

Continuity Curriculum

An online shadow curriculum for students temporarily out of lessons to ensure continuity of learning

Year 10 – Biology Combined

Half term 1

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
8 th September	Lesson 1 – Different types of cell	On video	Cells Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 2 - Microscopes	On video	Light microscopy: observing and drawing cells Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.

15 th September	Lesson 3 – RP: Plant cell microscopy	On video	Plant cells: common structures and specialised cells Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 4: Animal cell microscopy	On video	Animal cells: common structures and specialised cells Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
22 nd September	Lesson 5: Specialised cell	On video	Higher AQA KS4 Y10 Combined Science Lesson Resources Oak National Academy Prokaryotic cells	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 6: Diffusion	On video	Diffusion and surface area to volume ratio Higher AQA KS4 Y10 Combined science Lesson	Watch video and complete any tasks into your workbook. Then

			Resources Oak National Academy	complete worksheet found below the lesson video.
29 th September	Lesson 7 : Internal surfaces	On video	The importance of exchange surfaces and transport systems in humans Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 8: Osmosis	On video	Moving into and out of the blood: diffusion, osmosis and active transport Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 9: Osmosis Required Practical 1	On video	Moving into and out of the blood: diffusion, osmosis and active transport Higher AQA KS4 Y10 Combined science	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.

6 th October			Lesson Resources Oak National Academy	
	Lesson 10: Osmosis Required Practical 2	On video	Moving into and out of the blood: diffusion, osmosis and active transport Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
13 th October	<u>Lesson 11: active transport</u>	On video	Moving into and out of the blood: diffusion, osmosis and active transport Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	Lesson 12: Genes, DNA and cell cycle	On video	The structure of DNA Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.

			The cell cycle and cell division: mitosis Higher AQA KS4 Y10	
20 th October	<u>Lesson 13: Stem cells</u>	On video	Using stem cells in medicine: potential benefits, risks and ethical issues Higher AQA KS4 Y10 Combined science Lesson Resources Oak National Academy	Watch video and complete any tasks into your workbook. Then complete worksheet found below the lesson video.
	B1 –consolidation and revision	Review topic B1	Flash Cards B1 - cell biology B1 - Revision Mat Higher B1 Revision Mat - Foundation	Use the linked flashcards to test yourself Answer the questions on the Revision mats

Half term 2

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
3/11	Lesson 1: Food tests	On video	https://thenational.academy/pupils/lessons/tests-for-biological-molecules?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Lesson 2: Digestive enzymes	On video	https://thenational.academy/pupils/lessons/enzymes-function-structure-and-specificity?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
10/11	Lesson 1: Digestion and Absorption	On video	https://thenational.academy/pupils/lessons/biological-molecules?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

	Lesson 2: Enzymes	On video	https://thenational.academy/pupils/lessons/explaining-effects-of-substrate-concentration-and-temperature-on-enzyme-rate?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
17/11	Lesson 1: Enzyme RP	On video	https://thenational.academy/pupils/lessons/the-effect-of-ph-on-the-rate-of-an-enzyme-reaction-practical?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Lesson 2: Enzyme RP	On video	https://thenational.academy/pupils/lessons/the-effect-of-ph-on-the-rate-of-an-enzyme-reaction-data-analysis?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

24/11	Lesson 1: The lungs	On video	<p>https://thenational.academy/pupils/lessons/breathing-respiration-and-gas-exchange?share=true</p> <p>https://thenational.academy/pupils/lessons/the-human-gas-exchange-system-and-breathing?share=true</p> <p>https://thenational.academy/pupils/lessons/adaptations-of-the-human-lungs-for-gas-exchange?share=true</p>	<p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p> <p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p> <p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p>
	Lesson 2: Blood and blood vessels	On video	<p>https://thenational.academy/pupils/lessons/human-blood-cells-and-blood-vessels?share=true</p>	<p>Answer the questions in the Starter Quiz,</p>

				watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
1/12	Lesson 1: Heart	On video	https://thenational.academy/pupils/lessons/the-human-heart-and-double-circulatory-system?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Lesson 2: Heart Disease	On video	https://thenational.academy/pupils/lessons/cardiovascular-disease?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
8/12	Lesson 1: Lifestyle and disease	On video	https://thenational.academy/pupils/lessons/risk-factors-for-non-communicable-diseases?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

