

YEAR 8 TERMLY CURRICULUM

YEAR 8	ART	COMPUTING	DESIGN AND TECHNOLOGY	ENGLISH	GEOGRAPHY	HISTORY	MATHEMATICS	MODERN FOREIGN LANGUAGES	PHYSICAL EDUCATION	RELIGIOUS SOCIAL CULTURAL STUDIES	SCIENCE	TECHNICAL ENRICHMENT
Term 1	Students develop on the work from year 7 to refine their skills and develop their critical knowledge. This is pursued through projects devised by the teacher.	Computational Thinking - Students will learn key computational concepts including decomposition, abstraction and pattern recognition. They will use these skills to solve difficult problems and produce algorithms presented in the form of flowcharts and pseudocode. These are key skills required for successful study at GCSE Computer Science and prepare students for the rigour of Year 8 study and future programming modules. Students will also study the legal, moral and ethical concerns in Computer Science and how the use of computers impacts society and our environment.	Timbers - Wooden Box/ Maze Design. Students will learn how to design and make a variety of different wood joints, including mitre, dowel and finger joints. They will also learn about different types of wood finish- stains, oils, wax. Students will complete an end of topic theory test on timbers.	Modern fiction exploration with Lord of The Flies as stimulus. Focus on analysing characters and themes within texts.	The first term of year 8 sees students studying globalisation; looking at why the world has become more interconnected and the benefits and drawbacks that it brings. Using the example of a mobile phone students will learn about the different manufacturing stages of products and the impacts that these have on different countries. Students will also look at trade, Fairtrade and how consumers can make ethical decisions to improve the lives of producers around the world.	The first term of year 8 we explore one of the biggest changes in Great Britain the Industrial Revolution. During the term students will look at the causes of the Industrial Revolution and assess the impact on Public Health and technology in Britain. Students will continue to develop their knowledge and understanding of a topic as well as build on the skills of assessing significance. This will be assessed by one written exam question.	Engage tasks take place every lesson and a close the Gap test every two weeks. Students will recognise and use relationships between operations, including inverse operations use conventional notation for priority of operations, including brackets, powers, roots and reciprocals. Calculations will be checked using approximation and estimation, including answers obtained using technology. Extension tasks include calculate with roots, and with integer and fractional indices. Students will also explore how to interpret, analyse and compare the distributions of data sets .	My Free time - Sports and Hobbies. What do you like doing in your free time? Weather and descriptions of the world. Reasons for doing sport. Presentation skills developed by giving a weather report in the target language	Football/Rugby/Netball. Students are to lead their own effective warm up's, using correct names of muscle groups and justifying the importance of a warm up and cool down. Students progress onto a complex range of skills such as tackling, defending and attacking. Students are to recognise what strategy is best to use in a situation and give an explanation as to why it was successful/unsuccessful. Students will identify positive areas of performance and an area of weakness and actively seek out advice to in order to improve. Students are pushed to answer questions using sport specific terminology, and a sporting example.	The first term of year 8 we will be exploring relationships; looking at the various different types of relationships and the views from around the world. During this term students will be looking at some sensitive topics including FGM and divorce. This topic encompasses all of the values of our school especially tolerance. Students will be given a written assessment on this mid-way through the term	The first two weeks of the year 8 programme of study involves a brief review of the scientific skills required. They cover safety in the lab along with a number of practical lessons using the Bunsen burners and recap the stages required in planning scientific investigations. For the last 6 weeks of the term pupils cover content and carry out practical lessons on combustion within chemistry, energy transfers in physics and unicellular in biology.	Students rotate throughout the year between 5 different areas: Food Technology; Media; Castle Making; the Bronze Crest Award and an eco-friendly project. Students learn a variety of soft skills including team work, independence, creativity, and presenting ideas / public speaking. In addition, students will develop subject specific skills for disciplines such as DT and Engineering that they will be able to apply in these lessons. In the 'Castle Making' lessons, students will design and make a model castle with a historical focus. Students will be required to carry out research to aid their understanding of architecture from different periods. The Bronze Crest Award offers an introduction to real project work. Students will work independently or in groups (at the discretion of their teacher) to plan and run a project addressing a real-world STEM problem. The project process develops enquiry, problem-solving and communication skills. The eco-friendly project requires students to design an eco-friendly product that they have to then market in order to achieve investments.
