Science

We intend to equip our young people with the knowledge needed to understand the world and technology around them. We aim to encourage a curiosity in the natural, physical and chemical world around them; and to foster critical thinking. We strive to provide our young people with a chance to broaden their horizons and provide multiple routes into STEM careers.

Year 12 – A-Level Biology

Terms One and Two

Content of study	Biological Molecules and Cells
What are the aims and objectives of this term?	• Explain what a monomer and polymer are. • Identify some biological polymers and the monomer from which they are made. • Explain the concept of condensation and hydrolysis reactions in forming/breaking down polymers. • Identify common monosaccharides. • Describe the monosaccharides from which lactose, maltose and sucrose are made. • Explain what is meant by a glycosidic bond and how they form through condensation. • Describe how polymerisation of α-glucose can form starch or glycogen. • Describe the tests for starch, a reducing and non-reducing sugar in detail. • Explain what is meant by qualitative testing. • Represent the structure of α -glucose and β –glucose diagrammatically. • Explain that glycosidic bonds between α–glucose form starch or glycogen and how this relates to their function and properties. • Explain that glycosidic bonds between β–glucose form cellulose and how this relates to its function and properties. Describe the stages of the emulsion test. • Interpret the results of the emulsion test. Describe the structure of triglycerides. • Explain how triglycerides form. • Recognise, from diagrams, saturated and unsaturated fatty acids. • Describe the structure of phospholipids. • Explain the properties of phospholipids related to their structure. • Contrast the different properties of triglycerides and phospholipids. • Describe the general structure of an amino acid. • Describe the biuret test and how it can be interpreted. • Explain the variety of functions that proteins have and why they are so important to the body. • Explain the principle of chromatography. • Identify amino acids in a mixture. • Interpret chromatograms. • Explain how dipeptides and polypeptides form. • Explain the hierarchical organisation of protein structure. • Describe the types of bond involved in protein structure and the weakness of hydrogen bonds. • Relate the structure of proteins to properties of proteins (this is required for proteins named throughout the specification). • Interpret energy level diagrams and identify the activation energy. • Explain the induced-fit model of enzyme action.

	• Apply knowledge of tertiary structure to explain enzyme specificity and the formation of enzyme-substrate complexes. • Explain how temperature, pH, substrate concentration, enzyme concentration and the presence of inhibitors affect enzyme catalysis. • Describe and explain trends within graphs, relating this back to the tertiary structure of active sites and the effect of these variables. • Calculate rate of reaction from graphs and raw data and explain the advantage of using initial rate. • Interpret graphs of enzyme-controlled reactions and apply knowledge to explain them. • Explain the features of good experimental design. • Process data to calculate rates. • Represent raw and processed data clearly using tables and graphs. • Apply knowledge to draw and explain conclusions. • Evaluate the results and conclusions. • Explain the significance of DNA to organisms. • Describe the structure of DNA and identify structural components from diagrams. • Apply knowledge of complementary base pairing rules to work out the frequency of certain bases, when provided with information about the frequency the other bases. • Explain why many scientists initially doubted that DNA was the genetic code. • Explain the role of RNA in transferring genetic information and as a component of ribosome • Describe the structure of RNA and identify structural components of an RNA nucleotide from diagrams. • Compare and contrast the similarities and differences between DNA and RNA. • Describe the process of DNA replication. • Explain the significance of DNA replication. • Evaluate the work of scientists in validating the Watson-Crick model of DNA replication. • Apply your knowledge to explain experimental results from the work of these scientists. • Describe the structure of ATP. • Explain the role of enzymes in hydrolysing and synthesising ATP. • Explain the significance of ATP in numerous processes within organisms, as a supplier of energy or phosphate. • Describe the properties that are important in water. • Explain the properties of water linked to the polar nature of the molecule. • Explain the significance of these properties to living organisms and processes. • Explain what is meant by the term inorganic ions and where they occur in the body. • Explain the specific role of hydrogen ions, iron ions, sodium ions and phosphate ions. • Relate the role of each of these ions to their properties. **<u>Cells:</u>** • Explain what is meant by a eukaryotic cell and the defining characteristics of a eukaryotic cell.