	Lesson 2: Cancer	On video	https://thenational.academy/pupils/lessons/cancer?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
15/12	Lesson 1: Plant tissues and organs	On video	https://thenational.academy/pupils/lessons/plant-roots-are-adapted-to-absorb-water-and-mineral-ions?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Lesson 2: Transpiration and translocation	On video	https://thenational.academy/pupils/lessons/transport-systems-in-plants-xylem-and-transpiration?share=true https://thenational.academy/pupils/lessons/transport-systems-in-plants-phloem-and-translocation?share=true	<p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p> <p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the</p>

				worksheet, answer the questions in the Exit Quiz
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Spring half term 1

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
5/1/2026	B1 revision	Revise key concepts in B1	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/cell-biology/	Complete the appropriate 'Cell structure' exam question practice Self assess using the markscheme Make flashcards of your mistakes
	B1 revision	Revise key concepts in B1	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/cell-biology/	Complete the appropriate 'Transport in cells'

				<p>exam question practice</p> <p>Self assess using the markscheme</p> <p>Make flashcards of your mistakes</p>
12/1	B2 revision	Revise key concepts in B2	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/organisation/	<p>Complete the appropriate 'Animal tissues, organs and systems' exam question practice</p> <p>Self assess using the markscheme</p> <p>Make flashcards of your mistakes</p>
	B2 revision	Revise key concepts in B2	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/organisation/	<p>Complete the appropriate 'Plant tissues, organs and</p>

				<p>systems' exam question practice</p> <p>Self assess using the markscheme</p> <p>Make flashcards of your mistakes</p>
19/1	Infectious Disease	On video	https://thenational.academy/pupils/lessons/diseases?share=true	<p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p>
	Bacterial and Viral Disease	On video	https://thenational.academy/pupils/lessons/bacterial-and-viral-diseases-in-humans-salmonella-and-measles?share=true	<p>Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz</p>
26/1	STDs	On video	https://thenational.academy/pupils/lessons/sexually-transmitted-infections?share=true	<p>Answer the questions in the Starter Quiz, watch the Lesson</p>

				Video, complete the worksheet, answer the questions in the Exit Quiz
	Fungal and Protist disease	On video	https://thenational.academy/pupils/lessons/fungal-and-protist-diseases-in-humans?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
2/2	Immune response	On video	https://thenational.academy/pupils/lessons/responses-of-the-human-immune-system-to-specific-pathogens?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Vaccines	On video	https://thenational.academy/pupils/lessons/immunity-and-vaccination?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

9/2	B3 revision	Make revision materials for B3	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/infection-and-response/	Make flashcards of the definitions of the key words included in B3
	B3 revision	Revise key B3 content	https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/infection-and-response/	Complete the appropriate Communicable diseases' exam question practice Self assess using the markscheme Make flashcards of your mistakes

Spring half term 2

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
23/2	Medication to treat disease	On video	https://thenational.academy/pupils/lessons/antibiotics?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video,

				complete the worksheet, answer the questions in the Exit Quiz
	Drug Development	On video	https://thenational.academy/pupils/lessons/development-of-new-medicines?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
2/3	B3 exam questions	Complete and self assess exam questions	Exam questions Mark Scheme	<p>Complete the exam questions</p> <p>Use the markscheme to self assess and redraft</p>
	B3 exam question	Complete and self assess exam questions	Exam Question Mark Scheme	

9/3	Respiration	On video	https://thenational.academy/pupils/lessons/aerobic-cellular-respiration-in-humans-and-other-organisms?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Anaerobic respiration	On video	https://thenational.academy/pupils/lessons/anaerobic-cellular-respiration-in-humans-and-other-organisms?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
16/3	Metabolism	On video	https://thenational.academy/pupils/lessons/explaining-the-effect-of-different-substrates-on-the-rate-of-cellular-respiration?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Photosynthesis	On video	https://thenational.academy/pupils/lessons/photosynthesis-an-endergonic-process-that-takes-place-in-chloroplasts?share=true	Answer the questions in the Starter Quiz, watch

				the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
2/3	Testing for Starch	On video	https://thenational.academy/pupils/lessons/the-requirements-and-products-of-photosynthesis-practical?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Investigating rates of photosynthesis	On video	https://thenational.academy/pupils/lessons/factors-affecting-the-rate-of-photosynthesis?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