Term 2	Students continue to experiment and refine their techniques through projects devised by the art teacher. These projects can be influenced by Artists and the world around you. Students are given constant verbal feedback to improve their levels.	Small Basic Programming and Software - Students gain their first insight into text-based programming using the Small Basic platform. Students will apply their knowledge of key skills such as looping and conditionals through programming the Turtle to create shapes and drawings. Students will then study different types of software including Open Source and Proprietary software and the rules and regulations surrounding different licensing methods.	Metal - Metal Structures. Students will learn how to mark out and shape metal. They will also learn about cold form bending to create a metal structure. Students will complete an end of topic theory test on metals.	Explorations in Creative Reading and Writing. Developing students written and verbal skills with a focus on dystopian fiction.	The second term continues to look at globalisation, and its development around the world with a focus on case studies, examples and using these to inform longer, written answer. There is a focus on exam skills throughout this term in readiness for GCSE options. The second part of the term begins to look at tectonic hazards - focussing on causes, location, effects and responses.	Term 2 students study Slavery. Students look at the reasons behind Slavery, the process of transportation and life on a plantation. This topic aims to build students skills in the cause and consequences of events in history. Students will be working with a variety of sources and interpretations to help them build a picture of the time period. There will be one written assessment.	Engage tasks take place every lesson and a close the Gap test every two weeks. Students will substitute numerical values into formulae and expressions, including scientific formulae and understand and use the concepts and vocabulary of expressions, equations, formulae, identities, inequalities, terms and factors. They will simplify and manipulate algebraic expressions (including those involving surds and algebraic fractions) by collecting like terms, multiplying a single term over a bracket, taking out common factors. Extension task will include factorising quadratic expressions of the form $2x^2 + 3x + 2$, including the difference of two squares; factorising quadratic expressions of the form $2x^2 + 3x + 2$ simplifying expressions involving sums, products and powers, including the laws of indices	My Town and Local Area - Describing where you live and the area around. What is there and isn't there in your area? What would your ideal town be like? Design a brochure advertising your town in the target language.	Football/Rugby/Netball. Students are to lead their own effective warm up's, using correct names of muscle groups and justifying the importance of a warm up and cool down. Students progress onto a complex range of skills such as tackling, defending and attacking. Students are to recognise what strategy is best to use in a situation and give an explanation as to why it was successful/unsuccessful. Students will identify positive areas of performance and an area of weakness and actively seek out advice to in order to improve. Students are pushed to answer questions using sport specific terminology, and a sporting example.	Term 2 students will be studying the media and the stereotypes and controversy surrounding it. They will be exploring the media and how it can affect body image, both positively and negatively. Students will also be studying some more controversial topics such as the media and self-harm and also the media and drugs. The assessment for this topic will be at the end of term where students will create their own media campaign on a topic currently in the news.	The first 4 weeks of term two involves the teaching of 3 more topics, the periodic table, metals and respiration. Week 5 is revision week when problem areas are the focus prior to the trust assessment at the beginning of week 6. A close the gap lesson is carried out after the assessment and the remainder of the term one topic is covered out of genetics, fields or materials.	Students will be required to carry out research to aid their understanding of architecture from different periods. The Bronze Crest Award offers an introduction to real project work. Students will work independently or in groups (at the discretion of their teacher) to plan and run a project addressing a real-world STEM problem. The project process develops enquiry, problem-solving and communication skills. The eco-friendly project requires students to design an eco-friendly product that they have to then market in order to achieve investments.