	• Explain the roles of different components and organelles within eukaryotic cells. • Interpret pictures, diagrams and electron micrographs to identify cell organelles. • Identify examples of specialised eukaryotic cells. • Explain common adaptations that cells have to particular functions. • Apply knowledge of eukaryotic cells features in suggesting the role of cells based on their adaptations. • A bacterial cell consists of cytoplasm and a membrane surrounded by a cell wall; the genes are not in a distinct nucleus. • Describe the structural differences between prokaryotic and eukaryotic cells. • Explain the role of plasmids, capsules and flagella. • Describe the structure of virus particles. • Describe the role of the capsid and attachment protein. • Relate the structure of a virus to its replication within cells. • Describe how an optical microscope and an electron microscope work. • Explain the concepts of magnification and resolution and how they differ. • Compare and contrast optical and electron microscopes. • Explain why, for a considerable period of time, the scientific community distinguished between artefacts and cell organelles. • Explain the use of an eyepiece graticule. • Calculate the actual size of cells based on measured size and magnification. • Describe the processes of cell fractionation and ultracentrifugation. • Explain why the separation of cell components is important in studying cells and their components. • Explain the use of low temperatures and buffers during cell fractionation. • Explain the principles of separation by ultracentrifugation. • Explain what the cell cycle is and why it does not occur in some cells from multicellular organisms. • Describe the stages of the cell cycle. • Recognise the stages of the cell cycle: interphase, prophase, metaphase, anaphase and telophase (including cytokinesis). • Explain the appearance of cells in each stage of mitosis. • Apply knowledge of mitosis and the cell cycle, to identify cells in different stages of mitosis. • Use measured values to calculate the actual size of cells. • Explain what the mitotic index is and calculate the mitotic index from observed values. • Explain the events involved in the formation of tumours and cancers and why this is damaging to the body. • Identify the processes within the cell cycle which are disrupted and which lead to cancer. • State that cancer treatments often work to inhibit stages of the cell cycle. • Interpret data relating to cancer treatments and their effects on the rate of cell division. • Explain what binary fission is and the organisms which carry out binary fission. • Describe the process of binary fission. • Explain why viruses are not classified as being living organisms. • Describe the sequence of events by which viruses replicate. • Explain why viruses are so difficult to treat and develop medicines against. • Describe the arrangement of proteins, glycoproteins, glycolipids, phospholipids and cholesterol in the fluid mosaic model of membrane.

	• Explain the roles/importance of the constituent parts of the membrane. • Relate the structure of the membrane to its role around/inside cells. • Identify key variables which affect membrane permeability. • Represent raw and processed data clearly using tables and graphs. • Apply knowledge of the fluid mosaic model to suggest how temperature/ alcohol affects membrane permeability. • Evaluate the quality of results and reliability of conclusions. • Define osmosis in terms of water potential. • Explain the movement of water due to osmosis into or out of cells. • Explain the effect of osmosis on plant and animal cells. • Explain what a dilution series is and produce one from stock solutions. • Apply knowledge to explain how the water potential of a plant tissue can be experimentally determined. • Represent raw and processed data clearly using tables and graphs. • Process data to calculate percentage gain/loss. • Apply knowledge to explain trends in graphs in relation to osmosis, water potential and mass change. • Explain the usefulness of calibration curves or standards. • Evaluate the results and conclusions. • Define what is meant by diffusion and facilitated diffusion. • Explain the process of facilitated diffusion. • Identify which substances rely on facilitated diffusion and why they cannot enter/leave cells by diffusion. • Interpret data to identify when a substance is moving by facilitated diffusion or diffusion. • Define what is meant by active transport. • Explain the process of active transport. • Compare and contrast active transport and facilitated diffusion. • Interpret data to identify when a substance is being actively transported. • Explain the adaptations of specialised cells maximising the rate of transport across their internal and external membranes (could be linked to Fick's law). • Explain how surface area, number of channel or carrier proteins and differences in gradients of concentration or water potential affect the rate of movement across cell membrane. • Describe the adaptations of small intestine epithelial cells for absorption. • Define what is meant by co-transport. • Explain the process of co-transport in the context of absorption of glucose (and amino acids). • Explain what is meant by an antigen and the types of molecules which can act as antigens. • Explain why antigen recognition is important for the immune system. • Identify cells which the immune system would launch an immune response against. • Describe the process of phagocytosis. • Explain the role of lysozymes in the destruction of pathogens. • Explain the role of antigen presentation following destruction. • Explain what is meant by the specific immune response. • Explain the cell-mediated (cellular) immune response. • Explain the roles played by helper T cells. • Relating previous knowledge of protein structure, describe the structure of antibodies.

