

Biddulph High School Curriculum Intent

To deliver a broad and enriching curriculum through engaging and challenging lessons that provide a wide range of opportunities for all students to achieve their potential.

Students will all be prepared to take their next steps in a diverse and ever changing future ready to make a positive contribution to society.

Through a broad programme of extracurricular activities students will have the opportunities to showcase their talents and experience new challenges.

We value individuals and all that they can offer as well as supporting each other with kindness and empathy.

Curriculum Intent for Biology:

The lessons in the Science department provoke students' curiosity through exciting lessons; creating an environment where students will need to critically think and provide logical reasoning using various methods of investigation, such as observation, comparison, experimentation, and mathematical manipulation of data.

All teachers will follow the schemes of work and resources provided by the department. This will ensure that all students receive the same high-quality provision. All units of work will provide a clear outline of the knowledge and skills required and assessments will ensure that this knowledge has been retained and that skills can be evidenced.

Teachers will ensure that gaps are closed through regular monitoring within the classroom. DINT activities will allow for interleaving and recap of previous learning. Misconceptions will be identified through effective questioning and the regular inspection of student work.

Biology Long Term Overview						
Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
9	Cell Structures. Animal and plant cells, cell division. culturing microorganisms	Osmosis, diffusion, active transport.	Microscopy and maths skills. The human digestive system.	The heart and blood vessels. Cardiovascular issues and how to treat cardiovascular disease.	Non-communicable disease, Health issues, The effect of lifestyle on some non-communicable diseases, cancer.	Plant organ systems, Transpiration. The root, stem and leaves. The xylem and the phloem vessels.
10	communicable diseases viral diseases Bacterial diseases fungal diseases human defence systems vaccination Producing monoclonal Discovery and development of drugs antibodies (HT only)	Plant disease (biology only) Plant defence responses Photosynthesis Rate of photosynthesis required practical activity 6 light intensity uses of glucose from photosynthesis aerobic respiration	Response to exercise Homeostasis uses of glucose from photosynthesis tests to identify starch, glucose and proteins (qualitative reagents) Hormones to treat fertility (HT only) Homeostasis the human nervous system structure and function	The brain (biology only) The eye (biology only) Ray diagrams and lenses Control of body temperature (biology only) Hormonal coordination in humans	Hormones in human reproduction Contraception The use of hormones to treat infertility (HT only) Negative feedback (HT only) Revision for mocks 28/04/25 - 02/05/25	Plant hormones (biology only) Required practical activity 8: tropism on seedlings Use of plant hormones (HT only) Revision for mocks
11	Natural selection Evidence for evolution Evolution theories	Sampling part 1 Sampling part 2 Biodiversity Maintaining biodiversity Monitoring biodiversity	Food security Feeding the world Selective breeding Genetic engineering Use of biotechnology in farming	Health and disease Preventing disease Monoclonal antibodies Plant disease and defences. Blood and the body defence mechanism	Smoking and alcohol Exercise and diet Treating CVD New medicines Examinations	Revision for GCSE examinations

				vaccinations		
12	Basic components of Living systems. Biological molecules. Enzymes.	Plasma membranes. Cell division.	Exchanges surfaces and breathing transport in animals.	Transport in plants. Classification and evolution.	Biodiversity . Communicable diseases.	Neuronal communication. Hormonal communication.
13	Neuronal communication. Hormonal communication. Homeostasis.	Plant responses. Energy for biological processes. Respiration	Genetics of living systems. Patterns of inheritance and variation.	Manipulating genomes. Cloning and biotechnology.	Ecosystems. Populations and sustainability.	Preparation for A level examinations