Term 3	Students continue to experiment and refine their techniques through projects devised by the art teacher. These projects can be influenced by Artists and the world around you. Students are given constant verbal feedback to improve their levels.	System Architecture - Students will learn the fundamental workings of key computer components including the CPU, RAM and ROM, input/output and storage devices. Students will take their text-based programming skills to the next level using the Raspberry Pi platform to code their own "ScrollBot" devices.	Polymers - Laser cut rulers. Students will learn how to use CAD (2D Design) and CAM (laser cutting). Students will learn the basics of using a laser cutter. They will use CAD to design their ruler and CAM to make it. Students will complete an end of topic theory test on polymers.	Exploration of Cultural Poetry, covering a wide range of SMSC topics and developing analytical skill	Term 3 continues to look at natural hazards with a focus on processes, for example, continental drift and volcano creation. Students will learn about case studies including the Haiti earthquake and Monserrat and Icelandic volcanoes. Students will have the chance to take part in decision making games which enable students to choose different outcomes of scenarios and explain their reasoning behind it.	The focus of the term is the British Empire. Students will look at the vast amount of countries that Great Britain controlled from the 16th to 18th century. Students will debate how successful the Empire was and how other countries were treated in the process. Towards the end of the term we will make the comparison between treatment of individuals in the Empire to the more recent event of the Civil Rights Movement. Students will build their ability to identify and draw opinions from sources and interpretations to	Engage tasks take place every lesson and a close the Gap test every two weeks. Students will understand the concepts and vocabulary of prime numbers, factors (divisors), multiples, common factors, common multiples, highest common factor, lowest common multiple, prime factorisation, including using product notation and the factorisation theorem. They use positive integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5. Extension task will include changing recurring decimals into their corresponding fractions and vice versa	Where I Live - Describing your house and where you live. Comparing typical houses in the UK and the target country. Descriptions and prepositions. What you do to help around the home and your reward. Looking at famous Germans.	Tennis/Trampolining/Fitness. Students further develop the intricate skills needed for individual sport whilst working on their desire to succeed. Students are encouraged to analyse performance and seek ways to improve. Students will further improve their competence with aesthetic skills and routines, incorporating their flexibility and strength. Memory and retention also improve through remembering set routines and break down of skills. Students will be encouraged to try a more complex range of skills such as somersaults and top spin serve.	Term 3 will focus on employability and different career prospects. Students will spend time at the start of the term exploring the key skills employers look for when hiring a suitable employee. They will also spend time researching potential careers they may want to pursue in the future and creating a CV to help them achieve this goal. Students will be assessed on this at the end of the term where they will take part in their own research project researching potential jobs/careers and the skills and grades they need to get there.	The two topics not covered at the end of term 2 are covered at the beginning of term three. With the remainder of term 3 focusing on different aspects of each science. These being: forces, plants and finally reactivity. Most lessons involve practical aspects and so these skills are constantly developed throughout the year.	Students will be required to carry out research to aid their understanding of architecture from different periods. The Bronze Crest Award offers an introduction to real project work. Students will work independently or in groups (at the discretion of their teacher) to plan and run a project addressing a real-world STEM problem. The project process develops enquiry, problem-solving and communication skills. The eco-friendly project requires students to design an eco-friendly product that they have to then market in order to achieve investments.

Term 4	Students continue to experiment and refine their techniques through projects devised by the art teacher. These projects can be influenced by Artists and the world around you. Students are given constant verbal feedback to improve their levels.	Python Programming - Students will use the computation thinking and problem-solving skills they have learned over the course of the KS3 curriculum and apply this to using the Python programming language to create their own software. This unit provides vital preparation for KS4 study and allows students to explore fundamental programming skills such as inputs/outputs, conditionals, loops and validation. Students will also be introduced to programming subroutines to make their code as efficient as possible.	Papers/ Boards - Scene in a box. Students will develop their design skills and knowledge of perspective. They will develop their skills of using colour and shade to enhance their designs. They will make 2D nets to form their 3D object and will have to think about where they want certain details of their design on the net. Students will complete an end of topic theory test on papers and boards.	Shakespeare module- The Tempest- developing skills from Year 7, exploring the language and structure of the text.	In term 4, year 8 geography students will look at the process of development; how it occurs and the impact that this has on countries if it happens, or if it does not. Students will also learn about the different ways of measuring and classifying development before looking at different strategies used to improve development, and their effectiveness. There is a focus on case studies and examples here, with the end result being a short-written assessment based on these examples.	This term students will study World War One. Students will look at a number of different areas of from trench conditions to the Battle of the Somme. Students will gain an insight into individual experiences from soldiers on the front line to women back on the home front. Students will continue to build on the skills use from the previous term to develop a high level of analysis of sources and interpretations. This term students will be offered the opportunity to develop their learning outside of the classroom at Duxford War	Engage tasks take place every lesson and a close the Gap test every two weeks. Students will understand and use standard mathematical formulae; rearrange formulae to change the subject. They will interpret simple expressions as functions with inputs and outputs. Extension task will include the interpretation of the reverse process as the 'inverse function'; interpret the succession of two functions as a 'composite function'. Students will also calculate percentages and extend the percentage calculation strategies to find any percentage i.e. express one given number as a percentage of another, find the outcome of a given percentage increase/decrease	Health and Illness - Describing the body, health and fitness, illness and injury. Healthy lifestyle. Reading and Listening Skills	Athletics/Badminton/Ultimate Frisbee. Students will further learn about skill efficiency and executing skills consistently with the same result. Students will learn how best to utilize new skill concepts and discuss which scenarios best suit them. Students will continue to work together to achieve a common goal and identify new tactics and solutions to increase chances of success.	Term 4 students will be exploring the idea of religion and war. Students will take time studying some case studies, for example, the Arab-Israeli conflict and studying whether religion has played a part in any other 21st century wars. Students will also spend some time debating whether religion is to blame for terrorism and whether we are to be responsible for Brexit. This topic has a focus on debating, so students are able to form an informed argument of current affairs topics. Students will undertake a research project at	Term 4 has a large revision focus. Two weeks are dedicated to each science where gaps that were picked up throughout the year in trust tests are re-covered in revision lessons. The final trust assessment takes place in week 7 followed by a close the gap lesson. Week 8 consists of skill and application lessons where scientific skills are refined before the pupils begin GCSE content and taking part in required core practicals.