	• Explain the specificity of an antibody to a particular antigen. • Explain how antibodies lead to the destruction of pathogens. • Explain the humoral (antibody-mediated) immune response. • Explain what is meant by a monoclonal antibody. • Explain the roles of plasma cells in producing a primary response and memory cells in producing a secondary response. • Explain that antigen variability can lead to some diseases being caught more than once. • Explain how mutations can cause antigen variability and how this can cause new strains of pathogen. • Explain the consequences of antigen variability on the incidence of disease and the development of therapies against that disease. • Compare and contrast active and passive immunity and apply knowledge to given examples. • Describe how antigens can be used to produce a vaccine. • Explain why vaccination is able to protect against diseases caused by particular pathogens. • Explain what is meant by herd immunity and why it is able to protect unvaccinated individuals in a population • Discuss ethical issues associated with the use of vaccines • Evaluate methodology, evidence and data relating to the use of vaccines. • Describe the structure of a HIV particle • Explain how the structure of a HIV particle enables it to infect and replicate within a helper T cell • Explain the distinction between being HIV positive and developing AIDS • Explain how HIV causes the symptoms of AIDS • Explain why antibiotics are ineffective against viruses (link to cell structure). • Explain how the specificity of monoclonal antibodies can be used in medical diagnosis and targeting of medication at particular cell types. • Explain the use of monoclonal antibodies in the ELISA technique. • Interpret information to explain the accuracy and results of tests which use the ELISA technique. • Discuss ethical issues associated with the use of monoclonal antibodies • Evaluate methodology, evidence and data relating to the use of monoclonal antibodies.
What previous knowledge is required?	• Many small molecules (monomers) join together to form very large molecules (polymers). • Representing the formation of a polymer from a given monomer. • Protein molecules are made up of long chains of amino acids. Oils do not dissolve in water but can form emulsions with water if an emulsifier is present. • Saturated and unsaturated molecules and the representation of a double bond as =. • Vegetable oils are unsaturated as they contain one or more double bonds. Protein molecules are made of chains of amino acids, which fold to produce a specific shape. • The roles of proteins in the body include: enzymes; structural components of tissue eg muscle; antibodies; hormones. • Chromatography can be used to separate mixtures and identify molecules within a mixture (in the context of food colourings).

	• The shape of an enzyme is vital to its function in speeding up chemical reactions. Enzymes are affected by temperature and pH. • The use of enzymes in the body during digestion, protein synthesis and respiration. • The use of enzymes industrially and within the home, including the advantages and disadvantages of using enzymes. • The calculation of rate and the factors which affect the rate of chemical reactions. • Evaluation of the use of catalysts in industrial processes. • Respiration releases energy. • Energy from respiration is used for movement, protein synthesis, synthesis of amino acids in plants and maintenance of constant body temperature. • Heat can be transferred by evaporation. • Water has a high specific heat capacity. • Metals lose electrons to form positive ions, whereas non-metals gain electrons to form negative ions. • Mineral ions and vitamins are needed in small amounts for healthy functioning of the body. • Internal conditions that are controlled include the ion content of the body–ions are lost via the skin when we sweat, and excess ions are lost via the kidneys in the urine. • Animal cells have a nucleus, cytoplasm, ribosomes, mitochondria and cell membrane. In addition to these, plants also have chloroplasts, a cell wall and a permanent vacuole. • Yeast cells have a nucleus, cytoplasm and cell membrane surrounded by a cell wall. • Cells may be specialised to a particular function. • In body cells the chromosomes are normally found in pairs. Body cells divide by mitosis. • When a body cell divides by mitosis copies of the genetic material are made then the cell divides once to form two genetically identical body cells. • Mitosis occurs during growth or to produce replacement cells. • Cell membranes control the passage of substances into and out of the cells. • Dissolved substances can move into and out of cells by diffusion. The greater the difference in concentration, the greater the rate of diffusion. • White blood cells help to defend against pathogens by: ingesting pathogens; producing antibodies; and producing antitoxins. • The immune system of the body produces specific antibodies to kill a particular pathogen. This leads to immunity from that pathogen. • People can be vaccinated by introducing small quantities of dead of inactive forms of pathogen into the body stimulating white blood cells to produce antibodies and forming immunity against future infections. • MMR is used to vaccinate against measles, mumps and rubella. • If a large proportion of the population is immune to a pathogen, the spread of the pathogen is very much reduced.
How will this term's content help with future learning?	The two units being studied underpin the rest of the A level and mastery of this knowledge is required to move forward in the course with any level of success
Resources	Revision guides, Kerboodle on-line textbook - https://www.kerboodle.com YouTube – crash course biology - (15) Biology - YouTube AQA | Resources | Past Papers & AQA Mark Schemes