Biology Medium Term Overview			
Year 10	Autumn Term	Unit Title: Cell level systems	No of Lessons: 20
Overview	<p>Pathogens are microorganisms such as viruses and bacteria that cause infectious diseases in animals and plants. They depend on their host to provide the conditions and nutrients that they need to grow and reproduce. They frequently produce toxins that damage tissues and make us feel ill. This section will explore how we can avoid diseases by reducing contact with them, as well as how the body uses barriers against pathogens. Once inside the body our immune system is triggered which is usually strong enough to destroy the pathogen and prevent disease. When at risk from unusual or dangerous diseases our body's natural system can be enhanced by the use of vaccination. Since the 1940s a range of antibiotics have been developed which have proved successful against a number of lethal diseases caused by bacteria. Unfortunately, many groups of bacteria have now become resistant to these antibiotics. The race is now on to develop a new set of antibiotics.</p>		
Assessment	<p>Students will be assessed through a series of small tests to identify any misconceptions and the correct use of key scientific terminology.</p>		
<p><u>Essential Knowledge (what must students know):</u></p> <p>Pathogens are microorganisms that cause infectious disease.</p> <p>Pathogens may be viruses, bacteria, protists or fungi. They may infect plants or animals and can be spread by direct contact, by water or by air.</p> <p>Bacteria and viruses may reproduce rapidly inside the body.</p>	<p><u>Essential Skills (what must students be able to demonstrate):</u></p> <p>Practical skills:</p> <ul style="list-style-type: none"> • Required practical activity 6: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed. • Investigations into the effect of exercise on the body. 	<p>Lessons to cover</p> <p>Communicable diseases Viral diseases Bacterial diseases Fungal diseases Protist diseases Human defence systems Vaccination Antibiotics and painkillers Discovery and development of drugs Producing monoclonal antibodies (HT only) Uses of monoclonal antibodies</p>	

