**The Year 9 Curriculum at Cavendish**

Throughout each year of Key Stage 3 at Cavendish pupils follow a broad and balanced curriculum. Within each subject they study a variety of topics which are designed to develop and deepen their skills and knowledge so that they are prepared for the demands of the GCSE courses they will take in Year 10 and 11. Below is some brief information about the topic areas they will study in each subject.

If you would like additional information about the topics please contact the Head of Faculty for each subject. Their contact details can be found on the school website.

# English

| Term | Topic |
| --- | --- |
| 1 | Cavendish Booker Prize: this exciting scheme explores key themes in popular novels every week. Each week has the focus on a different novel which is available to borrow in the library. Pupils will be introduced to the key themes and context of the novel in lesson 1 and read an extract. In lesson 2 they will analyse the extract and in lesson 3 and 4 they will either emulate the style of writing in the novel or produce a piece of descriptive writing inspired by the novel. |
| 2 | Of Mice and Men - Steinbeck. This scheme explores the novella Of Mice and Men by John Steinbeck. Published in 1937, it narrates the experiences of George Milton and Lennie Small, two displaced migrant ranch workers, who move from place to place in California in search of new job opportunities during the Great Depression in the United States. Pupils will be developing a love of reading through this engaging text and how to apply and understand contextual influences. |
| 3 | Power of your voice: this non-fiction scheme explores how the power of our ‘voice’ has influence over the media and gives pupils the opportunity to develop their own opinions on important topics. |
| 4 | Voices of experience: this scheme explores different cultures and experiences through poetry. The poems chosen allow pupils to interpret and analyse their meanings. |
| 5 | Being resilient: this non-fictionscheme explores natural and man-made disasters where pupils will be learning new vocabulary, relating it explicitly with the help of context through short extracts. |
| 6 | Romeo and Juliet by William Shakespeare. This scheme will expose pupils to a high-quality and challenging text that they will be able to analyse by drawing on knowledge of previous text to apply context. |

# Maths

Classes in Maths are set according to ability. Each class follows a scheme of work tailored to their ability which very much focuses on improving understanding of topics and mastering concepts.

Each scheme visits a range of topics over the year, covering aspects of Number, Algebra, Shape and Handling Data, and we try to include problem solving in our lessons wherever possible.

The schemes of work reflect the changes to the new Maths GCSE; we have added or modified our teaching to enable students to feel confident with new content from an earlier age.

Each class will sit short tests over the year to see progress within a topic. We would hope that students would then use this information about their strengths and weaknesses to complete some independent work to address these areas to improve. Pupils will sit more formal exams three times in the year. These results will inform the grades that are reported home.

Each pupil will have access to HegartyMaths; an online Mathematics programme. We will sometimes use this software in lessons and it can also be used to complete homework or revision activities. Pupils will be given guidance on how to use HegartyMaths effectively.

| **Securing Knowledge (Sets 5 & 6)** |
| --- |
| Unit 1: The Number System |
| Unit 2: Fractions, Decimals and Percentages |
| Unit 3: Investigating Angle Properties |
| Unit 4: Equations and Formulae |
| Unit 5: Rounding and Estimating |
| Unit 6: Sequences and Straight Line Graphs |
| Unit 7: Area and Perimeter |
| Unit 8: Analysing Data |
| Unit 9: Calculating with Fractions 1 |
| Unit 10: Probability 1 |
| Unit 11: Bearings and Scale Drawings |
| Unit 12: Calculating with Decimals |
| Unit 13: Pythagoras’s Theorem |
| Unit 14: Units |
| Unit 15: 3D Shapes |

| **Developing Knowledge (Sets 3 & 4)** |
| --- |
| Unit 1: The Number System |
| Unit 2: Fractions, Decimals and Percentages |
| Unit 3: Angle Properties |
| Unit 4: Equations and Formulae |
| Unit 5: Analysing Data 1 |
| Unit 6: Sequences and Straight Line Graphs |
| Unit 7: Area and Perimeter |
| Unit 8: Estimating and Calculating |
| Unit 9: Calculating with Fractions 1 |
| Unit 10: Probability |
| Unit 11: Bearing and Scale Drawings |
| Unit 12: Calculating with Decimals |
| Unit 13: Pythagoras’s Theorem |
| Unit 14: Units |
| Unit 15: 3D Shapes |

| **Challenging Knowledge (Sets 1 & 2)** |
| --- |
| Unit 1: The Number System |
| Unit 2: Fractions, Decimals and Percentages |
| Unit 3: Simplifying and Factorising |
| Unit 4: Estimating and Calculating |
| Unit 5: Investigating Angle Properties |
| Unit 6: Equations and Formulae |
| Unit 7: Area and Perimeter |
| Unit 8: Sequences and Straight Line Graphs |
| Unit 9: Fraction Arithmetic |
| Unit 10: Cumulative Frequency |
| Unit 11: Percentages, Growth and Decay |
| Unit 12: Analysing Data 1 |
| Unit 13: Ratio and Proportion |
| Unit 14: Probability |
| Unit 15: Transformations |

# Science

In Science pupils move into subject specialist teaching groups. They are taught a range of topics across the 3 disciplines that build on their prior learning. Pupils will sit short end of topic tests in class throughout the year and continue to sit 3 formal phase tests.These results will inform the grades that are reported home.