	Required practicals https://youtu.be/P6VRvQ7p2mk?si=CYgb7W6CAiDrCb6z (31) Primrose Kitten Academy | GCSE & A-Level Revision - YouTube Google NotebookLM | Note Taking & Research Assistant Powered by AI https://www.briskteaching.com
Links to the national curriculum/specification	*https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF*
Assessments	End of topic tests. Students are informed ahead of time what exact spec points are to be tested in each paper. Marked and annotated by teachers and a U-A grade awarded. Cumulative tests will be set on a regular basis without warning.
Terms Three and Four	
Content of study	Organisms exchange substances with their environment Genetic information, variation and relationships between organisms
What are the aims and objectives of this term?	• Explain how the size of an organism affects its surface area to volume ratio and why this is important. • Apply your knowledge of surface area to volume ratio, to explain adaptations to body shape or the development of exchange systems. • Describe and explain the relationship between surface area to volume ratio and metabolic rate. • Calculate surface area to volume ratios when supplied with cell/organism dimensions. • Describe the internal structure of a leaf. • Explain how the structure is an adaptation allowing efficient gas exchange. • Explain what a xerophytic plant is • Explain the adaptations that xerophytic plants have and how these balance the needs for gas exchange whilst minimising water loss. • Explain the adaptations of single-celled organisms for efficient gas exchange. • Describe the structure of insect tracheal systems. • Explain how the tracheal system is adapted to allow efficient gas exchange. • Explain how tracheal systems balance the needs for gas exchange whilst minimising water loss. • Describe the structure of fish gills. • Explain how fish gills are adapted to maximise gas exchange, including counter current flow. • Describe the structure of the human gas exchange system. • Explain the roles of cartilage in the trachea and bronchi. • Explain the role of ventilation in terms of maintaining diffusion gradients. • Explain the mechanism of breathing in terms of the action of the diaphragm muscle and the antagonistic action of the external and internal intercostal muscles and the pressure changes which they cause in the thoracic cavity. • Explain the process of gas exchange, related to blood circulation and ventilation. • Describe the features of the squamous epithelium. • Explain how the squamous epithelium is adapted to maximising gas exchange.

	• Interpret information relating to the effects of lung disease on gas exchange and/or ventilation. • Interpret data relating to the effects of pollution and smoking on the incidence of lung disease. • Analyse and interpret data associated with specific risk factors and the incidence of lung disease. • Recognise correlations and causal relationships. • Explain the general roles of organs within the digestive system and where key events in digestion happen. • Explain the purpose of digestion. • Explain the role of different enzymes in the digestive process and relate the specificity of enzymes back to protein structure. • Explain how endopeptidases and exopeptidases increase protein digestion. • Explain the role of bile salts. • Recall the adaptations of intestinal epithelial cells to exchange. • Explain the absorption of amino acids and glucose against a concentration gradient by co-transport. • Explain the role of micelles in the absorption of lipids. • Describe the structure of the circulatory system, with particular reference to the blood vessels entering/leaving the heart, lungs and kidneys. • Link the structure of the circulatory system to its role in exchanging and transporting materials. • Relate knowledge of protein structure to the structure of haemoglobin. • Explain what is meant by the term “partial pressure”. • Explain how the binding of one oxygen molecule changes the shape of haemoglobin and how this affects the binding of further oxygen molecules. • Relate knowledge to explain the shape of an oxyhaemoglobin dissociation curve • Explain the effect of carbon dioxide concentration on oxygen dissociation. • Relate this knowledge to explain oxygen loading and unloading in different tissues. • Explain differences between the oxyhaemoglobin dissociation curves of different species. • Relate these differences to the environment in which the organisms with to explain how these adaptations allow organisms to survive. • Describe and label the structure of the heart. • Explain differences in the thickness of cardiac muscle between the atria and ventricles and between different sides of the heart. • Explain the role of the atrio-ventricular and semilunar valves. • Explain the role of the coronary artery. • Explain the cardiac cycle. • Explain the opening and closing of AV and semi-lunar valves in terms of differences in pressure at different stages of the cardiac cycle. • Analyse and interpret data relating to pressure and volume changes during the cardiac cycle. • Describe the structure of arteries, arterioles, veins and capillaries. • Relate the structure of arteries, arterioles, veins and capillaries to their functions. • Compare and contrast the structure and function of different blood vessels. • Explain what tissue fluid is and which substances it contains. • Explain the formation of tissue fluid in terms of hydrostatic pressure. • Explain the reabsorption of some tissue fluid back into the capillaries, in terms of hydrostatic pressure and water potential

