

Y9: Subject Curriculum Outline

Year 9 Subjects	Term One	Term Two	Term Three	Term Four	Term Five	Term Six
Mathematics: Higher	Number - Calculate with whole numbers, decimals, powers, and roots, including using place value, rounding, and estimation - Use index notation and laws, including with calculators and the order of operations - Apply the product rule for counting - Identify factors, multiples, primes, and perform prime factor decomposition - Find and use HCF and LCM through various methods, solving related problems - Convert between standard form and ordinary numbers - Perform calculations with numbers in standard form - Interpret and enter standard form on a calculator - Understand and simplify surds using square factors	Algebra - Form, simplify, expand, and factorise algebraic expressions - Generate and analyse sequences using the nth term, including arithmetic and quadratic - Distinguish between arithmetic, quadratic, and geometric sequences Statistics - Design, complete and interpret two-way tables and frequency tables for discrete and grouped data - Sort, classify and tabulate quantitative data - Calculate mean, median, mode and range from raw data, frequency tables and stem-and-leaf diagrams (including comparisons) - Understand the advantages and limitations of different averages - Estimate averages from grouped data using mid-interval values	Representing & interpreting data - Choose, produce and interpret appropriate charts (bar, pie, line, time-series, frequency polygons, histograms) - Compare data sets using charts and summary statistics - Use charts to identify patterns, trends, and make estimates or comparisons Scatter Graphs & Correlation - Interpret scatter graphs, identifying correlation, outliers and making predictions - Understand that correlation does not imply causation - Interpolate and extrapolate trends with caution Fractions, ratio & percentages - Calculate with fractions, mixed numbers, reciprocals, and recurring decimals - Solve problems using ratio, proportion, and percentages (including reverse) - Use fractions, ratios, and percentages interchangeably	Ratio & Proportion - Understand and simplify ratios, including part:part and part:whole - Divide quantities in a given ratio and solve problems using known values - Represent ratios as fractions and linear functions - Identify and use direct proportion in tables and real-life contexts (e.g. scale models, recipes, currency conversion). Polygons, Angles & Trigonometry - Use angle properties of polygons and parallel lines, giving reasons - Apply Pythagoras' Theorem and trigonometric ratios to find missing sides or angles - Recall exact values for sine, cosine, and tangent.	Graphs - Plot points and interpret linear graphs in all four quadrants, including real-life contexts - Calculate gradients, intercepts, and other measures from graphs - Use and identify equations of straight lines, including special, parallel, and perpendicular lines - Analyse and interpret linear and scatter graphs, including lines of best fit. Perimeter, Area & Volume - Use formulae to calculate area and perimeter of standard and compound 2D shapes, including circles and parts of circles - Estimate measurements for reasonableness - Identify parts of a circle and apply circle formulae, including solving for missing values - Form and solve equations involving geometric shapes	Statistics & sampling - Specify a problem, plan an investigation, and decide what data and analysis are needed, considering fairness - Recognise types of data (primary, secondary, quantitative, qualitative) - Identify, collect, and organise suitable data, including grouped data, from various sources - Understand bias, sampling, and how samples may not represent the whole population - Understand the distinction between a sample and a population Accuracy & Bounds - Calculate upper and lower bounds of numbers and expressions, including those involving the four operations, measurements, and geometric calculations (perimeter, area, volume) - Apply bounds in real-life contexts using appropriate accuracy - Use inequality notation to express error intervals from rounding or truncation