<p>Bacteria may produce poisons (toxins) that damage tissues and make us feel ill.</p> <p>Viruses live and reproduce inside cells, causing cell damage.</p> <p>Measles is a viral disease showing symptoms of fever and a red skin rash. Measles is a serious illness that can be fatal if complications arise. For this reason most young children are vaccinated against measles.</p> <p>The measles virus is spread by inhalation of droplets from sneezes and coughs.</p> <p>HIV initially causes a flu-like illness. Unless successfully controlled with antiretroviral drugs the virus attacks the body's immune cells. Late stage HIV infection, or AIDS, occurs when the body's immune system becomes so badly damaged it can no longer deal with other infections or cancers. HIV is spread by sexual contact or exchange of body fluids such as blood which occurs when drug users share needles.</p> <p>Tobacco mosaic virus (TMV) is a widespread plant pathogen affecting many species of plants including tomatoes. It gives a distinctive 'mosaic' pattern of discolouration on the leaves which affects the growth of the plant due to lack of photosynthesis.</p>	<ul style="list-style-type: none"> • Tests to identify starch, glucose and proteins using simple qualitative reagents. • Use data to relate limiting factors to the cost effectiveness of adding heat, light or carbon dioxide to greenhouses. • Evaluate the advantages and disadvantages of monoclonal antibodies. <p>Learners are able to:</p> <ul style="list-style-type: none"> • Students should be able to explain how diseases caused by viruses, bacteria, protists and fungi are spread in animals and plants. • Students should be able to explain how the spread of diseases can be reduced or prevented. • Students should be able to explain the use of antibiotics and other medicines in treating disease. • Students should be able to explain the role of the immune system in the defence against disease. • Students should be able to describe the process of discovery and development of potential new medicines, including preclinical and clinical testing. • Students should be able to explain how vaccination will prevent illness in an individual, and how the spread of 	<p>Homework Seneca topic based homework to be set every fortnight. Seneca: Topics will be set to allow students to understand communicable and non-communicable disease including plant diseases.</p> <p>Common misconceptions:</p> <p>Learners have a view that the slow flow of blood in capillaries is due to the narrow diameter, when in fact it is a function of the total cross-sectional area of the capillaries (1000 times greater than the aorta). When explaining the importance of the slow flow of blood in allowing time for exchange by diffusion, this misunderstanding should be considered.</p> <p>Learners commonly think that their eyes see objects 'directly', like a camera, but the reality is that the image formed by the brain is based on the eyes and brains interpretation of the light that comes into the eye i.e. different people will perceive the same object or image differently. Young learners also have the misconception that some sort of 'force' comes out of the eye, enabling it to see.</p> <p>Examination technique: understanding key command words within examination style questions to build confidence in student responses</p> <p>Key terms: Stomata Light intensity Mass</p>
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<p><i>Salmonella</i> food poisoning is spread by bacteria ingested in food, or on food prepared in unhygienic conditions. In the UK, poultry are vaccinated against <i>Salmonella</i> to control the spread. Fever, abdominal cramps, vomiting and diarrhoea are caused by the bacteria and the toxins they secrete. Gonorrhoea is a sexually transmitted disease (STD) with symptoms of a thick yellow or green discharge from the vagina or penis and pain on urinating. It is caused by a bacterium and was easily treated with the antibiotic penicillin until many resistant strains appeared.</p> <p>Gonorrhoea is spread by sexual contact. The spread can be controlled by treatment with antibiotics or the use of a barrier method of contraception such as a condom.</p> <p>Rose black spot is a fungal disease where purple or black spots develop on leaves, which often turn yellow and drop early. It affects the growth of the plant as photosynthesis is reduced. It is spread in the environment by water or wind. Rose black spot can be treated by using fungicides and/or removing and destroying the affected leaves.</p> <p>Vaccination involves introducing small quantities of dead or inactive forms of a pathogen into the body to stimulate the white blood cells to produce antibodies. If the same pathogen re-enters the body the white blood cells respond quickly to produce the correct antibodies, preventing infection.</p>	<p>pathogens can be reduced by immunising a large proportion of the population.</p> <ul style="list-style-type: none"> • Students should be able to describe how monoclonal antibodies are produced. • Students should be able to describe some of the ways in which monoclonal antibodies can be used. • Students should be able to describe the non-specific defence systems of the human body against pathogens. • Students should be able to describe the process of discovery and development of potential new medicines, including preclinical and clinical testing. • Students should be able to describe physical and chemical plant defence responses. • Students should be able to describe photosynthesis as an endothermic reaction in which energy is transferred from the environment to the chloroplasts by light. 	<p>Temperature Density Xylem Phloem Potometer Transpiration Translocation Plasma Vessels Circulatory system</p>
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<p>Monoclonal antibodies create more side effects than expected. They are not yet as widely used as everyone hoped when they were first developed.</p> <p>Photosynthesis is represented by the equation: carbon dioxide + water light glucose + oxygen Students should recognise the chemical symbols: CO₂, H₂O, O₂ and C₆H₁₂O₆.</p> <p>Examination technique: understanding key command words within examination style questions to build confidence in student responses</p>		
<p>Careers Link</p> <p>EKG technician. Exercise physiologist. Cardiovascular technician. Respiratory therapist. Medical sonographer. Cardiology consultant. Cardiac nurse. Cardiology physician.</p>	<p>Maths skills required:</p> <ul style="list-style-type: none"> • Solve simple algebraic equations. • Use data to relate limiting factors to the cost effectiveness of adding heat, light or carbon dioxide to greenhouses. • measure and calculate rates of photosynthesis extract and interpret graphs of photosynthesis rate involving one limiting factor • plot and draw appropriate graphs selecting appropriate scale for axes • translate information between graphical and numeric form. 	<p>MY PB</p> <p>Social Me- active listening, speaking effectively, working with others Practical work will require resilience and responsibility.</p> <p>Thinking Me – evaluating & creativity Evaluation will be utilised when comparing different methods of microscopy</p> <p>This is Me – Resilience, responsibility, self-motivation, integrity, self-management Students will need to demonstrate resilience and self-management when looking at the assessed points across the lessons</p>