	• Explain the role of the lymph system. • Analyse and interpret data associated with specific risk factors and the incidence of cardiovascular disease. • Recognise correlations and causal relationships. • Explain the role of the xylem in plants. • Explain how water transport in the xylem is linked to transpiration in the leaves. • Explain the cohesion-tension theory of water transport. • Explain the factors which affect transpiration. • Explain the role of the phloem in plants. • Explain what is meant by translocation. • Explain the mass flow hypothesis as a mechanism for translocation. • Recognise correlations and causal relationships. • Interpret evidence from tracer and ringing experiments and evaluate the evidence for and against the mass flow hypothesis. **<u>Genetic information unit:</u>** • Explain what is meant by the terms chromosome and gene. • Compare and contrast DNA in eukaryotes with that in prokaryotes, mitochondria and chloroplasts. • Explain what a gene could code for. • Explain how the DNA base sequence is able to code for the primary structure of a polypeptide. • Explain the terms degenerate, universal and non-overlapping. • Explain why much of eukaryotic DNA can be considered as non-coding. • Explain what is meant by an intron and an exon. • Explain what the terms genome and proteome mean. • Describe the structure of mRNA and how it is related to its function (link to 3.1.5.1). • Explain the process of transcription in prokaryotes. • Explain the process of transcription and splicing in eukaryotes, linking this to knowledge of introns. • Interpret data from experimental work investigating the role of nucleic acids. • Explain the process of translation. • Explain the specific roles of ribosomes, ATP and tRNA in translation. • Describe the structure of tRNA and how it is related to its function. • Relate the base sequence of nucleic acids to the amino acid sequence of polypeptides, when provided with suitable data about the genetic code. • Explain what a gene mutation is and how it arises. • Explain what is meant by a deletion and substitution mutation and the potential consequences of each (linked to primary protein structure). • Interpret base sequences to identify gene mutations and their impact. • Describe what a mutagenic agent is and identify some possible mutagenic agents. • Explain the different outcome of mitosis and meiosis. • Explain how meiosis results in variation.

	• Complete diagrams showing the chromosome content of cells after the first and second meiotic division, when given the chromosome content of the parent cell. • Recognise where meiosis occurs when given information about an unfamiliar life cycle. • Explain how random fertilisation of haploid gametes further increases genetic variation within a species. • Explain what a non-disjunction event is and how it occurs. • Compare and contrast gene and chromosomal mutations. • Explain what is meant by genetic diversity and allele frequency. • Explain the concept of reproductive success. • Explain the principles of natural selection and how selection and adaptation are major factors in evolution and contributing to species diversity. • Apply knowledge to unfamiliar information to explain how selection produces changes within a population of a species. • Explain what is meant by directional and stabilising selection. • Identify types of selection from distribution curves. • Interpret data relating to the effect of selection in producing change within populations. • Apply knowledge of types of selection to explain antibiotic resistance and human birth weights. • Explain the basis of working aseptically and the standard techniques for doing so. • Apply knowledge of types of selection to explain antibiotic resistance. • Explain what a species is. • Appreciate the difficulties in defining the term species. • Explain the role of courtship and why it is necessary. • Interpret information and data relating to courtship displays. • Explain the hierarchical taxonomic ranks used in the classification of species. • Interpret phylogenetic trees. • Apply knowledge to identify different taxonomic ranks from information provided. • Appreciate the difficulties in constructing valid phylogenetic classifications. • Explain how the results of genetic sequencing and immunological analysis can help us to update our understanding of evolutionary relationships. • Interpret results from genetic and immunological analysis, to draw valid conclusions as to evolutionary relationships between organisms. • Explain what is meant by the terms biodiversity, species richness and index of diversity. • Calculate the index of diversity when supplied with relevant information. • Interpret information and draw conclusions from the index of diversity for different habitats. • Explain how farming techniques impact on biodiversity and the reason why these techniques are used • Evaluate conservation techniques and why these must be balanced with farming. • Explain how the results of DNA hybridisation and biochemical analysis can be used to suggest relationships between different organisms within/between species. • Interpret data obtained from DNA hybridisation or biochemical analysis. • Explain how gene technology has changed the way in which relationships between organisms are worked out. • Evaluate direct DNA/protein sequencing against methods of measuring the frequency of characteristics. • Explain how random samples can be obtained.