Mathematics: Foundation	Number - Use, compare, and order integers and decimals, including negative numbers, with all four operations - Apply place value, rounding and estimation to check calculations - Use brackets and the hierarchy of operations, including with indices - Perform calculations with decimals including $\times / \div$ by numbers between 0 and 1 - Read, write, and interpret numbers in decimal and standard form - Recall and use squares, cubes, roots, and index notation - Apply index laws and simplify expressions using calculators and mental methods - Identify factors, multiples, primes, and perform prime factor decomposition using index form - Find and use HCF and LCM using listing, Venn diagrams, and prime factors to solve problems - List all three-digit numbers formed from given digits and solve related number problems	Algebra - Use correct notation and symbols, including $\neq$ and $\equiv$ - Write, select, and simplify algebraic expressions using like terms and index laws - Multiply and cancel algebraic terms using index notation - Expand and simplify expressions, including using squares, cubes, and brackets - Factorise expressions by taking out common factors - Show equivalence between algebraic expressions through reasoning - Write and use expressions and formulae to model problems and situations - Substitute values, including positives, negatives, brackets, powers, and roots, into expressions and formulae	Graphs, tables & charts - Collect, sort, classify, and tabulate discrete, continuous, and qualitative data using appropriate notation - Design and interpret data collection sheets, two-way tables, timetables, and time-series tables - Use inequalities in grouped data and identify totals, modes, and modal class from frequency tables - Plot coordinates and read graph scales in the first quadrant - Produce and interpret charts (e.g. pictograms, bar charts, line graphs, histograms, stem-and-leaf, pie) for various data types - Extract key information (e.g. mode, totals, greatest/least values) and recognise patterns in charts - Interpret and represent data using suitable charts and tables for different data types - Draw and interpret scatter graphs, using lines of best fit to analyse correlation, trends, and limitations	Fractions, decimals & percentages - Represent, compare, and simplify fractions using diagrams and equivalents - Convert between improper fractions and mixed numbers - Order and compare fractions, decimals, percentages, and integers using inequality signs - Add, subtract, multiply, and divide fractions and mixed numbers - Find fractions of quantities and use unit fractions as inverses - Convert between fractions, decimals, and percentages, including recurring decimals - Use conversions and decimals to simplify calculations - Understand percentages as fractions out of 100 and use them to compare quantities - Calculate percentage increase, decrease, and apply multipliers - Solve real-life percentage problems (e.g. VAT, profit/loss, interest, tax)	Equations, inequalities & sequences - Form, solve, and rearrange linear equations, including contextual problems - Substitute into formulae and estimate solutions using graphs - Solve, represent, and interpret inequalities, including double inequalities and error intervals - Generate and analyse sequences using the nth term, distinguishing between arithmetic, quadratic, and geometric types Polygons, angles & parallel lines - Estimate, measure, and describe angles using correct notation and geometric language - Understand angle types and key angle sums (e.g. in triangles, quadrilaterals, and full turns) - Identify and use properties of parallel and perpendicular lines, - Apply angle rules for lines, triangles, and quadrilaterals to solve problems with reasoning - Recall and classify triangles and quadrilaterals by their properties	Statistics & sampling - Specify a problem, plan an investigation, and decide what data and analysis are needed, considering fairness - Recognise types of data (primary, secondary, quantitative, qualitative) - Identify, collect, and organise suitable data, including grouped data, from various sources - Understand bias, sampling, and how samples may not represent the whole population - Understand the distinction between a sample and a population Averages & range - Calculate and interpret mean, median, mode, and range for discrete data - Find averages from frequency tables (discrete and grouped), bar charts, and stem-and-leaf diagrams - Estimate the mean from grouped data using mid-interval values - Compare averages and range between two distributions using various charts - Understand the advantages and limitations of different measures of average

Science	Cell Biology and Transport Core Knowledge - Identify and describe the structures and functions of prokaryotic and eukaryotic cells, including specialised cells and their adaptations. - Understand the key differences between diffusion, osmosis, and active transport, and can explain how substances move into and out of cells. - Learn how microscopes can differ and how they are used to study cells, including how to calculate magnification.	Organisation and the Digestive System Core Knowledge - Understand the five levels of organisation in living organisms: cells, tissues, organs, organ systems, and organisms, with the digestive system serving as an example of an organ system. - Learn the specific functions of the organs within the digestive system, including the salivary glands, oesophagus, stomach, small intestine and large intestine. - Will identify the roles and sites of production for key digestive enzymes and how factors like temperature and pH affect enzyme activity, including the concept of denaturation.	Energy Transfer by Heating Core Knowledge - Describe how thermal energy is transferred through materials and how thermal conductivity, material thickness, and temperature difference affect this process. - Understand and apply the concept of specific heat capacity to calculate thermal energy changes in materials. - Explain how infrared radiation affects temperature, including the greenhouse effect.	Molecules and Matter Core Knowledge - Understand that changes of state are physical processes where mass is conserved, and that heating a substance increases the kinetic energy of its particles. - Learn that internal energy is the sum of a substance's kinetic and potential energy of particles, and that latent heat is the energy transferred during a change of state. - Learn that the pressure of a gas is caused by particles hitting container walls; students will also understand the factors which affect pressure.	Photosynthesis Core Knowledge - Understand that photosynthesis is an endothermic chemical reaction in plants where light energy is absorbed by chlorophyll to convert carbon dioxide and water into glucose and oxygen. - Identify the limiting factors for the rate of photosynthesis, and how these factors interact. - Learn the inverse square law for light intensity and understand how plants utilize the glucose produced for various functions.	Energy Changes Core Knowledge - Understand that chemical reactions involve energy transfers: exothermic reactions release energy to the surroundings, while endothermic reactions absorb energy from the surroundings. - Learn that reaction profiles illustrate these energy changes, including the activation energy, and that overall energy changes in reactions are determined by the balance between energy required to break bonds and energy released when making new bonds. - Learn that chemical cells generate electricity from electron transfer in reactions, with the potential difference depending on metal reactivity, while fuel cells use fuels and oxygen to produce electricity with water as the only waste product.
	Atomic Structure Core Knowledge - Understand the structure of atoms, relative mass, and charges of protons, neutrons, and electrons, as well as how to calculate atomic and mass numbers. - Explain the historical development of atomic models, from Dalton to Bohr and Chadwick. - Learn to distinguish between elements, compounds, and mixtures, and know the physical techniques used to separate mixtures	Periodic Table Core Knowledge Understand the historical development of the Periodic Table, from early attempts at ordering elements by atomic mass to Mendeleev's predictions and the modern arrangement by atomic number.	The heart and Transport in Plants Core Knowledge - Learn about the structure and function of the human heart, and how blood flows through it to deliver oxygen. - Understand common heart issues like coronary heart disease and faulty heart valves, and the medical interventions used to treat them. - Be able to explain the structure and function of the xylem and phloem in plants.	Structure and Bonding Core Knowledge - Learn how atoms can form ions by gaining or losing electrons, leading to ionic bonds which are attracted by strong electrostatic forces in a giant ionic lattice. - Understand that covalent bonds involve the sharing of electrons between non-metal atoms, forming a range of structures. - Learn that metals consist of positive ions	Energy Resources Core Knowledge - Understand that energy resources are primarily used for generating electricity, heating, and transport, with most current energy coming from non-renewable fossil fuels. - Learn the advantages and disadvantages of various non-renewable energy sources (coal, oil, natural gas, nuclear fission) and renewable energy sources (hydroelectric, tidal, wave, wind, geothermal, biofuels).	Respiration Core Knowledge Understand that cellular respiration is a continuous exothermic reaction occurring in