Biology Medium Term Overview			
Year 10	Spring term	Unit Title: 4.5 Homeostasis and response	No of Lessons: 19
Overview	<p>Cells in the body can only survive within narrow physical and chemical limits. They require a constant temperature and pH as well as a constant supply of dissolved food and water. In order to do this the body requires control systems that constantly monitor and adjust the composition of the blood and tissues. These control systems include receptors which sense changes and effectors that bring about changes. In this section we will explore the structure and function of the nervous system and how it can bring about fast responses. We will also explore the hormonal system which usually brings about much slower changes. Hormonal coordination is particularly important in reproduction since it controls the menstrual cycle. An understanding of the role of hormones in reproduction has allowed scientists to develop not only contraceptive drugs but also drugs which can increase fertility.</p>		
Assessment	<p>Students will be assessed through a series of small tests to identify any misconceptions and the correct use of key scientific terminology.</p>		
<p><u>Essential Knowledge (what must students know):</u></p> <p>Homeostasis maintains optimal conditions for enzyme action and all cell functions. In the human body, these include control of:</p> <ul style="list-style-type: none"> • blood glucose concentration • body temperature • water levels. <p>These automatic control systems may involve nervous responses or chemical responses. All control systems include:</p> <ul style="list-style-type: none"> • cells called receptors, which detect stimuli (changes in the environment) • coordination centres (such as the brain, spinal cord and pancreas) that receive and process information from receptors 	<p><u>Essential Skills (what must students be able to demonstrate):</u></p> <p>Practical skills:</p> <p>Required practical activity 7: plan and carry out an investigation into the effect of a factor on human reaction time.</p> <p>Required practical activity 8: investigate the effect of light or gravity on the growth of newly germinated seedlings.</p> <p>Record results as both length measurements and as careful, labelled biological drawings to show the effects. Evaluate information around the relationship between obesity and diabetes, and make</p>	<p>Lessons to cover</p> <p>B4 summary test Intervention</p> <p>5.1. Homeostasis 5.2 .1 The human nervous system structure and function Required practical activity 7: Investigation into reaction times 5.2.2 The brain (biology only) 5.2.3 The eye (biology only) Ray diagrams and lenses 5.2.4 Control of body temperature (biology only) 5.3 Hormonal coordination in humans 5.3.2 control of blood sugar concentration 5.3.3 Maintaining water and nitrogen balance in the body (biology only) 5.3.4 Hormones in human reproduction 5.3.5 Contraception</p>	

