**Year 10 Curriculum Map – January to February half term**

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| **Maths** | Students continue to study in two separate tiers based on their tier of entry in year 11. Within each tier the topics are further differentiated according to prior attainment so not all topics will be covered by every student.

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| Foundation - Algebra (Unit 3F) | Higher - Geometry (Unit 3H) |
| * Factorising and Solving Quadratics
* The Difference of Two Squares
* Finding the Equation of a Straight Line
* Roots and Turning points of Quadratics
* Cubic and Reciprocal Graphs
* Solving Simultaneous Equations Algebraically
* Geometric Progressions
 | * Exact Trigonometric Values
* Introduction to Vectors
* Enlargement - Negative Scale Factors
* Combinations of Transformations
* Circle Theorems
* Proof of Circle Theorems
* Similarity - Area and Volume
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| **English** | Due to restructuring of the curriculum in Year 9, a period of transition between curriculum plans will be needed. Current Year 10 students (Jan 2020) will study war poetry from the AQA GCSE English Literature Poetry Anthology and develop their narrative writing skills. From January 2021 Year 10 students will develop their narrative writing skills and study poetry associated with the theme of identity from the GCSE English Literature AQA Anthology.  |
| **Science** | Students following the separate sciences – Set 1. In biology students will be completing topic 3 infection and response then moving on to topic 4 – Bioenergetics. In Physics students will be completing topic 3, Particle model and moving on to topic 4 – Atomic structure. In Chemistry students will be completing topic 4 – Chemical changes and onto 5 – Energy changes. In the Combined science course, for Biology students will be completing topic 3 Infection and response and moving on to topic 4 Bioenergetics. In Physics students will be completing topic 2 – Electricity and moving on to topic 3 Particle model. In Chemistry students will be finishing topic 4 – Chemical changes and moving on to topic 5 – Energy changes. |
| **Geography** | Students will continue to study AQA Geography GCSE 9-1. They will study a unit on urban Manchester. Manchester will be the case study to learn about how urban change has created opportunities and challenges. Students will explore the features of urban sustainability and how to manage resources and transport in a sustainable way. Students will be assessed through regular low stakes knowledge tests and by formal written assessments – the assessments will be cumulative and include topics that have been studied previously in years 9 and 10.  |
| **History** | Students will continue to study AQA History GCSE 9-1. They will continue to develop their historical skills and second-order concepts such as causation, significance, interpretations and source skills. Students will be focusing on the 1930s, 1940s and 1950s. They will study the Great Depression, the New Deal, the Second World War and the Civil Rights Movement. All of the topics will help students to understand and explore the time that they live in by giving them an awareness of economic and political concepts. Students will take part in activities that deepen their ability to make inferences from complex written and visual sources. Students will be assessed through regular low stakes knowledge tests and by formal written assessments. |
| **Health & Social Care** | Component 1 learning Aim B - Investigating how individuals deal with life eventsWe will be researching expected and unexpected life events and how they can impact on people’s physical, intellectual, emotional and social development.We will also be exploring how individuals can adapt or be supported through changes caused by life events.  |
| **Psychology** | Research methods and unit 2: Development.Homework set at least once a week. |
| **Religious Studies** | Students will continue to study Islamic beliefs and practices as well as aspects for the War and Conflict Unit. Students will consider key ethical and philosophical questions that relate to the causes and consequences of war and conflict and investigate warzones influenced by religion and cultural difference like Israel, Palestine. Students will consider the concept of peace and analyse religious teachings about Just war and pacifism and conscientious objectors. |
| **Design Technology - Graphics** | The main project for this half term will be to create a ‘slot-together animal’ kit toy along with the packaging that will contain and promote it. Students will gain experience in 3D drawing by creating instructional diagrams to demonstrate how their product should work. This will build on previous skills that students have developed in using CAD and CAM processes and will help students to develop further skills in isometric drawing and other sketching techniques. Theory lessons will focus on design styles and strategies and will investigate research methods, including primary and secondary data and how they are used. |
| **Design Technology – Resistant Materials** | Theory lessons will focus on investigating primary and secondary data, the work of others and design strategies.Practical and computing lessons build on previous basic skills to make an article in wood, metal and plastics (both in the workshop and CAM)Homeworks will be a mix of worksheets and research activities that relate to the theoretical knowledge or practical skills covered in recent lessons. |
| **Food & Nutrition** | Students continue to develop their practical skills each week creating a variety of different products both savoury and sweet. Students are still working on Food Science in theory lessons. This includes why food is cooked, heat transfer, water and fat-based cooking methods, dry methods of cooking. Changing the properties of proteins, carbohydrates, fats and oils and raising agents.  |