	Conservation of Energy Core Knowledge - Understand that energy exists in various stores and can be transferred between these stores or to the surroundings - Comprehend that in a closed system, the total energy remains constant, as energy cannot be created or destroyed, only transferred usefully, stored, or dissipated. Learn that the efficiency of an energy transfer measures how much energy is usefully transferred, and that unwanted energy transfers due to friction or resistance can be reduced.	- Learn the characteristics of Group 1 alkali metals, including their reactivity with oxygen, chlorine, and water, and how their reactivity increases down the group. - Describe the properties of Group 7 halogens, and will learn about the inert nature of Group 0 noble gases due to their full outer shells.		in layers surrounded by delocalised electrons, explaining their properties, and will compare alloys to pure metals.	Be able to compare and contrast different energy resources based on factors such as greenhouse gas emissions, waste products, reliability of supply, and initial setup costs.	living cells to release energy from glucose. - Learn the difference between aerobic respiration and anaerobic respiration - Study the body's physiological responses to increased energy demand during exercise, and the concept of oxygen debt for removing accumulated lactic acid after anaerobic respiration.
English	Shakespeare: Romeo and Juliet Students will study Romeo and Juliet and explore different character perspectives but also the differing perspectives of a modern versus Elizabethan audience.		English Language Paper 1: Familial Relationships Students will study four fiction extracts that link to family relationships and explore the perspectives from which these stories are told.	Poetry: Conflict Students will study a collection of poetry, some of which are taken from the AQA Power and Conflict poetry cluster but are not the poems from their own GCSE cluster.	English Language Paper 2: Viewpoints and Perspectives Students will study four nonfiction extracts and will explore the perspectives presented in the writing.	Modern Novel: The Giver by Lois Lowry Students will study a contemporary dystopian novel and explore the genre in depth and key conventions of this genre.
History	The Treaty of Versailles and the Rise of the Nazis Investigate how the end of WWI and the Treaty of Versailles contributed to political instability in Germany and the rise of the Nazi Party.	Nazi Control and Dictatorship Examine how the Nazi regime maintained power through terror, propaganda, and popularity, and assess the links between these factors.	The Holocaust Understand the development of anti-Semitic policy under the Nazis and trace the persecution of Jewish people from discrimination to genocide.	WWII and the Cold War: An Overview Gain a broad understanding of key events in WWII and the global tensions that followed in the early Cold War.	GCSE Medicine: Medieval Period (1250-1500) Study how medicine was practised in medieval England and evaluate the role of religion, training, and natural ideas.	GCSE Medicine: Renaissance Period (1500-1700) Explore developments in medicine during the Renaissance including key individuals and new ideas.

