



Sutton Coldfield Grammar School for Students Year 9 Curriculum Map: Autumn Term 2019



The purpose of this curriculum map is to give you a general outline of what your daughter is learning in school during this term. We are hoping that this will allow you to support your daughter more effectively in her studies and further enable you to have an open dialogue about learning with your daughter. Each department has made suggestions as to activities that will further support learning in their subject outside the curriculum.

Subject	What we learn	Outside the Curriculum
Art	Year 9 students begin the year focusing on Natural Forms: Students will embark upon a mixed-media approach to this project. The skills of realising a 2D idea in a 3D construction are explored whilst learning about key photographers and artists who have been inspired by natural forms. The final outcome is a 3D animal head sculpture.	Visit Birmingham Botanical Gardens and enjoy photographing and sketching the wide variety of natural forms. Work in the style of Karl Blossfeldt and focus in on an interesting area, abstracting your image. Learn about other photographers such as Edward Weston to further extend your knowledge.
Biology	In Year 9 we start the GCSE Biology course. In the Autumn term students will start to work their way through the B1 Cell Level Systems module. This includes work on cell structures, what happens in cells, respiration and photosynthesis. Students will develop their practical skills and longer answers so that they perform to the best of their ability in exams.	Students will be learning to use a microscope. There are some microscopes available in shops that interested students could use. There are also lots of images taken through microscopes available at: http://www.cell.com/pictureshow
Chemistry	Students will commence the GCSE course by studying the particle model and the structure of the atom. They will then move on to study purity and separating techniques, which will involve lots of interesting practical work. Students will be introduced to the style of GCSE examination questions including multiple choice and long answer questions.	Students are encouraged to take time to view a range of on line resources such as YouTube and BBC Bitesize, to broaden knowledge and understanding about the models and techniques being studied.
Design & Technology	Resistant materials and Graphic products: Students are required to design and manufacture a whole product using a range of materials and processes. The focus for this terms product is the promotion of an event and a suitable piece of merchandise. Students will then have to promote the product and produce the necessary packaging so it will be ready for sale. In Food and Nutrition: Year 9 will be increasing their skill-base by practising different methods of cooking. This will equip them for feeding themselves and others, healthily in the future as they will be able to transfer the skills and knowledge they gain across a wide variety of recipes. In Textiles: Students are required to manufacture a product in response to a design brief. Students will be taught the principle techniques required to use a commercial textiles pattern before making a high quality garment.	Visit sketch a day website to develop their design skills and drawing at speed. http://www.sketch-a-day.com/ Look at how products are advertised in the real world. Visit a variety of retailers to explore textiles for a range of target markets including high end fashion at the Mailbox and the iconic Selfridges store in the Bullring.
Drama	Students are exploring key extracts from various plays. They will consider the roles of performers, designers and directors when bringing to life key extracts from the texts. Students will consider their artistic vision for the plays and what they want to communicate to their audience. They will experiment with staging and key practitioners will be introduced throughout this unit.	Visit the Midlands Art Centre which frequently has interactive exhibitions or drama workshops. The Royal Shakespeare Company often runs free workshops during school holidays which can be good taster sessions for everyone from beginners to experienced performers. Go to local theatres such as Birmingham Rep/Library Theatre/Hippodrome/Lichfield Garrick which offer excellent performances all year round.
English	In Year 9 we are following a 'carousel' of English lessons in order to offer a more enriched experience of the subject. Students will experience the following six rotations, each lasting approximately 5 weeks:- Creative reading and writing; Modern Drama <i>Blue Remembered Hills</i> ; Pre-1914 Prose; Exploring Shakespeare with a focus on context and tragedy; Argument and Debate; Poetry.	Students would benefit from supporting their study independently in any of the following ways: reading other texts by the same author they are reading; seeing a performance of a play, including Shakespeare; reading and writing poetry; watching debates where they happen on television (political / news programmes as well as <i>Room 101</i>) as well as reading discursive editorials in broadsheet newspapers such as <i>The Times</i> or <i>The Independent</i> .
French	Expo 2 Module 4 : Introduction of food vocabulary. Through the course of the module, students will learn how to: discuss eating habits and food preferences; buy food at a market; use expressions of quantity; take part in short dialogues in a restaurant.	Complete <i>Ecoute et parle</i> independent study material on VLE. Use online website such as www.linguascope.com to revise and extend key vocabulary and www.languagesonline.org.uk to practise the past, present and future tenses. Visit a local French restaurant, crêperie or a visiting French market.
Geography	This term will start with studying 'Africa: A continent of contrasts' – giving students the opportunity to explore many aspects of this vast continent. We will look at why people are migrating from the countryside into one of Africa's biggest cities, Lagos. Students will also study several of the modern challenges Africa is facing in education and health. In the topic "Amazon" we explore the structure of a rainforest, plants and animal adaptations and the lives of tribal people living in this environment. The local, national and global impacts of deforestation are explored along with sustainable solutions.	Read around the topic in the news – look for up to date articles on gender inequality in education, the impact of HIV and malaria in Africa and urban population growth in Africa. BBC and National Geographic documentaries on rainforests will enable students to see for themselves rainforest life. A trip to Birmingham Botanical gardens would allow students to witness these amazing plants for themselves.

