



Year 11 Revision Schedule 2025-2026

EXAM DATES: PAPER 1 12TH MAY 2026 (PM)

PAPER 2 8TH JUNE 2026 (AM)

Subject/Course:	GCSE Combined Biology HIGHER (AQA)
Student Name:	

		Topic	Key knowledge/skills/questions	Resources/activities/links
Week 1	Monday 23rd February	4.5.1 Homeostasis 4.5.2 The human nervous system 4.5.3 Hormonal coordination in humans	<ul style="list-style-type: none"> What homeostasis is and why it is important The different parts of the nervous system and how they work together to co-ordinate a nervous response Reflex actions- examples and how they are different to a normal nervous response Synapses- how they work CORE PRACTICAL- investigating reaction time Different glands of the endocrine system – names and labels, which hormones they secrete Controlling blood glucose using insulin and glucagon Which hormones control puberty and the menstrual cycle How different contraceptives work The process of IVF and how it works The uses of the hormones thyroxine and adrenaline in the body and where they are secreted from 	<ul style="list-style-type: none"> BBC bitesize homeostasis and response https://www.bbc.co.uk/bitesize/topics/zyybb82 Sparx science- please log on and choose these topics to answer questions on Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/

Week 2	Monday 2 nd March	4.6.1 Reproduction 4.7.1 Adaptations, interdependence and competition	<ul style="list-style-type: none"> DNA structure and function including what a genome is What are genes and chromosomes Sexual vs asexual reproduction The cell cycle The processes of mitosis and meiosis – how they work, what they are used for, the differences between them What ecosystems are Competition in animals and plants- why and how they do this Adaptation in animals and plants- different types of adaptations for different environments Abiotic and biotic factors- what these are and examples of each 	<ul style="list-style-type: none"> BBC bitesize Reproduction https://www.bbc.co.uk/bitesize/guides/zycmk2p/revision/1 BBC bitesize Ecology https://www.bbc.co.uk/bitesize/topics/zxxhh39 Sparx science- please log on and choose these topics to answer questions on Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/
Week 3	Monday 9 th March	4.7.2 Organisation of an ecosystem 4.7.3 Biodiversity and the effect of human interaction on ecosystems	<ul style="list-style-type: none"> Food chains- how these are structured and the naming system we use for each stage (i.e. producers/consumers) CORE PRACTICAL: How to sample an area using quadrats or transects to estimate biodiversity or population size (e.g. of a type of plant) The water cycle The carbon cycle Biodiversity- what this means and why it is important How humans are affecting biodiversity (land use, water pollution, air pollution) Global warming- how and why this is happening Deforestation- reasons for doing this and the impact it has on the environment How we can help to maintain ecosystems and biodiversity 	<ul style="list-style-type: none"> BBC bitesize Ecology https://www.bbc.co.uk/bitesize/topics/zxxhh39 Sparx science- please log on and choose these topics to answer questions on Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/
Week 4	Monday 16 th March	4.1.1 Cell structure 4.1.2 Cell division 4.1.3 Transport in cells	<ul style="list-style-type: none"> Eukaryote and prokaryote structure Animal and plant cell structure and functions of sub cellular structures How to use a microscope to observe cells and draw cells seen Cell specialisation and cell differentiation Differences between light and electron microscopes How to use the magnification equation Where chromosomes are found What happens in the cell cycle and why the cell cycle happens What a stem cell is and where stems cells are found in embryos, adults and plants Use of stem cells for therapeutic cloning and production of cloned plants What happens in diffusion and which factors affect the rate of diffusion How to calculate SA:V Explain how animal and plants are adapted for exchanging materials 	<ul style="list-style-type: none"> BBC bitesize Cells https://www.bbc.co.uk/bitesize/topics/z2mttv4 Sparx science- please log on and choose these topics to answer questions on Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/