	Core knowledge: - Key terms and impact of the Treaty of Versailles - Weaknesses of the Weimar Republic - The Beer Hall Putsch and political violence - Effects of the Wall Street Crash on Germany - Nazi propaganda and electoral success - Source analysis and interpretation skills	Core knowledge: - Use of terror: SS, Gestapo, concentration camps - Consent and popularity: economic recovery, Hitler Youth, public works - Role of propaganda: rallies, film, media control - Factor analysis: comparing causes of control - Essay writing on key reason for Nazi control	Core knowledge: - Long-standing anti-Semitism and Nazi ideology - Nuremberg Laws and legal discrimination - Kristallnacht and increasing violence - Ghettos and forced segregation - The Final Solution and Auschwitz - Source and interpretation analysis	Core knowledge: - Key battles and turning points in WWII - Home front and global impact of war - Origins of the Cold War: USSR vs USA - The Iron Curtain and key tensions	Core knowledge: - Causes of disease and beliefs about illness - Role of the Church and supernatural beliefs - Treatments, surgery, and public health - Healers: apothecaries, physicians, barber-surgeons - Assessment: Essay on the role of the medieval healer	Core knowledge: - Renaissance ideas and their impact on medicine - Vesalius, Harvey and changes in anatomy and circulation - The Great Plague vs Black Death - Some exploration of developments in the Industrial Period (Jenner / vaccines and Florence Nightingale / nursing)
Geography	Economics and Development - Study of the factors influencing wealth, inequality, and sustainable development on local and global scales Core knowledge: - What is development? - Measuring development - Employment sectors - Globalisation Sustainable development goals	Sustainable Futures - Students explore solutions for balancing environmental, social, and economic needs for a sustainable world. Core knowledge: - Fossil Fuels - Fracking - Renewable Energy	Natural Hazards - Investigating the causes, impacts, and management of extreme natural events and their effects on people and environments. Core knowledge: - Tectonic processes and boundaries - Volcanoes - Earthquakes - Hurricanes Case studies e.g. Christchurch, Haiti, Katrina, Haiyan	Geography of Disease - Understand the spatial patterns, causes, and impacts of diseases, as well as their connections to population, development, and the environment. Core knowledge: - Types and causes of disease - Disease patterns - Transmission methods - Impacts of disease - Comparison of diseases in HICs and LICs Management of disease	Challenging Environments - Understand how extreme conditions shape ecosystems, human activity, and the strategies used to adapt and thrive in such areas. Core knowledge: - Types and characteristics of environments - Challenges for humans - Human adaptations - Use of challenging environments	Skills - Equip students with the tools to interpret data, use maps, conduct fieldwork, and critically analyse geographical information. Core knowledge: - Map skills - Data skills - Communication and critical thinking Numerical and mathematical skills
Ethics and Philosophy	Evil and Suffering: To study the philosophical concepts of both evil and suffering and the impact this can have on the world.	Forgiveness: To look at the complex nature of forgiveness from a religious and secular perspective.	Judaism: To study Judaism as a living religion and the impact it has in modern society. (This usually takes two terms to study in the right amount of depth)	Judaism continues:	Controversial issues: A unit of work that examines a range of current controversial issues. (This builds upon those studied in year 7 and 8)	Buddhism: To explore Buddhism as a living religion.

	Core Knowledge: - To explore the problem of Evil and the effect this can have on belief in God. - To know the difference between natural and moral evil. - To example of suffering in the modern world	Core Knowledge: - To understand what forgiveness is - To be able to apply a range of religious teachings to the topic - To apply their knowledge to a range of case studies including Anthony Walker and Amy Biehl.	Core Knowledge: - To know about the covenant made by Moses - To understand the importance of the 613 laws found in the Torah - To examine the importance of religious festivals - To look at the role the synagogue place in a Jews everyday life	Core Knowledge: - To understand the impact that the Holocaust has had on the faith - To understand the importance of the promised land and to have a working knowledge of the current conflict in Israel	Core Knowledge: - To look at the role of women within religion - To examine the differences between monogamy and polygamy - To look at the issue of forced marriage. - To explore whether all cults are dangerous To look at whether cloning has a place when exploring reproductive ethics	Core Knowledge: - To understand that this is an Atheistic faith - To have a working knowledge of the Dharma or key teachings of the Buddha. Including the 5 precepts and the 8 fold path. To know who the Dalai Lama is and his importance to Tibetan Buddhists
Languages	Family and Friends - Reviewing basic descriptions of others and talking about our relationships. Core Knowledge: - Review of phonics. - Reviewing basic physical and personality descriptions (myself and family). - Saying who you get on well with and why. - Using reflexive relationship verbs. - Saying what we usually do with our family/friends. Using varied language, and extended structures and opinions.	Future plans - Describing our personal plans for the future linked to relationships, marriage and post-18. Core Knowledge: - Review of phonics. - Saying what your friends are like. - Reviewing present tense verbs. - Discussing the qualities of an ideal friend and an ideal partner. - Sharing your plans for next weekend with your family/friends. - Using intentional future structures. Using 'if' clauses to say what you would do in future if you could.	Customs and Celebrations - Talking about food, drink and festivals from the French and Spanish speaking world. Core Knowledge: - Review of phonics. - Learning about different foods, drinks and traditional dishes from French/Spanish speaking countries. - Learning about festivals and how they are celebrated. - Talking about personal celebrations in the past. Practising using and conjugating verbs in the past tense.	Where I live - Talking about our home and local area in detail. - Discovering new places in French/Spanish speaking countries. Core Knowledge: - Review of phonics. - Talking about our home, town and region. - Learning the key features of a Francophone/Hispanic city. - Talking about shops, buying items and shopping habits.	The environment - Discussing important environmental concerns and our global responsibilities. Core Knowledge: - Review of phonics. - Talking about environmental and social issues – natural and man-made disasters. - Discussing human rights. - Saying what we should do to save the planet. - Reviewing conditional tense structures. Activities for how to become a social role model and global ambassador.	An introduction to the GCSE – Life at School - Introducing GCSE structures and phrases with a familiar topic. Core Knowledge: - Reviewing phonics and key sound patterns. - Giving a variety of opinions on school subjects. - Talking about your school facilities. - Giving detailed opinions on uniform. Saying what you would do to improve your school.