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History	Students will be studying the impact of dictators in the 1930s. We will focus on life in the Soviet Union during the regime of Stalin and the events in that led up to Holocaust and the Final Solution of 1942.	If in London visit the Imperial War Museum and experience their excellent exhibition on the Holocaust. Entry is free. Try some wider reading, 'Schindler's Ark' by Thomas Keneally or 'Between Shades of Grey' by Ruta Sepetys
Computing	During Autumn 1 students study how data is represented in a computer system with a focus on binary, denary and hexadecimal number systems. Hardware is recapped from year 8 with a focus on the FDE cycle and logic gates (Truth tables). In Autumn 2 students start practical programming in Python, building upon skills taught in programming in year 8 ; Writing Algorithms/Flowchart – programming using variables, operators, inputs, outputs and assignments, understanding and using the three basic programming constructs used to control the flow of a program: Sequence; Selection; Iteration. Using suitable loops including count and condition controlled loops, use different types of data, including Boolean, string, integer and real, appropriately in solutions to problems, basic string manipulation, basic file handling operations: defining and using arrays (or equivalent) as appropriate when solving problems	Visit Bletchley Park – www.python.org
Mathematics	In Geometry we look at trigonometry in right angled triangles and its practical applications. In number we look at reciprocals and the definitions of zero, negative and fractional indices along with the rules of indices. We will use standard form in calculations. In Algebra we expand a term over a single bracket and find the product of two brackets. We also look at the process of factorisation and use it to solve basic quadratic equations. In Statistics we look at probability including sample spaces and probability trees.	Mymaths.co.uk has lessons on all of the topics, as well as puzzles, games and extension materials. Students have been issued the current password by their Maths teachers.
Music	In the first half term students will look at song writing. They will study a number of popular songs from the second half of the twentieth century and identify successful features used in their composition before composing and performing their own songs. In the second half term students will be looking at variations and cover versions. Students look at a range of pieces that have been 'altered' and identify these techniques through listening. Students then demonstrate their understanding of variation techniques through performance and composition.	<ul style="list-style-type: none"> • Join an extra-curricular Music activity within school • Consider buying a keyboard if you have not already got one at home <p>Try to attend a live performance of Music. Birmingham has a huge wealth of Music from different cultures and genres. www.thsh.co.uk will list all performance at Birmingham's Town Hall and Symphony Hall.</p>
PE	The PE curriculum is broken down into four week blocks. In each block students participate in a programme of study for one activity area. In the Autumn term students will take part in badminton, trampolining, netball and handball. Throughout each lesson they will be developing their performance skills, fitness levels as well as their ability to officiate and lead.	<ul style="list-style-type: none"> • Attend the extra-curricular sports fair at the beginning of the term to find out about clubs. • Get involved in extra-curricular activities, not just as a performer but try taking on another role such as a leader or an official. • Try developing the exercise activities you have tried at school further by taking part in an exercise class at your local leisure centre. • Try building up running a mile by using interval training. • Get into the habit of monitoring your pulse rate during or after exercise to know the training zone you are working in.
Physics	Students are starting their GCSE course with Unit 2, Motion and Forces. (Unit 1 is key ideas that are applied throughout the entire course). Students will study the way objects move and how forces affect their movement. They will also make calculations of speeds and accelerations, and be introduced to ideas about momentum and road safety, including stopping distances.	Look at the Highway code, particularly the pages on stopping distances, to see how stopping and braking distances change with speed. Look at the tyres on your family car, or a friend's car, to examine the depth of the tread. How well do you think your tyres would push water out of the way?
Religious Studies	Students have the opportunity in Year 9 to begin to consider religion in a philosophical way. In the first half term, they consider the arguments for and against the existence of God and in the second half term, they complete an in-depth study into the debate about evil and suffering.	Take the opportunity to discuss arguments for and against the existence of God within your family. Are you atheists? Why? Are you members of a particular faith community? What are the reasons behind your beliefs? Look out for stories in the news that are relevant to the study of religion.
Spanish	Claro 1 Unit 4: In Unit 4 students will learn to talk about the area where they live, describe types of house, discuss the different rooms in a house, describe their bedroom, talk about their dream home using the conditional tense and describe household tasks.	Use www.linguascope.com to practise new vocabulary. Borrow some Spanish magazines from the library or ask your Spanish teacher about this.