Summer half term 1

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
13/4	Rates of photosynthesis part 2	On video	https://thenational.academy/pupils/lessons/the-effect-of-light-intensity-on-rate-of-photosynthesis-in-pondweed-evaluation?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Limiting Factors	On video	https://thenational.academy/pupils/lessons/photosynthesis-and-limiting-factors?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
20/4	B4 revision	Complete and self assess exam questions	Photosynthesis test Photosynthesis markscheme	Complete and self assess exam questions
	B4 revision	Complete and self-assess exam questions	Respiration test Respiration mark scheme	Complete and self-assess exam questions

27/4	Communities	On video	https://thenational.academy/pupils/lessons/components-of-an-ecosystem?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Biotic and Abiotic Factors	On video	https://thenational.academy/pupils/lessons/components-of-an-ecosystem?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
4/5	Adaptations	On video	https://thenational.academy/pupils/lessons/competition-and-adaptations-in-ecosystems?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Global Warming	On video	https://thenational.academy/pupils/lessons/impacts-of-environmental-changes-on-the-distribution-of-organisms?share=true	Answer the questions in the Starter Quiz, watch the Lesson

				Video, complete the worksheet, answer the questions in the Exit Quiz
11/5	Estimating populations 1	On video	https://thenational.academy/pupils/lessons/estimating-population-size-using-quadrats-practical?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
	Estimating populations 2	On video	https://thenational.academy/pupils/lessons/estimating-population-size-and-distribution-using-transects-practical?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
18/5	Biodiversity	On video	https://thenational.academy/pupils/lessons/benefits-and-challenges-of-maintaining-biodiversity?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz

	B7 revision	Complete and self-assess exam questions	B7 test B7 Mark Scheme	Complete and self-assess exam questions
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Summer half term 2

Week Beginning	Lesson Title	Lesson Objective	Online Lesson Link	Any additional instructions?
1/6	Revision B1-B4	Revise and consolidate Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202018%20QP.pdf https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202018%20MS.pdf	Complete the attached past paper one question at a time and self assess using the markscheme
	Revision B1-B4	Revise and consolidate	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202019%20QP.pdf	Complete the attached

		te Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202019%20MS.pdf	past paper one question at a time and self assess using the markschem e
8/6	EOYA	Revise and consolida te Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202020%20QP.pdf https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202020%20MS.pdf	Complete the attached past paper one question at a time and self assess using the markschem e
	EOYA	Revise and consolida te Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202021%20QP.pdf https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202021%20MS.pdf	Complete the attached past paper one question at a time and self assess

				using the markscheme
15/6	EOYA	Revise and consolidate Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202022%20QP.pdf https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202022%20MS.pdf	Complete the attached past paper one question at a time and self assess using the markscheme
	EOYA	Revise and consolidate Paper 1 Biology	https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FQP%2FJune%202023%20QP.pdf https://www.physicsandmathstutor.com/pdf-pages/?pdf=https%3A%2F%2Fpmt.physicsandmathstutor.com%2Fdownload%2FScience%2FGCSE%2FPast-Papers%2FAQA%2FBiology-1H%2FMS%2FJune%202023%20MS.pdf	Complete the attached past paper one question at a time and self assess using the markscheme

22/6	End of B7 Topic test feedback	Consolidate and revise B7	<u>Definitions</u>	Make flashcards of the definitions and test yourself
	Human food security and possible solutions	On video	<u>https://thenational.academy/pupils/lessons/factors-affecting-human-food-security-and-possible-solutions?share=true</u>	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
29/6	Climate change and biodiversity	On video	<u>https://thenational.academy/pupils/lessons/climate-change-and-biodiversity-forests-and-oceans?share=true</u>	Answer the questions in the Starter Quiz, watch the Lesson Video, complete

				the worksheet, answer the questions in the Exit Quiz
	Human interactions with the ecosystems	On video	https://thenational.academy/pupils/lessons/examples-of-human-interactions-with-ecosystems-including-use-of-peat?share=true	Answer the questions in the Starter Quiz, watch the Lesson Video, complete the worksheet, answer the questions in the Exit Quiz
6/7	WEX			
	WEX			
13/7	End of year Bio feedback	B1-B4 revision	B1 Definitions B2 Definitions	Make flashcards of the definitions

				and test yourself
	End of year Bio feedback	B1-B4 revision	B3 Definitions B4 Definitions	Make flashcards of the definitions and test yourself