Art	Theme: Animals and Habitats - drawing focusing on different animals, birds and reptiles and their habitats. Artist Link: Rachelle Dyer, Lina Keil, Anastasiia, Firsova, Linn Warne, Kleuren Voor Volwassener, Jesi Thompson, Dashkevich Snezhana. Core Knowledge: Observation drawing skills using visual elements; lines, shapes, tone, pattern and textured mark making. Focus on detailed realistic drawings, blind drawings and stylised approaches. Analysis of other artists work. Media and techniques; pencil, graphite sticks, rubbers, fine liner.	Theme: Animals and Habitats - developing a composition of animals in their habitat. Exploring mixed media and then selecting to create a final piece. Artist Link: Marcia Balwin, Carolee Vitaletti, Kendahal Jan jubb, Henri Rousseau Core Knowledge: Exploring different media and techniques and reviewing and refining the results. Creating a composition. Exploring the effects of colour and applying the other visual elements from the previous term into the colour media and techniques. Media and techniques; wax resist, watercolours, inks, sanitiser fluid, colouring pencil and fineliner.	Theme: Realistic portrait - drawing; focusing on proportion of the face, tone and mark making. Artist Link: Lina Iris Viktor, Shepard Fairey, Gustav Klimpt. Core Knowledge: Observation drawing skills using visual elements; line, shape, tone and textured mark making. Analysis of other artists work. Media and techniques; pencil, graphite sticks, rubbers.	Theme: Portraits, Identity and Pattern - lino print focusing on how portraits and patterns can be combined in art work. Artist Link: Lina Iris Viktor, Shepard Fairey, Gustav Klimpt. Core Knowledge: Use drawing skills to create a design for a reduction lino print, focusing on composition, line, shape, and pattern. Exploring lino printing techniques and colour combinations and how to refine and develop prints further. Media and techniques; lino printing, printing inks, cut and layering prints.	Theme: Masks - using drawings of close up birds or big cats as a starting point to design a three dimensional decorative mask. Artist Link: Sri Lankan and Venetian masks, African and Theatre masks, Tinga Tinga art. Core Knowledge: Observation drawing focusing on abstract detailed marks and patterns. Use observation drawings to inspire a mask design, combined with cultural art patterns if desired. Media and techniques; pencils, colouring pencils, wax resist, oil pastels.	Theme: Masks - Create a 3D mask of a bird or big cat using card and paper sculpting techniques. Artist Link: Sri Lankan and Venetian masks, African and Theatre masks, Tinga Tinga art. Core Knowledge: Explore a variety of paper sculpting techniques, considering shape, texture, pattern and colours. To construct an effective three dimensional mask based on their own design. Media and techniques; Paper sculpting and folding, quilling, card, PVA glue, coloured paper, scissors, knives.
	Exploring dance skills through repertoire Students learn repertoire and explore their use of technical and expressive performance skills Core knowledge ● Repertoire ● Technical performance skills - flexibility, coordination, strength, stamina.	Professional work - <i>Into the Hoods</i> by Kate Prince (Zonation) Analysing characters and street dance styles to discover the choreographic purpose. Core knowledge ● Repertoire ● Stimulus ● Purpose ● Stylistic qualities ● Features - set, costume, lighting,	Dancing around the world Discovering different dance styles from different parts of the world Core knowledge ● Culture ● Learning areas around the world and their associated cultures ● Dance styles - African dance, Jazz, Jive, Salsa and Indian dance ● Having a deeper understanding of stylistic qualities		The rehearsal process and feedback - preparation for Now Dance A focus on how we rehearse a dance and giving and receiving feedback Core knowledge ● Teacher feedback, self feedback and peer feedback ● Repetition ● The rehearsal process	Working from a brief Students are given a theme and they work in groups to choreograph and perform a dance which responds to this theme. Core knowledge ● Brief ● Choreographic Intention ● Designer ● Commission ● Context and scenario