Term 5	Students continue to experiment and refine their techniques through projects devised by the art teacher. These projects can be influenced by Artists and the world around you. Students are given constant verbal feedback to improve their levels.	Algorithms - Students will be given further opportunities to prepare for KS4 study through the study and implementation of advanced algorithms. Students will use flowcharts and pseudocode to design algorithms to solve problems, as well as using their new-found Python skills to bring these algorithms to life. Students will also learn algorithms that are crucial to the successful working of the majority of software applications including search and sorting algorithms.	Systems - Textiles - Animal Door Weights. Students will learn about different textiles including natural, synthetic and woven. They will learn about the qualities of these materials and why they may be used for certain things. They will learn about different types of stitching such as a saddle stitch and a running stitch. Students have to use design skills to plan their door weight: they will choose their materials and colours, cut out the material, stitch it where necessary and add adornments such as buttons. Students will complete an end of topic theory test on textiles.	Writing to argue, persuade and advise using a range of stimuli. Developing debate skills and written communication	"During term 5 students will spend the time focussing on improving their geographical skills including grid references, direction and location of place in a creative and hands on setting. During this term students will look at how they can organise emergency responses for urban areas, planning and developing long term recovery strategies and applying this with sustained justification.	This term looks at the second of the World Wars. The term will focus on the different battles that took place with a focus on whether or not the Battle of Dunkirk was a complete disaster or not. Students will work in groups to explore the different arguments to reach an independent conclusion on the topic.	Engage tasks take place every lesson and a close the Gap test every two weeks. Students will know and apply formulae to calculate: area of triangles, parallelograms, trapezia; volume of cuboids and other prisms (including cylinders). Know the formulae: circumference of a circle = $2\pi r$; area of a circle = πr^2 ; calculate: perimeters of 2D shapes, including circles and composite shapes. Extension task will include measuring angle segments in geometric figures, including interpreting maps and scale drawings and use of bearings. Students will also explore and solve word problems involving direct proportion. Extension tasks will include comparing ratios and using the unitary method to solve problems	Media - Film, TV, Music. Giving opinions with reasons. Listening/watching authentic target language resources. Festivals in target language countries. End of Year exams in all skills.	Rounders/Cricket/Softball. Students will begin to develop tactical knowledge in order to increase chances of scoring. Students will look at ball placement and back-handed hits to outwit fielders and increase opportunities to score. Students will be encouraged to discuss ideas and solutions within their teams to improve collaboration and active listening.	Term 5 students will be exploring why knife crime has become a phenomenon in Britain. During this term students will be studying what knife crime is, why Britain has seen an increase in knife crime and the causes and consequences of this crime. The term will focus on how to prevent knife crime especially in your local area and students will create a knife crime campaign to help inform others. During the term students will receive a visit from Corby Technical Schools local PCSO and they will attend a talk on knife crime in their	Term 5 involved biology, chemistry and physics transition. The pupils are preparing for the step into either combined science or the separate sciences at GCSE level. The key concepts of each subject are covered to ensure pupils are prepared for the start GCSE content.