

Year 9 curriculum learning points

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Art	<p>Explore how to develop key drawing skills via observational drawings</p> <p>Explore & Explain how to use different techniques and media such as pencil/pen, ink/dip pen, colour blocking and scale.</p> <p>How to analyse artists work to inspire your own, using subjective and objective comments</p>		<p>Explore how to further develop painting and drawing skills</p> <p>Explore & Explain how to use different techniques through painting and print making</p> <p>How to further analyse artists work to inspire your own, using subjective and objective comments</p>		<p>Explore how to further develop 3D construction skills</p> <p>Explore & Explain how to use different 3D techniques through clay & card</p> <p>How to further analyse artists work to inspire your own, using subjective and objective comments</p>	
Geography	<p>Understand the characteristics of tropical rainforests and hot deserts and the issues they face</p> <p>Understand tourism patterns and overtourism</p>		<p>Know what is meant by the Anthropocene and be able to discuss current environmental issues</p>	<p>Describe glacial processes and landforms</p>	<p>Describe patterns of urbanisation and explain the opportunities and challenges faced by cities</p>	
Spanish	<p>Describe your town and local area</p>	<p>Describe hobbies in the past tense</p>	<p>Describe your music, film, TV and gaming habits</p>		<p>Describe your relationships with family and friends, and future life plans</p>	
French	<p>Describe your town and local area</p>	<p>Describe hobbies in the past tense</p>	<p>Describe your relationships with family and friends, and future life plans</p>		<p>Describe your music, film and TV preferences</p>	
German	<p>Describe family and friends, relationships with family and friends and future life plans</p>		<p>Describe your hobbies, music, film, TV and online preferences</p>		<p>Describe your food preferences, German traditional foods and German traditional festivals</p>	
History	<p>How far did experiences of WWI live up to expectations?</p> <p>Identify, describe and explain life in WWI – for those</p>	<p>How far was Germany really to blame for WWI?</p> <p>Identify, describe and explain the causes of WWI.</p>	<p>How far was WWII 'Hitler's war'?</p> <p>Identify, describe and explain the 'inter-war' years and the causes of WWII.</p>	<p>How did people experience WWII?</p> <p>Identify, describe and explain life in WWII – for those fighting and those at home.</p>	<p>To consider a range of topics in relation to the Holocaust, e.g.:</p> <ul style="list-style-type: none"> • Pre-war Jewish life • Life under Nazi rule 	<p>How have people campaigned for equality since 1900?</p> <p>Identify and describe various campaigns for</p>

Year 9 curriculum learning points

	fighting and those at home.				<ul style="list-style-type: none"> The Final Solution Life after the Holocaust Impact & legacy of the Holocaust	equality across the 20 th / 21 st century
English	To analyse the use of dramatic techniques used in Arthur Miller's play 'The Crucible'.	To create your own fictional character, using ambitious vocabulary.	To analyse how Shakespeare presents Richard III in his play.	To analyse representations of disability in a range of fiction and non-fiction literature.	To understand features of transactional writing and to apply these when writing for a range of genres.	To analyse how writers use language and structure in a range of fictional extracts
Maths (Foundation)	To know factors and multiples and substitute into an expression	To use a variety of graphs, tables and charts to represent data	To calculate with fractions and solve a 2-step equation	To understand shape properties and calculate angles in different polygons	To calculate with averages including mean, median, mode and range. To calculate surface area and volume 3D solids	To plot linear graphs and read other types of graphs including real life graphs. To use transformations
Maths (Higher)	To calculate with powers and surds and expand brackets, factorise an expression	To interpret and represent data using a variety of diagrams and graphs	To convert between fractions, decimals and percentages and calculate angles in any polygon	To use and understand Trigonometry and Pythagoras' Theorem	To calculate area and volume of 2D/3D shapes and to use transformations and constructions	To solve quadratic equations and solve probability problems
Biology	Describe how the cell structure of eukaryotes and prokaryotes are different.	Describe the cell cycle. Explain how substances get in and out of cells.	Define tissue, organ and organ system. Know the function of the organs in the digestive system.	Explain how enzymes work, and explain the effect of pH and temperature on enzyme function,	Explain how the lungs are adapted to their function.	Describe the structure of the circulatory system. Describe the treatments for coronary heart disease.
Chemistry	Describe elements, compounds and mixtures.	Describe the changes to the idea of an atom over time.	Describe corrosion and explain how it can be reduced.	Describe the development of the periodic table over time.	Describe the reactions of metal oxides. Use the reactivity series to determine	Describe and explain neutralisation reactions with various chemicals.