Drama	Mini Text based unit – Blood Brothers - CAREERS link - Scriptwriting Exploration of the Musical Play Blood Brothers by Willy Russell Core Knowledge: • Literacy Skills - Scriptwriting and performing • Use of accent and proxemics • Duologue - paired performances		Devising from a Stimuli - includes practitioner workshops in the style of physical theatre - group dependent unit with Mini Theatre Review Core Knowledge: • Performing • Creating • Analysis and Evaluation		Street Theatre - exploring all the performing arts to create an outdoor performance in school. Core Knowledge: • Performing Arts • Creating • Peer Evaluation and participation
	Salsa Learn about contextual information and the stylistic features of Salsa music. Develop performance skills using technology. Core Knowledge: • Understand where Salsa music comes from and the way it is constructed. • Play a variety of simple and complex rhythmic, melodic and chordal parts. • Develop sequencing skills. • Perform in time using music technology	Disco Learn about contextual information and the stylistic features of Disco music. Develop ensemble performance skills Core Knowledge: • Understand where Disco music originated from and the way it is constructed. • Perform a variety of parts to ‘Funky Town’ • Develop collaboration skills and further improve performance skills when in an ensemble.	Samba Learn about contextual information and the stylistic features of Samba music. Develop rhythmic composition skills Core Knowledge: • Understand where Samba music originated from and the way it is constructed. • Develop collaboration skills and further improve performance skills when in an ensemble. • Can create Samba groove rhythms.	Film Music Learn about the history of and stylistic features used in film music. Create music to accompany a film clip using sequencing technology. Core Knowledge: • Create own music to accompany a film clip • Develop sequencing skills. Perform in time using music technology	Battle of the Bands Learn about the pop music industry Develop ensemble performance skills Core Knowledge: • Develop collaboration skills and further improve performance skills when in an ensemble. • can problem solve to work out rhythmic, chordal and melodic content to pop music songs.

Computer Science	E-Safety - Identify what constitutes inappropriate content and understand its impact. - Understand the concept of social media bubbles and the importance of protecting personal identities online. - Learn how to report concerns effectively and research information responsibly. - Learn to structure a report and format it professionally using word processing tools. - Explore the safe use and risks of AI tools, in the context of social media	Programming - Advanced loops - File handling - Debugging			Programming - Modular Programming: Organizing code with functions and modules. - Using Libraries: Introduction to libraries like random and math. - Data Analysis (Part 1): Working with lists and basic statistics. - Data Analysis (Part 2): Visualizing data with text-based outputs. - Problem Decomposition: Breaking down a complex problem into smaller tasks. - Capstone Project: Designing a program that integrates concepts from all modules.	Ethical, Environmental, Legal, Future Tech
	Core Knowledge - Inappropriate Content - Social Media Bubbles - Reporting concerns - Protecting identities - Word Processing - Researching - Safe use of AI	Core Knowledge - Advanced Loops: Nested loops and practical applications. - String Manipulation: Advanced string operations. - File Handling (Part 1): Reading and writing to text files. - File Handling (Part 2): Applying file handling in projects. - Debugging Strategies: Identifying and fixing errors. - Final Project: Creating a program with file handling and user interaction.			Core Knowledge - Modular programming - Using libraries - Problem decomposition.	What is AI? - Basic introduction to AI and machine learning concepts. - Examples of AI in everyday life. - Ethics of AI - Discussing bias, fairness, and decision-making in AI systems. - Case studies of AI misuse (e.g., surveillance, deepfakes). - Jobs and AI: The Future of Work - How AI is transforming industries and creating new opportunities. - Potential risks of job displacement. - Legal and Ethical Implications of AI - Exploring issues like accountability, privacy, and regulation in AI development. - Emerging Technologies Beyond AI - Brief overview of quantum computing, robotics, and biotech. - Discussing the role of ethics in innovation.