<p>• effectors, muscles or glands, which bring about responses which restore optimum levels. The nervous system enables humans to react to their surroundings and to coordinate their behaviour. Information from receptors passes along cells (neurones) as electrical impulses to the central nervous system (CNS). The CNS is the brain and spinal cord. The CNS coordinates the response of effectors which may be muscles contracting or glands secreting hormones. stimulus receptor coordinator effector response</p> <p>Reflex actions are automatic and rapid; they do not involve the conscious part of the brain.</p> <p>The brain controls complex behaviour. It is made of billions of interconnected neurones and has different regions that carry out different functions.</p> <p>(HT only) Students should be able to explain some of the difficulties of investigating brain function and treating brain damage and disease. (HT only) Neuroscientists have been able to map the regions of the brain to particular functions by studying patients with brain damage, electrically stimulating different parts of the brain and using MRI scanning techniques. The complexity and delicacy of the brain makes investigating and treating brain disorders very difficult.</p> <p>The eye is a sense organ containing receptors sensitive to light intensity and colour.</p>	<p>recommendations taking into account social and ethical issues.</p> <p>Students should be able to explain that homeostasis is the regulation of the internal conditions of a cell or organism to maintain optimum conditions for function in response to internal and external changes.</p> <p>Students should be able to explain how the structure of the nervous system is adapted to its functions.</p> <p>Students should be able to explain how the various structures in a reflex arc – including the sensory neurone, synapse, relay neurone and motor neurone – relate to their function.</p> <p>Students should understand why reflex actions are important.</p> <p>Students should be able to relate the structures of the eye to their functions. This includes:</p> <ul style="list-style-type: none"> • accommodation to focus on near or distant objects adaptation to dim light. <p>Students should be able to identify the cerebral cortex, cerebellum and medulla on a diagram of the brain, and describe their functions.</p> <p>Students should be able to identify the following structures on a diagram</p>	<p>5.3.6 The use of hormones to treat infertility (HT only) Negative feedback (HT only) 5.4 Plant hormones (biology only) Required practical activity 8: tropism on seedlings 5.4.2 Use of plant hormones (HT only)</p> <p>Homework Seneca topic based homework to be set every fortnight. Seneca: Topics will be set to allow students to understand the roles of hormones in the body and how they and how they can be used to support agriculture.</p> <p>Common misconceptions:</p> <p>With regards to the menstrual cycle, research has shown that learners have problems relating the time of conception to the condition of the lining of the uterus.</p> <p>Learners often confuse type 1 and type 2 diabetes, and the effective treatments for each. The effect of ADH on the permeability of the kidney tubules is often confused.</p>
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<p>Accommodation is the process of changing the shape of the lens to focus on near or distant objects. To focus on a near object:</p> <ul style="list-style-type: none"> • the ciliary muscles contract • the suspensory ligaments loosen • the lens is then thicker and refracts light rays strongly. <p>To focus on a distant object:</p> <ul style="list-style-type: none"> • the ciliary muscles relax • the suspensory ligaments are pulled tight <p>the lens is then pulled thin and only slightly refracts light rays.</p> <p>Two common defects of the eyes are myopia (short sightedness) and hyperopia (long sightedness) in which rays of light do not focus on the retina.</p> <ul style="list-style-type: none"> • Generally these defects are treated with spectacle lenses which refract the light rays so that they do focus on the retina. • New technologies now include hard and soft contact lenses, laser surgery to change the shape of the cornea and a replacement lens in the eye. <p>Body temperature is monitored and controlled by the thermoregulatory centre in the brain. The thermoregulatory centre contains receptors sensitive to the temperature of the blood. The skin contains temperature receptors and sends nervous impulses to the thermoregulatory centre. If the body temperature is too high, blood vessels dilate</p>	<p>of the eye and explain how their structure is related to their function:</p> <ul style="list-style-type: none"> • retina • optic nerve • sclera • cornea • iris • ciliary muscles • suspensory ligaments. <p>Students should be able to interpret ray diagrams, showing these two common defects of the eye and demonstrate how spectacle lenses correct them.</p> <p>(HT only) Students should be able to explain how these mechanisms Lower or raise body temperature in a given context.</p> <p>Students should be able to identify the position of the following on a diagram of the human body:</p> <ul style="list-style-type: none"> • pituitary gland • pancreas • thyroid • adrenal gland • ovary • testes. <p>Students should be able to explain how insulin controls blood glucose (sugar) levels in the body.</p>	
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<p>(vasodilation) and sweat is produced from the sweat glands. Both these mechanisms cause a transfer of energy from the skin to the environment. If the body temperature is too low, blood vessels constrict (vasoconstriction), sweating stops and skeletal muscles contract (shiver).</p> <p>The endocrine system is composed of glands which secrete chemicals called hormones directly into the bloodstream. The blood carries the hormone to a target organ where it produces an effect. Compared to the nervous system the effects are slower but act for longer. The pituitary gland in the brain is a 'master gland' which secretes several hormones into the blood in response to body conditions. These hormones in turn act on other glands to stimulate other hormones to be released to bring about effects.</p> <p>Blood glucose concentration is monitored and controlled by the pancreas. If the blood glucose concentration is too high, the pancreas produces the hormone insulin that causes glucose to move from the blood into the cells. In liver and muscle cells glucose is converted to glycogen for storage.</p> <p>(HT only) If the blood glucose concentration is too low, the pancreas produces the hormone glucagon that causes glycogen to be converted into glucose and released into the blood.</p>	<p>Students should be able to compare Type 1 and Type 2 diabetes and explain how they can be treated.</p> <p>Students should be able to extract information and interpret data from graphs that show the effect of insulin in blood glucose levels in both people with diabetes and people without diabetes.</p> <p>(HT only) Students should be able to explain how glucagon interacts with insulin in a negative feedback cycle to control blood glucose (sugar) levels in the body.</p> <p>Students should be able to explain the effect on cells of osmotic changes in body fluids.</p> <p>Students should be able to describe the function of kidneys in maintaining the water balance of the body.</p> <p>(HT only) Students should be able to explain the interactions of FSH, oestrogen, LH and progesterone, in the control of the menstrual cycle.</p> <p>Students should be able to evaluate the different hormonal and nonhormonal methods of contraception.</p>	
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<p>The kidneys produce urine by filtration of the blood and selective reabsorption of useful substances such as glucose, some ions and water.</p> <p>Knowledge of other parts of the urinary system, the structure of the kidney and the structure of a nephron is not required.</p> <p>During puberty reproductive hormones cause secondary sex characteristics to develop. Oestrogen is the main female reproductive hormone produced in the ovary. At puberty eggs begin to mature and one is released approximately every 28 days. This is called ovulation. Testosterone is the main male reproductive hormone produced by the testes and it stimulates sperm production.</p> <p>Fertility can be controlled by a variety of hormonal and non-hormonal methods of contraception.</p> <p>Adrenaline is produced by the adrenal glands in times of fear or stress. It increases the heart rate and boosts the delivery of oxygen and glucose to the brain and muscles, preparing the body for 'flight or fight'.</p> <p>Thyroxine from the thyroid gland stimulates the basal metabolic rate. It plays an important role in growth and development.</p> <p>Plants produce hormones to coordinate and control growth and responses to light (phototropism) and gravity (gravitropism or geotropism). Unequal</p>	<p>Students should be able to explain the use of hormones in modern reproductive technologies to treat infertility.</p> <p>Students should be able to explain the roles of thyroxine and adrenaline in the body.</p> <p>Students should be able to describe the effects of some plant hormones and the different ways people use them to control plant growth.</p> <p>Key terms: Hormones Homeostasis Urine Insulin Diabetes Vasoconstriction Vasodilation Contraception IVF Gravitropism Phototropism Auxin Gibberellin Ripening</p> <p>Examination technique: understanding key command words within examination style questions to build confidence in student responses.</p>	
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<p>distributions of auxin cause unequal growth rates in plant roots and shoots.</p> <p>Plant growth hormones are used in agriculture and horticulture.</p> <p>Ethene is used in the food industry to control ripening of fruit during storage and transport.</p>		
<p><u>Careers Link</u></p> <p>Biotechnologists create and improve products and processes for agriculture, medicine and conservation using biological organisms. They study the genetic, chemical and physical attributes of cells, tissues and organisms, and identify industrial uses for them.</p>	<p>Maths skills required:</p> <p>Students should be able to extract and interpret data from graphs, charts and tables, about the functioning of the nervous system.</p> <p>Students should be able to translate information about reaction times between numerical and graphical forms.</p> <p>Students should be able to translate tables and bar charts of glucose, ions and urea before and after filtration.</p>	<p><u>MY PB</u></p> <p>Social Me- active listening, speaking effectively, working with others Practical work will require resilience and responsibility.</p> <p>Thinking Me – evaluating & creativity Evaluation will be utilised when comparing different methods of microscopy</p> <p>This is Me – Resilience, responsibility, self-motivation, integrity, self-management Students will need to demonstrate resilience and self-management when looking at the assessed points across the lessons</p>