Year 9 curriculum learning points

	<p>Confidently balance chemical equations.</p> <p>Define and calculate relative atomic mass.</p> <p>Draw electron structures of different elements.</p> <p>Practical skills.</p>	<p>Describe the process of making potable water and waste water treatment.</p> <p>Describe and explain alternative methods of metal extraction (Phytomining and bioleaching).</p> <p>Evaluate products using life cycle assessment data.</p>	<p>Describe the properties and uses of ceramics, polymers and composites.</p> <p>Link the properties of ceramics polymers and composites to their uses.</p> <p>Describe the arrangement of elements in the modern periodic table.</p>	<p>Describe and explain the properties of group 1 elements.</p> <p>Describe and explain the properties of group 7 elements.</p> <p>Describe and explain the properties of group 0 elements.</p> <p>Practical skills.</p>	<p>appropriate methods of metal extraction for individual metals.</p> <p>Explain oxidation and reduction in terms of electron movement.</p> <p>Describe reactions of metals with acids including balanced symbol equations.</p>	<p>Describe the process of obtaining a sample of dry salt using various reactants.</p> <p>Carry out required practical to acquire a sample of dry salt.</p> <p>Compare strong and weak acids.</p>
Physics	<p>Identify different types of energy stores.</p> <p>Explain what energy transfer is and how it is to power and efficiency.</p>	<p>Investigate what thermal conductivity is.</p> <p>Explain how thermal conductivity is linked to home insulation.</p>	<p>Explore the difference speed and acceleration.</p> <p>Interpret distance-time graphs and velocity-time graphs.</p>	<p>Explain what non-contact forces are and what contact forces are.</p> <p>Understand the concept of a resultant force.</p>	<p>Understand what momentum is.</p> <p>Describe how the rate of change of momentum is linked to car safety designs.</p>	<p>Skills based work in planning, collecting data and then drawing a conclusion.</p>
Business	<p>Identify the reasons why entrepreneurs might form a business.</p> <p>Identify the characteristics of an entrepreneur and explain how</p>	<p>Describe the main forms of business ownership: sole trader, partnership, Ltd and PLC.</p> <p>Identify who internal and external stakeholders are</p>	<p>Explain the difference between primary & secondary research, qualitative & quantitative data.</p> <p>Describe the 4Ps of the marketing mix:</p>	<p>Describe what break-even is and how to work it out using the break-even formula.</p> <p>Explain how break-even can be used in business to help set prices and targets.</p>	<p>Describe what human resources in business are and why they're important.</p> <p>Explain the role of a human resources department, identifying the work they do.</p>	<p>Describe what makes a convincing and confident business pitch.</p> <p>Explain what details potential investors want to hear in your pitch and why.</p>

Year 9 curriculum learning points

	these characteristics contribute to business success.	and explain their potential influence on a business	product, price, place & promotion.			
Health and Social	Identify and describe the impact of Growth and Development upon an individual.	Describe the characteristics of each Life Stage.	Explain the Impact of Physical Factors upon Health and Wellbeing.	Explain the Impact of Economic and Environmental Factors upon Health and Wellbeing.	Describe primary response to Health and Wellbeing.	Describe Job Roles within the Health and Social Care sector and how Risk Assessments are carried out.
PE	Continue to practice in competitive situations across a range of sporting activities. Be able to apply suitable sporting examples to a range of exam questions. Be able to apply prior learning of contemporary issues anatomy and physiology, health and fitness and nutrition with their project.		Describe how to optimise training and prevent injuries in a variety of sporting scenarios. Be able to identify components of fitness for specific sports and describe the relevant methods of training to improve this.		Be able to apply more advanced skills and tactics to competitive situations across a range of sporting activities. Begin to track participation in sport via a performance diary, including training sessions, drills and competitive situations.	
Philosophy and Ethics	What are alternative Worldviews? Explore alternative worldviews that are present within society, develop an understanding of how alternative religious/secular beliefs inform cultural practices.		How do different people experience inequality and what can we do about it? Review case studies in the context of religious and sociological responses to inequality and evaluate the motivations of our belief systems. To understand the responsibility of expressing personal belief systems and the importance of safeguarding society.			
Character and Culture	Demonstrate knowledge and understanding about what constitutes online hate and what	Demonstrate knowledge and understanding of what makes healthy relationships and facts about	Demonstrate knowledge and understanding of how to manage finances, payslips and bank accounts	Demonstrate knowledge and understanding of what constitutes extremism and radicalisation and	Demonstrate knowledge and understanding of what the laws are concerning drugs	Demonstrate knowledge and understanding of various topics including trafficking, incels, use of AI;