Year 9: Design Technology Curriculum

NB: Students select their chosen specialism at the end of Y8 and will study these for the entire year				
Timbers	Timbers – Tealight Holder - Introduction to Primary and Secondary research – Tealight sizes - Orthographic Drawing – 2D Drawing techniques, Scale drawing - Techsoft CAD templates - Wood Finishes – Oil, Wax, Varnish, Stain Core Knowledge - Product Analysis - Orthographic Drawing - Isometric Drawing - Annotation - CAD drawing - Hand tool skills - Machine skills - Finishing skills	Timbers – Mobile Phone Amplifier - Introduction to Ideation – rapid design idea generation - Primary research – Phone sizes - Scale drawing in Isometric – Ellipses & curves - CAD development - Foam prototyping – Development through modelling - Advanced machining skills Core Knowledge - Product Analysis 2D sketching - Isometric Drawing - Annotation - CAD drawing - translations - Solid Modelling skills - Third Party Testing	Timbers – Acrylic Clock - Introduction to design movements of the past 100 years - Taking inspiration from past products 2D scale drawing of clock designs 2D card prototyping – scale modelling of the clock - CAD / CAM manufacture – Laser cutting the clock components - Joining plastics – Solvent adhesive, machine screws, Threading holes Core Knowledge - Design Movement Analysis - Specification Writing 2D scale drawing Drawing - Annotation - CAD drawing - components - CAM manufacture – Laser cutter - Plastic adhesives	Timbers – Bird Box - Creativity – working around design fixation - RSPB research into garden birds needs - Working with Manufactured boards – exterior plywood - Ways to make wood more water resistant - Corrugated card prototyping - Experimentation of materials, processes and techniques Core Knowledge - Product Analysis 2D scale drawing - Rendering - CAD templates - Card prototyping - Development modelling and experimentation - Marking out - Reinforcing Hand tool skills - Reinforcing Machine Skills
Graphic Design	Architecture- Retail Park	Fillafragrance/ Recyclaphone product -Research- Environmental awareness -Design Brief/Specification writing -Sketching methods -2D, Isometric -Development of ideas -Annotation	Fillafragrance/ Recyclaphone product Continued with a focus on practical skills	Fillafragrance/ Recyclaphone - Packaging -Research- Environmental awareness -Sketching methods -2D, Isometric -Net packaging types -Typography & branding -Development of ideas

		-Foam prototype modelling skills using hand tools. -Finishing skills. -Manufacturing diary, including Health & Safety and Quality control considerations			-Adobe Illustrator design software -Card prototyping --Manufacturing diary, including Health & Safety and Quality control considerations	
Textiles	Textiles - Drawstring bag - The theory of surface decoration - Designing to a brief of geometric shapes. - Developing decorative techniques such as Batik, tie dye, mola, free machine embroidery and block printing - communicating detailed design ideas - Pockets - how to make and attach Core knowledge: - Annotation of designs - layering techniques creatively - Quality and accuracy when using tools and machinery	Textiles - Drawstring bag - Dyeing a base fabric - Applying decorative techniques such as Batik, tie dye, mola, free machine embroidery and block printing - How to construct a drawstring bag Core knowledge: - layering techniques creatively - quality and accuracy when using machinery	Textiles - Charity Dress and Dungarees - Cultural and ethical considerations of Textiles production e.g. fast fashion and cotton production - Introduction to how culture affects design choices - Introduction to the charity we will be making garments for - Choosing a culture to represent when design the garment - Research chosen culture - Profile the user - Analyse existing products - Create a design specification Core knowledge: - Awareness of how culture affects design choices - Research skills - Analysis skills	Textiles- Charity Dress and Dungarees - Test different construction methods such as seams - Design to the brief of representing a child's culture Core Knowledge: - Using sewing machine safely and accurately - Evaluation skills - Annotation of designs	Textiles Charity Dress and Dungarees - Apply previous skills into the surface decoration of the garment - Construct the garment with quality and accuracy Core knowledge: - layering techniques creatively - Quality and accuracy when using tools and machinery - Construction skills such as curved seams and button holes	Textiles - Charity Dress and Dungarees - Apply previous skills into the surface decoration of the garment - Construct the garment with quality and accuracy Core knowledge: - layering techniques creatively - Quality and accuracy when using tools and machinery - Construction skills such as curved seams and button holes

Food and Nutrition	Food Science	Food Investigation	Food from other cultures/cuisines	Italian and British Food	Afternoon tea	South American & African food
	Chemical and Functional Properties	Chemical and Functional Properties			Savoury & sweet products	
	Protein - protein denaturation - protein coagulation - gluten formation - foam formation	Raising agents Carbohydrates - gelatinisation - dextrinisation	Practical skills Ingredients from other countries	Practical skills	British food Practical skills	Dietary needs veg/vegan/pescatararian etc Lifestages and diet