Biology Medium Term Overview			
Year 10	Summer term	Unit Title: Community-level systems and genes, inheritance and selection	No of Lessons:24
Overview	This term will be used to support year 10 students in revising for their mock examinations and identifying any curriculum gaps and how to close these curriculum gaps through bespoke revision techniques and revision lessons to support growth in learning in science. This term will also be used to finalise the uses of plant hormones and the required practical of tropism acting on seedlings.		
Assessment	Students will be assessed through a series of mock examinations and lesson time will be used to revise for, feedback and intervene where needed to support learning of exam techniques within Biology.		
<p><u>Essential Knowledge (what must students know):</u></p> <p>Plants produce hormones to coordinate and control growth and responses to light (phototropism) and gravity (gravitropism or geotropism). Unequal distributions of auxin cause unequal growth rates in plant roots and shoots.</p> <p>(HT only) Gibberellins are important in initiating seed germination.</p> <p>(HT only) Ethene controls cell division and ripening of fruits.</p> <p>(HT only) The mechanisms of how gibberellins and ethene work are not required.</p> <p>Plant growth hormones are used in agriculture and horticulture.</p> <p>Auxins are used:</p> <ul style="list-style-type: none"> • as weed killers 	<p><u>Essential Skills (what must students be able to demonstrate):</u></p> <p>Students should be able to describe the effects of some plant hormones and the different ways people use them to control plant growth.</p> <p>Understand how the everyday use of hormones as weed killers has an effect on biodiversity.</p> <p>Students will focus heavily on exam technique and specific niches of the AQA exam board.</p> <p>Students will be able to answer all AO1/2/3 questions fluently.</p> <p>Students will be able to structure, manage and interpret 6 mark questions allowing for well-structured extended responses.</p>	<p>Lessons to cover</p> <p>5.4 Plant hormones (biology only)</p> <p>Required practical activity 8: tropism on seedlings</p> <p>5.4.2 Use of plant hormones (HT only)</p> <p>B5 summary test</p> <p>Intervention from b5 summary</p> <p>Intervention from b5 summary</p> <p>Revision for mocks</p> <p>MOCKS 28/04/25 - 02/05/25</p> <p>Mock intervention</p> <p>WEX</p> <p>WEX</p> <p>B1 summary test</p> <p>B1 summary intervention</p> <p>B2 summary intervention</p> <p>B3 summary test</p> <p>B3 summary intervention</p> <p>B3 summary intervention</p> <p>B4 summary test</p> <p>B4 summary intervention</p> <p>B5 summary test</p> <p>B5 summary intervention</p>	