	• Explain what standard deviation is and how it is calculated. • Represent raw and processed data clearly using tables and graphs. • Interpret data in terms of means and the overlap of standard deviation bars. • Apply knowledge of, to draw and explain conclusions. • Evaluate the quality of results and reliability of conclusions.
What previous knowledge is required?	• The hierarchical organisation of cells into tissues, organs and organ systems, exemplified by the stomach and the digestive system. • The role of amylase, protease and lipase enzymes in the digestion of large, insoluble food molecules and their sites of production. • The role of bile in emulsifying fats and neutralising acid from the stomach and the site of its production/storage. • Diffusion is the movement of molecules from a region of high to low concentration. • Xylem and phloem tissue transports substances around a plant. • Chromosomes are made of DNA which has a double helix structure. • A gene is a small section of DNA with the code for a particular combination of amino acids which make a specific protein. • Cells in reproductive organs divide to form gametes by a process called meiosis. • When a cell divides during meiosis, copies of the genetic information are made and then the cell divides twice to form four gametes, each with a single set of chromosomes. • When gametes join at fertilisation, a single body cell with new pairs of chromosomes is formed. • Darwin's theory of evolution by natural selection states that all species of living things have evolved from simple life forms that first developed more than three billion years ago. • Individual organisms within a particular species may show a wide range of variation because of differences in their genes. • Individuals with characteristics most suited to the environment are more likely to survive to breed successfully. • The genes that have enabled these individuals to survive are then passed on to the next generation. • Where new forms of a gene result from mutation there may be relatively rapid change in a species if the environment changes. • Studying the similarities and differences between organisms allows us to classify organisms and understand evolutionary/ecological relationships. • Variation between organisms can be caused by the genes they inherit, the conditions in which they develop, or both.
Resources	Revision guides, Kerboodle on-line textbook - https://www.kerboodle.com YouTube – crash course biology - (15) Biology - YouTube AQA | Resources | Past Papers & AQA Mark Schemes Required practicals https://youtu.be/P6VRvQ7p2mk?si=CYgb7W6CAiDrCb6z (31) Primrose Kitten Academy | GCSE & A-Level Revision - YouTube Google NotebookLM | Note Taking & Research Assistant Powered by AI

	https://www.briskteaching.com
Links to the national curriculum/specification	*https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF*
Assessments	End of topic tests. Students are informed ahead of time what exact spec points are to be tested in each paper. Marked and annotated by teachers and a U-A grade awarded. Cumulative tests will be set on a regular basis without warning.
Term Five	
Content of study	Revision and AS exams
What are the aims and objectives of this term?	To revise key content based upon data analysis and AfL and sit AS exams
What previous knowledge is required?	All of AS Biology
How will this term's content help with future learning?	Informs A2 Biology
Resources	Revision guides, Kerboodle on-line textbook Kerboodle - https://www.kerboodle.com YouTube – crash course biology - (15) Biology - YouTube AQA | Resources | Past Papers & AQA Mark Schemes Required practicals https://youtu.be/P6VRvQ7p2mk?si=CYgb7W6CAiDrCb6z (31) Primrose Kitten Academy | GCSE & A-Level Revision - YouTube Google NotebookLM | Note Taking & Research Assistant Powered by AI https://www.briskteaching.com
Links to the national curriculum/specification	*https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF*
Assessments	External examinations
Term Six	
Content of study	Required practicals
What are the aims and objectives of this term?	Students are to be assessed in the first 6 practicals from within the AQA AS Biology scheme
What previous knowledge is required?	All AS biology
How will this term's content help with future learning?	15% of marks in the exams are based on practical work done in the required practicals.

Links to the national curriculum/specification	https://filestore.aqa.org.uk/resources/biology/specifications/AQA-7401-7402-SP-2015.PDF