Year 9: PE Curriculum

Year 9 Subjects	Team games	Striking & Fielding Activities	Athletics	Fitness	Racquet Activities	Swimming	Gymnastics
Physical Education	Activities Covered: Netball / Basketball / Football / Volleyball / Handball	Activities Covered: Cricket / Rounders	Activities Covered: Athletics	Activities Covered: -	Activities Covered: Badminton / Tennis / Pickleball	Activities Covered: Waterpolo / Life Saving	Activities Covered: Trampolining
	Core Knowledge Advanced Skill Application Perform a range of skills (e.g. passing, shooting, defending) with control, speed, and under pressure in competitive scenarios. Complex Tactical Understanding Apply advanced tactics such as zonal vs man-marking, switching play, overloads, and pressing	Core Knowledge Technical Precision Perform advanced batting, bowling/throwing, and fielding techniques with control and consistency under pressure. Tactical Awareness Apply strategic decisions like field placements, shot selection, and bowling variations to outwit opponents.	Core Knowledge Technical Refinement Demonstrate efficient and effective technique across running, jumping, and throwing events with a focus on form and mechanics. Performance Analysis Use video or data to evaluate technique, identify strengths/weaknesses,	Core Knowledge Application of Fitness Components Apply understanding of all components of fitness (e.g. power, muscular endurance, agility) to sport-specific contexts. Training Methods and Principles Use and compare various training methods (e.g. Fartlek, HIIT, resistance training) alongside principles like	Core Knowledge Advanced Shot Execution Perform a variety of shots (e.g. drop shots, smashes, spins, lobs) with precision, power, and tactical intent. Movement and Positioning Anticipate play, recover quickly, and position effectively to maintain control and pressure during rallies. Tactical Play and	Core Knowledge Advanced Stroke Technique Refine all four strokes (freestyle, backstroke, breaststroke, butterfly) with improved efficiency, rhythm, and control. Starts, Turns, and Finishes Perform competitive starts, correct turns (e.g. tumble turn), and strong finishes for each stroke. Endurance and Pacing	Core Knowledge Technical Execution Perform core shapes (tuck, pike, straddle) and more advanced moves (e.g. swivel hips, half/full twists, seat/front/back drops) with control and height. Routine Composition Create and perform routines of linked movements showing fluency, creativity, and variation in direction and shape. Body Control and Spatial Awareness

	systems. Strategic Decision-Making Make quick, effective in-game decisions based on game flow, opponent behaviour, and team strategy. Leadership and Communication Lead warm-ups, organise team roles/formations, and use effective communication to guide and support peers. Performance Analysis and Goal Setting Use video, peer and teacher feedback to evaluate performance; set SMART targets for skill and tactical improvement.	Positional Roles and Responsibility Understand and fulfil specific roles (e.g. wicketkeeper, deep fielder, bowler) based on team needs and game situations. Leadership and Communication Take initiative in organising fielding setups, calling plays, and leading team discussions during games. Performance Evaluation and Development Analyse personal and team performance, identify strengths and areas for improvement, and implement strategies for progression.	and apply corrective feedback. Tactical Awareness Apply pacing strategies in races and adapt techniques based on environmental conditions or competition format. Training and Preparation Understand how to structure warm-ups, cool-downs, and event-specific drills for performance and injury prevention. Personal Goal Setting Set and review SMART targets using timed/measured results to track and improve performance over time.	overload, specificity, and progression. Fitness Testing and Monitoring Carry out and interpret fitness tests accurately; monitor progress and relate results to health and performance goals. Health and Wellbeing Impact Understand how exercise influences physical, mental, and emotional health, and the risks of inactivity. Designing Personal Programmes Plan basic fitness programmes using FITT and SMART principles tailored to individual goals and needs.	Strategy Apply in-game strategies such as targeting weaknesses, varying pace, and using space to outplay opponents. Rules and Officiating Understand and apply more complex rules; take on umpiring or scoring roles with accuracy. Performance Evaluation Reflect on your own and others' performance using sport-specific terminology; set personal targets for skill and tactical development.	Swim longer distances using consistent technique and pacing strategies to maintain performance. Water Safety and Survival Skills Demonstrate deep-water survival techniques, safe self-rescue methods, and awareness of open water safety. Performance Analysis and Goal Setting Use personal times and feedback to analyse performance; set SMART targets to improve stroke efficiency and endurance.	Maintain correct posture, tension, and alignment during flight; land safely and consistently. Safety and Spotting Set up equipment correctly, follow all safety procedures, and demonstrate effective spotting and supervision techniques. Analysis and Improvement Use performance criteria and peer/teacher feedback to evaluate routines and refine technical execution.