<ul style="list-style-type: none"> • as rooting powders • for promoting growth in tissue culture. <p>Ethene is used in the food industry to control ripening of fruit during storage and transport.</p> <p>Gibberellins can be used to:</p> <ul style="list-style-type: none"> • end seed dormancy • promote flowering • increase fruit size. <p>Examination technique: understanding key command words within examination style questions to build confidence in student responses</p>	<p>Students will have the skills to be able to work independently to identify and close specific curriculum gaps and know how to close these gaps and what resources to use.</p> <p>Practical skills:</p> <p>Required practical activity 8: investigate the effect of light or gravity on the growth of newly germinated seedlings.</p> <p>Record results as both length measurements and as careful, labelled biological drawings to show the effects.</p> <p>AT skills covered by this practical activity: AT 1, 3, 4 and 7.</p> <p>Key terms: Pyramids of biomass Abiotic and biotic factors Biomass transfers Interdependence Ecosystems Community Trophic levels Competition</p>	<p>paper 1 exam questions paper 1 exam questions</p> <p>Homework Seneca topic based homework to be set every fortnight. Seneca: Topics will be set to allow students to understand with the idea of a food web and the interrelationships associated with them and that variation allows living things to survive in the same ecosystem.</p> <p>Common misconceptions: Some students do not understand that plant hormones are still chemical messengers that provide a localised response. Students need to be clear that plant hormones are heavily linked to tropisms.</p>
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	Decomposers Decomposition Consumers Producers Nutrient cycling	
<p><u>Careers Link</u></p> <p>Biomedical research assistant. Biomedical technician. Pharmaceutical sciences manager. Biologist. Cancer research scientist. Biomedical engineer. Clinical trials administrator</p>	<p>Maths skills required:</p> <p>calculate rate changes in the decay of biological material calculate the percentage of mass Use fractions and percentages plot and draw appropriate graphs selecting appropriate scales for the axes extract and interpret information from charts, graphs and tables</p>	<p>MY PB</p> <p>Social Me- active listening, speaking effectively, working with others Practical work will require resilience and responsibility.</p> <p>Thinking Me – evaluating & creativity Evaluation will be utilised when comparing different methods of microscopy</p> <p>This is Me – Resilience, responsibility, self-motivation, integrity, self-management Students will need to demonstrate resilience and self-management when looking at the assessed points across the lessons</p>