Common	All water is excreted	Reflex actions cannot be prevented	Identified from active questioning	
Misconceptions				
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this	w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul	w/b 3 <sup>rd</sup> Jul	Exam season	
half-term				
Career	LIFE SKILLS: Understanding how water levels in the	LIFE SKILLS: Understanding how reflex actions work	LIFE SKILLS: Resilience & organisation	
opportunities	body are controlled	EMPLOYMENT: Physiotherapist	EMPLOYMENT: www.rsb.org.uk/careers-and-	
Employment Links	EMPLOYMENT: Dialysis nurse		cpd/careers	
Employability Skills		Aiming high Literacy	Aiming high Literacy	
	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy	
	Leadership Independence	Leadership Independence	Leadership Independence	
	Listening Communication	Listening Communication	Listening Communication	
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork	
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive	
Week 36	<b>Lesson 1:</b> 5.1.2 (e) – The effects of kidney failure and its	<b>Lesson 1:</b> 5.1.3 (b) – The structure and function of sensory,	Lesson 1: Exam question practice prep	
(w/b 19 <sup>th</sup> Jun)	potential treatments	relay and motor neurones (myelinated 'v' non-myelinated	Lesson 2: Exam question practice prep	
	<b>Lesson 2:</b> 5.1.2 (f) – How excretory products can be used in	axons and speed of transmission)	Lesson 3: Exam question practice prep	
	medical diagnosis		Lesson 4: Exam question practice prep	
1	l ~		Lesson 4: Exam question practice prep	

	T		1
	Lesson 3: Unit review	Lesson 2: 5.1.3 (c) – The generation and transmission of nerve impulses in mammals (resting potential)  Lesson 3: 5.1.3 (c) – The generation and transmission of nerve impulses in mammals (action potential)	
Key Words	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Excretion, metabolic waste, hepatic artery, hepatic	Pacinian corpuscle, receptor, transducer,	Linked directly to paper section
Level 3	portal vein, ornithine cycle, catalase, cytochrome,	depolarisation, neurone, myelinated, node of Ranvier,	Elinea an early to paper section
Level 5			
	detoxification, urea, deamination, nephron,	action potential, resting potential, generator potential,	
	ultrafiltration, selective reabsorption,	saltatory conduction, cholinergic synapse,	
	descending/ascending limb, Loop of Henle,	neurotransmitter, summation	
	osmoreceptor, glomerulus		
Common	You need 2 kidneys to survive	All stimuli generate a response	Identified from active questioning
Misconceptions	·		
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	Review book chapter and answer in book questions
Assessment this	w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul	w/b 3 <sup>rd</sup> Jul	Exam season
half-term	W/S 20 Juli Q 17 Juli	w/ 5 Jul	Exam 3003011
	LIEE CHILC: Hadamata di tala a di tala	LIFE CAULC. Hadamar destruction and	LIEE CKILL C. Daviliana a C. a caratta i
Career	LIFE SKILLS: Understanding how substances can be	LIFE SKILLS: Understanding how reflex actions work	LIFE SKILLS: Resilience & organisation
opportunities	tested for in urine	EMPLOYMENT: Physiotherapist	EMPLOYMENT: www.rsb.org.uk/careers-and-
<b>Employment Links</b>	EMPLOYMENT: Pathologist		<u>cpd/careers</u>
<b>Employability Skills</b>	Aiming high Literacy	Aiming high Literacy	Aiming high Literacy
• • • • • • • • • • • • • • • • • • •	Creativity Numeracy	Creativity Numeracy	Creativity Numeracy
	Leadership Independence	Leadership Independence	Leadership Independence
	Listening Communication	Listening Communication	Listening Communication
	Presenting Teamwork	Presenting Teamwork	Presenting Teamwork
	Problem solving Staying positive	Problem solving Staying positive	Problem solving Staying positive
Week 37	Lesson 1: Unit assessment	<b>Lesson 1:</b> 5.1.3 (d) – The structure and roles of synapses in	Lesson 1: Exam question practice prep
(w/b 26 <sup>th</sup> Jun)	Lesson 2: Exemplars	neurotransmission	Lesson 2: Exam question practice prep
(30, 2 20 3011)	<b>Lesson 3:</b> 5.1.4 (a) – Endocrine communication by hormones	<b>Lesson 2:</b> 5.1.3 (d) – The structure and roles of synapses in	Lesson 3: Exam question practice prep
		neurotransmission	
		neurotransmission	Laccon 1: Evam question practice prop
		Lesson 3: Unit review	Lesson 4: Exam question practice prep
Kev Words	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review	
Key Words	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate	Identify, describe, explain, explore, compare, evaluate
Level 2	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer,	