Year 9 curriculum learning points

	laws are in place to prevent it.	contraception and STIs.		how they can be challenged.		sextortion, chatbots and FGM, virginity testing and hymenoplasty – the law and where to find support.
Music	<p>Understand about triplet rhythms and perform them as part of a whole class performance.</p> <p>Compose a piece of programme music using triplets.</p>	<p>Develop your knowledge of time signatures by understanding about compound time signatures.</p> <p>Perform a piece of music in 6/8.</p> <p>Compose an accompaniment for a melody in 6/8.</p>	<p>Understand how to edit audio files using a Digital Audio Workstation.</p> <p>Learn how to add FX to audio files to improve an audio recording.</p>	<p>Understand the stylistic features of Brit Pop.</p> <p>Understand how to perform as part of a band.</p>	<p>Understand how to compose major and minor chords.</p> <p>Compose a chord pattern with a clear accompaniment pattern.</p>	<p>Understand how to compose a melody to a chord pattern.</p> <p>Understand how to incorporate passing & auxiliary notes into a melody to make it more fluent.</p>
Drama	<p>Theatre Space, the people and Design</p> <p>-To be able to discuss how different designers operate and create meaning in different stage spaces</p>	<p>Practitioners styles</p> <p>-To understand a range of practitioners and how they impact the audience The</p>	<p>Term 2</p> <p>Devising theatre</p> <p>-To create work from scratch inspired by a stimulus and research</p>		<p>Term 3</p> <p>Performing from a comedy text-</p> <p>To interpret a script and it's context using voice and physicality to bring it to life.</p>	
Computing	<ul style="list-style-type: none"> Know what a fetch-decode and execute cycle is Know what embedded systems are and give an example Can identify primary and secondary storages. 		<ul style="list-style-type: none"> Know the two types of networks - LANs and WANs. Draw and know the Advantages and disadvantages of the Star and Mesh topologies. 		<ul style="list-style-type: none"> Create a flowchart to show the structure of a problem e.g dice game Understand binary search Understand the standard sort algorithms: Bubble sort, Insertion sort, Merge sort 	

Year 9 curriculum learning points

	<ul style="list-style-type: none"> • Be able to convert binary to denary and denary to binary • Know the purposes and differences between RAM and ROM • Explain why virtual memory may be needed in a system and how it works. 		<ul style="list-style-type: none"> • Know the Advantages and disadvantages of Cloud storage. • The principle of encryption to secure data across network connections. • The basic principles of each protocol i.e. its purpose and key features. • How layers are used in protocols, and the benefits of using layers. 		<ul style="list-style-type: none"> • Create and use trace tables to follow an algorithm • Identify syntax/logic errors in code and suggest fixes. • The use of variables, constants, operators, inputs, outputs and assignments • The common arithmetic operators and the common Boolean operators AND, OR and NOT
Tech – Food	<p>Describe different types of cereals, their characteristics and their uses.</p> <p>To use this knowledge when making a range of cereal based products</p>	<p>Explain where eggs come from and the wide range of uses of eggs in cooking</p> <p>To use this knowledge when making a range of egg based products</p>	<p>Discuss meat and fish, as a commodity including their importance in the diet</p> <p>To use this knowledge when making a range of different food products</p>	<p>Discuss fruit and vegetables and milk and milk products as a commodity including primary and secondary processing</p> <p>To use this knowledge when making a range of different food products</p>	<p>Explain the importance of hygiene and safety in food preparation</p> <p>Describe methods of heat transfer and the different methods of cooking including how to preserve nutrients when cooking</p> <p>To use this knowledge when making a range of different food products</p>
Tech – RM	<p>Be able to name a range of tools and equipment stating their use and safety requirements. Ability to name the 3 key materials, their families and identify materials that meet each category.</p>		<p>Be able to demonstrate creative designs using a range of graphic techniques including sketching and rendering. To be able to use formal drawing skills to show their design concepts.</p>		<p>Be able to show a competent and confident use of manufacturing and design skills to generate prototypes and working models of their chosen designs.</p>
Tech – Graphics	<p>To be able to learn a range of Graphic design skills including hand-rendering techniques and CAD. They will learn about colour theory, rendering, paper and board and sustainability factors. With the hope of using this knowledge in the next project towards their packaging.</p>		<p>To be able to understand the importance of typography used within Graphics. By focusing on a theme with the influence of an art movement. To gain knowledge about nets, SMCE, standard components and to enhance drawing ability to create a piece of packaging.</p>		<p>To enhance CAD skill using Adobe Illustrator to create various merchandise designs based on a festival. To learn different printing applications with the intention of creating promotional clothing, accessories and promotional products. To be able to show how mechanisms work, and how ergonomics/</p>

Year 9 curriculum learning points

				anthropometrics are important within design, whilst understanding marketing with a TMG focus.
Tech - Textiles	Complete a construction based mini project, recapping use of the sewing machines, construction techniques and pattern adapting to create a character pin cushion.	Complete a decorative skills project which introduces Photoshop alongside, sublimation printing and design transfers, fabric collaging and hand embroidery. The outcome is a Wall hanging based on the theme of Identity.	Be able to design and construct a Childs garment. Either a dress or romper will be completed by learning how to pattern cut and use a range of accurate constructive techniques such as straight and curved seams, hems and inserting a zip. Various machinery will be introduced in this project from sewing machines to overlockers and CAD embroidery machines.	Be able to respond to a given theme of Contrast and construct a knot bag with a focus on experimental decorative techniques such as tie dye, batik, weaving, couching, applique, reverse applique, slashing, fabric collage, beading and embellishing.
Photography	To understand photography in context and explore the foundations of what makes an effective photograph. To identify the visual elements in photography and apply them to our own images.		To understand and apply colour theory to our photographs. To explore experimental editing on Photoshop. To create personal final outcomes in response to the theme of colour.	To understand and apply compositional techniques. To capture photographs with creative viewpoints and unusual perspectives. To experiment with creative image making through contemporary collage.