			<ul style="list-style-type: none"> • What is osmosis and what happened in the required practical investigating the effect of changing salt solution on the mass of plant tissue (potato chips) • What is active transport 	
Week 5	Monday 23rd March	<p>4.2.1 Principles of organisation</p> <p>4.2.2 animal tissues, organs and organ systems</p> <p>4.2.3 Plant tissues, organs and organ systems</p>	<ul style="list-style-type: none"> • What is the organisation in living organisms • Digestive system- what are the organs and their functions • Enzyme structure and function – including the lock and key theory • Digestive enzymes- amylase, protease and lipase- where are these produced and what do they do • Role of bile • How temperature and pH affect enzyme activity • Required practical Food tests • Required practical effect of pH on the rate of reaction of amylase enzyme on digestion of starch • Heart structure and types of blood vessels • What is in the tissue blood • Coronary heart diseases- what it is and how valves and transplants can be treatments • Factors that can cause/ contribute to ill health • Use disease data to draw conclusions • Cancer cells and the difference between benign tumours and malignant tumours. • Plant tissues- epidermal, palisade and spongy mesophyll, xylem and phloem • Leaf structure • Adaptations of root hair cells, xylem and phloem • Transpiration-how it is measured (potometer) and which factors affect it • Role of leaves, stem, root • Translocation and where this happens in a plant 	<p style="text-align: center;">BBC bitesize Organisation https://www.bbc.co.uk/bitesize/topics/zwi22nb</p> <ul style="list-style-type: none"> • Sparx science- please log on and choose these topics to answer questions on <ul style="list-style-type: none"> • Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) • https://www.physicsandmathstutor.com/biology-revision/qcse-aqa/
Week 6	Monday 30th March EASTER HOLIDAYS	<p>4.3.1 Communicable disease</p>	<ul style="list-style-type: none"> • Spread of diseases • Pathogen definition • How do bacteria and viruses make us poorly • Symptoms and treatments/prevention of spread for viral diseases – measles, HIV, TMV • Symptoms and treatments/prevention of spread for bacterial diseases – <i>Salmonella</i>, Gonorrhoea, • Symptoms and treatments/prevention of spread for fungal diseases – Rose black spot • Symptoms and treatments/prevention of spread for protist diseases – Malaria • Non specific defence systems in the human body • Role of white blood cells defending against pathogens • Vaccination – what happens in the body • Antibiotics- what these medicines do and issues with their overuse • What do painkillers do? • Origin of drugs digitalis and aspirin and how Penicillin was discovered 	<p style="text-align: center;">BBC bitesize Infection and response https://www.bbc.co.uk/bitesize/topics/z9kww6f</p> <ul style="list-style-type: none"> • Sparx science- please log on and choose these topics to answer questions on <ul style="list-style-type: none"> • Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) • https://www.physicsandmathstutor.com/biology-revision/qcse-aqa/

			<ul style="list-style-type: none"> Stages needed when testing a drug and why these steps are important 	
Week 7	Monday 6th April EASTER HOLIDAYS	4.4.1 Photosynthesis 4.4.2 Respiration	<ul style="list-style-type: none"> Photosynthesis equation and photosynthesis is an endothermic reaction Effects of temperature, light intensity, carbon dioxide concentration and amount of chlorophyll on the rate of photosynthesis Understanding these factors (above) interact and one may be a limiting factor H: how to use the inverse square law to calculate light intensity H: how to maximise rate of photosynthesis and maintain a profit (greenhouses) Required practical: investigating the effect of light intensity on the rate of photosynthesis Uses of glucose (produced in photosynthesis) Respiration is an exothermic reaction Equations for aerobic respiration and anaerobic respiration (muscles and yeast/plants) Why do organisms need energy Effect of exercise on the body and issues with ongoing anaerobic respiration occurring- muscle fatigue, lactic acid production and oxygen debt What is metabolism (definition and examples) 	BBC bitesize Bioenergetics https://www.bbc.co.uk/bitesize/topics/zgr997h <ul style="list-style-type: none"> Sparx science- please log on and choose these topics to answer questions on <ul style="list-style-type: none"> Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/
Week 8	Monday 13th April	4.5.1 Homeostasis 4.5.2 The human nervous system 4.5.3 Hormonal coordination in humans	<ul style="list-style-type: none"> What homeostasis is and why it is important The different parts of the nervous system and how they work together to co-ordinate a nervous response Reflex actions- examples and how they are different to a normal nervous response Synapses- how they work Required practical - investigating reaction time Different glands of the endocrine system – names and labels, which hormones they secrete Controlling blood glucose using insulin and glucagon Which hormones control puberty and the menstrual cycle How different contraceptives work The process of IVF and how it works The uses of the hormones thyroxine and adrenaline in the body and where they are secreted from 	BBC bitesize homeostasis and response https://www.bbc.co.uk/bitesize/topics/zyybb82 <ul style="list-style-type: none"> Sparx science- please log on and choose these topics to answer questions on <ul style="list-style-type: none"> Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) https://www.physicsandmathstutor.com/biology-revision/gcse-aqa/
Week 9	Monday 20th April	4.7.1 Adaptations, interdependence and competition 4.7.2 Organisation of an ecosystem	<ul style="list-style-type: none"> Competition in animals and plants- why and how they do this Adaptation in animals and plants- different types of adaptations for different environments Abiotic and biotic factors- what these are and examples of each Food chains- how these are structured and the naming system we use for each stage (i.e. producers/consumers) 	BBC bitesize Ecology https://www.bbc.co.uk/bitesize/topics/zxxhh39 <ul style="list-style-type: none"> Sparx science- please log on and choose these topics to answer questions on