	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier,	Identify, describe, explain, explore, compare, evaluate
Level 2	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential,	Identify, describe, explain, explore, compare, evaluate
Level 2	Identify, describe, explain, explore, compare, evaluate	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse,	Identify, describe, explain, explore, compare, evaluate
Level 3 Level 3		Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section
Level 2 Level 3 Common	Identify, describe, explain, explore, compare, evaluate  Identified in assessment	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse,	Identify, describe, explain, explore, compare, evaluate
Level 2 Level 3  Common Misconceptions	Identified in assessment	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning
Level 2 Level 3		Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section
Level 2 Level 3  Common Misconceptions	Identified in assessment	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning
Level 2 Level 3  Common Misconceptions Homework	Identified in assessment  Review book chapter and answer in book questions	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions
Level 2 Level 3  Common Misconceptions Homework Assessment this	Identified in assessment	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul	Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season
Common Misconceptions Homework  Assessment this half-term Career	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul  LIFE SKILLS: Understanding how reflex actions work	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul	Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse	Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul  LIFE SKILLS: Understanding how reflex actions work EMPLOYMENT: Physiotherapist	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation  EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high  Literacy	Lesson 3: Unit review  Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul  LIFE SKILLS: Understanding how reflex actions work EMPLOYMENT: Physiotherapist  Aiming high  Literacy	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high  Literacy
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity  Numeracy	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and- cpd/careers  Aiming high Creativity  Literacy Numeracy
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence	Identify, describe, explain, explore, compare, evaluate Pacinian corpuscle, receptor, transducer, depolarisation, neurone, myelinated, node of Ranvier, action potential, resting potential, generator potential, saltatory conduction, cholinergic synapse, neurotransmitter, summation  All stimuli generate a response  Review book chapter and answer in book questions  w/b 3 <sup>rd</sup> Jul  LIFE SKILLS: Understanding how reflex actions work EMPLOYMENT: Physiotherapist  Aiming high Creativity Numeracy Leadership Independence	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Numeracy Leadership Independence
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links Employability Skills	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving  Staying positive  Lesson 1: 5.1.4 (b) – Structure and function of adrenal	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links Employability Skills	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving  Staying positive  Lesson 1: 5.1.4 (b) – Structure and function of adrenal glands	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links Employability Skills  Week 38	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Presenting Teamwork Problem solving  Lesson 1: 5.1.4 (b) – Structure and function of adrenal glands Lesson 2: 5.1.4 (c) – The histology of the pancreas	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links Employability Skills  Week 38	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving  Staying positive  Lesson 1: 5.1.4 (b) – Structure and function of adrenal glands	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork
Level 2 Level 3  Common Misconceptions Homework  Assessment this half-term Career opportunities Employment Links Employability Skills  Week 38	Identified in assessment  Review book chapter and answer in book questions  w/b 26 <sup>th</sup> Jun & 17 <sup>th</sup> Jul  LIFE SKILLS: Resilience & organisation EMPLOYMENT: Surgeon, vet, doctor, nurse  Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Presenting Teamwork Problem solving  Lesson 1: 5.1.4 (b) – Structure and function of adrenal glands Lesson 2: 5.1.4 (c) – The histology of the pancreas	Lesson 3: Unit review	Identify, describe, explain, explore, compare, evaluate Linked directly to paper section  Identified from active questioning  Review book chapter and answer in book questions  Exam season  LIFE SKILLS: Resilience & organisation EMPLOYMENT: www.rsb.org.uk/careers-and-cpd/careers  Aiming high Literacy Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork

Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Endocrine, hormone, adenyl cyclase, adrenal cortex, adrenal medulla, adrenaline, mineralocorticoids, fasciculata, reticularis, beta cells glucagon, insulin, hyper/hypoglycaemia, glycogenolysis, gluconeogenesis, diabetes mellitus	Identify, describe, explain, explore, compare, evaluate Alkaloid, pheromone, tannin, phototropism, geotropism, chemotropism, thigmotropism, thigmonasty, apical dominance, auxin, gibberellin, cytokinin	
Common Misconceptions	People often confuse type I and type II diabetes	Identified in assessment	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this half-term	w/b 17 <sup>th</sup> Jul	w/b 3 <sup>rd</sup> Jul	
Career opportunities Employment Links	LIFE SKILLS: Understanding how to regulate blood sugar EMPLOYMENT: Diabetes nurse, dietician	LIFE SKILLS: Resilience and organisation EMPLOYMENT: Research scientist	
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Preamwork Problem solving  Literacy Numeracy Independence Staying positive	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	
Week 39 (w/b 10 <sup>th</sup> July)	Lesson 1: 5.1.4 (d) – How blood glucose concentration is regulated Lesson 2: 5.1.4 (e) – The differences between type I and type II diabetes Lesson 3: Section review	Lesson 1: 5.1.5 (b) – The types of plant responses Lesson 2: 5.1.5 (c) – The experimental evidence for the role of auxins in the control of apical dominance Lesson 3: 5.1.5 (d) – The experimental evidence for the role of gibberellin in the control of stem elongation and seed germination	
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Endocrine, hormone, adenyl cyclase, adrenal cortex, adrenal medulla, adrenaline, mineralocorticoids, fasciculata, reticularis, beta cells glucagon, insulin, hyper/hypoglycaemia, glycogenolysis, gluconeogenesis, diabetes mellitus	Identify, describe, explain, explore, compare, evaluate Alkaloid, pheromone, tannin, phototropism, geotropism, chemotropism, thigmotropism, thigmonasty, apical dominance, auxin, gibberellin, cytokinin	
Common Misconceptions	People often confuse type I and type II diabetes	Plants don't move	
Homework	Review book chapter and answer in book questions	Review book chapter and answer in book questions	
Assessment this half-term	w/b 17 <sup>th</sup> Jul	6 mark in class question	
Career opportunities Employment Links	LIFE SKILLS: Understanding how to regulate blood sugar EMPLOYMENT: Diabetes nurse, dietician	LIFE SKILLS: Understanding how plants respond to stimuli EMPLOYMENT: Horticulture	
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving  Literacy Numeracy Independence Communication Presenting Teamwork Staying positive	Aiming high Creativity Numeracy Leadership Independence Listening Communication Presenting Teamwork Problem solving Staying positive	
Week 40 (w/b 17 <sup>th</sup> July)	Lesson 1: Section assessment Lesson 2: Exemplars Lesson 3: X	Lesson 1: 5.1.5 (f) – The commercial use of plant hormones Lesson 2: X Lesson 3: X	
Key Words Level 2 Level 3	Identify, describe, explain, explore, compare, evaluate Endocrine, hormone, adenyl cyclase, adrenal cortex, adrenal medulla, adrenaline, mineralocorticoids,	Identify, describe, explain, explore, compare, evaluate Alkaloid, pheromone, tannin, phototropism, geotropism, chemotropism, thigmotropism,	

	hyper/hypoglyca	ularis, beta cells glucagon, insulin, emia, glycogenolysis, diabetes mellitus	thigmonasty, api cytokinin	cal dominance, auxin, gibberellin,
Common Misconceptions	Identified in asse		Only humans have hormones	
Homework	Review book cha	pter and answer in book questions	Review book chapter and answer in book questions	
Assessment this half-term	w/b 17 <sup>th</sup> Jul		6 mark in class q	uestion
Career opportunities Employment Links	LIFE SKILLS: Resili EMPLOYMENT: R	ence and organisation esearch scientist	LIFE SKILLS: Unde stimuli EMPLOYMENT: H	erstanding how plants respond to
Employability Skills	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive	Aiming high Creativity Leadership Listening Presenting Problem solving	Literacy Numeracy Independence Communication Teamwork Staying positive