| **French** | Students continue to develop their skills of listening, speaking, reading and writing. They consolidate their work from the previous half-term and they then start to learn about dealing with a hotel stay, travel, holidays - past and present, ordering food and holiday disasters.They add to their knowledge of French grammar, with an emphasis on secure formation of present, past and future tenses. They develop their knowledge of GCSE marking criteria and complete tasks across the four skills, including translation from and into the target language. They also develop their skills in forming simple and justified opinions and using comparative language. |
| **Performing Arts** | Practitioners and the IndustryLessons this term will explore the performing arts industry in a range of contexts – including media-based forms such as film. Students will be required to consider the purpose and function of the performing arts industry in each context and research attitudes towards performing arts practice in the locality through questionnaires. Students should begin to recognise their individual strengths whilst maintaining a holistic approach whilst learning about a variety of practitioners form the industry. Practical work will focus on a mini-brief where students can explore different disciplines whilst working towards one aim this will be useful preparation for Unit 1. Students will also explore how to operate effectively as a group; how to run meetings (agendas and minutes etc) and action plan. |
| **Art** | Portraiture Project Students will start to have more freedom in their project as they choose an artist to study. They will begin to create portraits based on the style of their artist and then explore ways of bringing their own style, creativity and ideas into their work. Students will need to practise photography to capture the right reference material to support their artwork.Main aims For this Half-Term student learning will focus on independent research, artist analysis, media experiments (ink, biro, coloured pencil), and photography.Liverpool Galleries Visit Tuesday 14th January 2020 |
| **GCSE PE** | Theory - Learners will develop their knowledge and understanding of the short and long-term effects of exercise on muscles and bones, the heart and the respiratory system. They will be able to apply understanding of these effects to examples from a range of physical activities and sports.Learners will be able to collect and use data in this section related to both short-term and long-term effects of exercisePractical - Learners are assessed in their ability to select and perform appropriate skills consistently, precisely and with control and fluency in conditioned, competitive environments, adapting their performance to suit a variety of situations. Starting with table tennis, trampolining and football depending on the group’s needs. |
| **Cambridge National Sport** | Cam Nat Students will continue two separate assignments. R052 Developing sports skills, students will start with the main focus of table tennis (individual and officiating) and then moving onto badminton doubles (team). Students will develop their skills, techniques and use of tactics/strategies/ compositional ideas in both an individual and a team sporting activity, as well as their understanding of the rules to allow them to act in a number of officiating roles within an activity. They will also consider the use of different practice methods in order to improve their performance. R051: Contemporary issues in sport, students will explore a range of topical and contemporary issues in sport, relating to participation levels and barriers, the promotion of values and ethical behaviour through sport and the role of high-profile sporting events and national governing bodies in advancing sports’ attempts to positively impact upon society and showcase their worth beyond providing entertainment. |
| **Enterprise** | Students will spend this half term studying Component 1 – Exploring Enterprises which is the coursework component of their Tech Award qualification in Enterprise. The skills learned from these projects teach new perspectives and understanding on the world of business and enhance the student’s enterprise capability. The unit builds upon knowledge of business start-up and financial skills focused on in previous years blending the theoretical knowledge covered with practical activities as part of a Key Stage 4 qualification. Homework that relates to the topics covered is set on Doddlelearn.co.uk online homework platform every two lessons. |
| **Computer Science** | Students will spend this half term studying Programming with Python which is a topic assessed by the final examination component of their GCSE Computer Science. The skills learned from these programming projects teach new perspectives and understanding on the world of IT and enhance the student’s digital capability. The unit builds upon knowledge of programming and computer architecture focused on in previous years blending the theoretical knowledge covered with practical activities as part of a Key Stage 4 qualification. Homework that relates to the topics covered is set on Doddlelearn.co.uk online homework platform and Office 365 every two lessons. |
| **Digital Information Technology** | Students will spend this half term studying Component 2 – Collecting, Presenting and Interpreting Data which is the coursework component of their Tech Award qualification in Digital Information Technology. The skills learned from these projects teach new perspectives and understanding on the world of technology and enhance the student’s digital capability. The unit supplements the more traditional Office and ICT skills focused on in previous years blending the theoretical knowledge covered with practical activities as part of a Key Stage 4 qualification. Homework that relates to the topics covered is set on Doddlelearn.co.uk online homework platform every two lessons. |