		4.7.3 Biodiversity and the effect of human interaction on ecosystems	<ul style="list-style-type: none"> • CORE PRACTICAL: How to sample an area using quadrats or transects to estimate biodiversity or population size (e.g. of a type of plant) • The water cycle • The carbon cycle • Biodiversity- what this means and why it is important • How humans are affecting biodiversity (land use, water pollution, air pollution) • Global warming- how and why this is happening • Deforestation- reasons for doing this and the impact it has on the environment • How we can help to maintain ecosystems and biodiversity 	<ul style="list-style-type: none"> • Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) • https://www.physicsandmathstutor.com/biology-revision/gcse-aga/
Week 10	Monday 27th April	Paper 1 Preparations	<ul style="list-style-type: none"> • Complete AQA paper 1 past paper questions 	https://www.aqa.org.uk/subjects/science/gcse/science-8464/assessment-resources?componentCodes=8464B1H
Week 11	Monday 11th May	PAPER 1 IS ON TUESDAY 12TH MAY PM	<ul style="list-style-type: none"> • Complete AQA paper 1 past paper questions 	https://www.aqa.org.uk/subjects/science/gcse/science-8464/assessment-resources?componentCodes=8464B1H
Week 12	Monday 18th May	<p>4.6.1 Reproduction</p> <p>4.6.2 Variation and evolution</p> <p>4.6.3 Development of understanding on genetics and evolution</p> <p>4.6.4 Classification of living organisms</p>	<ul style="list-style-type: none"> • The process of meiosis • Differences between sexual and asexual reproduction • Structure of DNA and define genome • Importance of understanding the human genome • Alleles, dominant, recessive, homozygous, heterozygous, genotype and phenotype • Predicting the probability of inheriting a characteristic - using a Punnett square (H constructing a Punnett square) • Inheritance of Polydactyly and Cystic fibrosis • Determination of sex • What causes differences in individuals in a population • The process of evolution • Evidence for evolution (fossils, genes, resistant bacteria) • Extinction • The process of selective breeding • The process of genetic engineering • Classification of living organisms and evolutionary trees 	<p>BBC bitesize Inheritance, variation and evolution https://www.bbc.co.uk/bitesize/topics/zppffcw</p> <p>BBC bitesize Cells https://www.bbc.co.uk/bitesize/topics/z2mttv4</p> <ul style="list-style-type: none"> • Sparx science- please log on and choose these topics to answer questions on <ul style="list-style-type: none"> • Physics and maths tutor: find questions to test homeostasis understanding (NB this website also contains Separate only content) • https://www.physicsandmathstutor.com/biology-revision/gcse-aga/
Week 13	Monday 25th May	<p>4.5.1 Homeostasis</p> <p>4.5.2 The human nervous system</p>	<ul style="list-style-type: none"> • What homeostasis is and why it is important • The different parts of the nervous system and how they work together to co-ordinate a nervous response 	BBC bitesize homeostasis and response https://www.bbc.co.uk/bitesize/topics/zyybb82

			Complete paper 2 past papers	
Week 14	Monday 1st June	Paper 2 preparations	Complete paper 2 past papers	https://www.aqa.org.uk/subjects/science/gcse/science-8464/assessment-resources?componentCodes=8464B2H
Week 15	Monday 8th June	PAPER 2 IS ON MONDAY 8TH JUNE AM		