| Biology:  Cells  Plants and Photosynthesis  Health and Infection  Digestion |
| --- |
| Chemistry:  The Atmosphere  Sustainable Development  Atomic Structure and the Periodic Table |
| Physics  Energy  Particles |

# History

| Term | Topic |
| --- | --- |
| 1 | Is Conflict Always Good versus Evil?  In Year 9 we embark on a thematic approach to History, looking at key concepts that have been identified as implicit themes in the GCSE (Conflict, Women/Individuals, Protest and Leadership). Units are no longer chronological, but span History, touching upon different topics and events. Some of these have been previously studied, while others are new. The first theme is ‘conflict’ and this topic encourages pupils to consider the traditional narrative of good vs. evil and unpick it using historical examples. |
| 2 | How Did Women Change the World?  Building on work done in year 8 that looked at the role of the individual in History, and on topics which considered minorities, this topic looks at the impact of key women in global History. Each lesson focuses on a different woman or a different field and the contribution that women made. This includes, Marie Curie, the role of women in the Space Race, Frida Kahlo, Wangari Mathai and Ada Lovelace. |
| 3 | Is Protest Always a Force for Good?  Continuing with the idea of challenging accepted “truths”, this topic looks at the role of the protester over History, within different time periods. It gives pupils an understanding of politics and political change which they began to develop in the civil rights unit. This topic includes the Suffragettes, the IRA, the Peasants’ Revolt, the Race Riots, the BLM protests and the Gunpowder Plot. |
| 4 | Has What Makes a Good Leader Changed?  This topic again takes a key theme - leadership - and studies it across History, looking at leaders that have been studied before and those that have not. By the end of the topic, pupils will know hho William the Conqueror was, what Elizabeth I was like as a leader, why people followed Toussaint L’Ouverture, how to assess if Emmeline Pankhurst was a good leader, who Gandhi was and why people followed Martin Luther King Jr. |
| 5 | What Can We Learn from the Holocuast?  This is a highly challenging and emotive topic by the end of which pupils will know the key events of the Holocaust and how to explain how persecution intensified over time. They will also consider the different roles of different people within the Holocaust and how we should think about the Holocaust now and what lessons we should take with us. |
| 6 | GCSE Preparation  This topic provides an essential foundation for the start of the GCSE units. It covers the medieval section of the unit and allows pupils to start utilising all the skills they have developed so far. By the end the will know what medieval England was like, what the 4 humours were, who Hippocrates and Galen were, the importance of the medieval Church and what treatment was like in medieval hospitals. |

# Geography

| Term | Topic |
| --- | --- |
| 1 | Oceania |
| 2 | Asia |
| 3 | Asia |
| 4 | Asia |
| 5 | Middle East/Russia |
| 6 | Holocaust |

# RE

| Term | Topic |
| --- | --- |
| 1 | Christianity and equality. |
| 2 | Christianity and equality. |
| 3 | Community Cohesion |
| 4 | Crime and Punishment |
| 5 | Non-religious worldview |
| 6 | Holocaust Project |

# Spanish

| Term | Topic |
| --- | --- |
| 1 | Holiday activities, holiday preferences, expressing opinions |
| 2 | Describing a trip to Barcelona, booking holiday accommodation, dealing with problems |
| 3 | Writing about a holiday. School subjects and teachers. School uniform and school day. |
| 4 | Description of the school, talking about school rules and problems. |
| 5 | School exchange, talking about after school activities and achievements. |
| 6 | Socialising and family, favourite apps and social networks. |

# French

| Term | Topic |
| --- | --- |
| 1 | Friends and family relationships. |
| 2 | Making arrangements to go out, describing a day out. |
| 3 | Discussing role models. Talking about leisure activities. |
| 4 | Talking about sports and about using technology. Discussing reading habits and music. |
| 5 | Talking about television programmes and discussing a night out with friends. |
| 6 | Discussing food, meals and clothes. Describing your daily life. |

Computing

| Term | **Topic** |
| --- | --- |
| 1 | Pupils will know how to:   * Describe copyright and digital ownership principles; and understand the potential implication of copyright infringement. * Explore wellbeing and mental health in relation to the use of digital technologies. * Explore current and topical issues around e-safety; building an awareness of potential dangers and how to protect. * Explore the range of malware and threats that can exploit both technical weaknesses and the human user. * Explore the concepts of “big data”, data protection, issues around data privacy. |
| 2 | Pupils will know how to:   * Create simple applications and solve computational problems using a variety of programming tools and languages (e.g. Python) |
| 3 | Pupils will know how to:   * Explore digital data transmission; cabling, data transmission speeds and protocols (WIFI, Bluetooth, 4G, 5G) * Understand the role and purpose of communication protocols * Understand the essential components of a Local Area Network, and to explore LAN topologies |
| 4 | Pupils will know how to:   * Explore the components of a CPU, and to understand CPU performance (speed and number of cores). * Create an assembly language program using the Little Man Computer (LMC) simulator; and also to assemble into machine code for operation. * Identify the role and purposes of primary and secondary memory |
| 5 | Pupils will know how to:   * Brainstorm and present ideas for a multimedia project * Gather and summarise survey data; gathering relevant data that can inform the project outcome. * Create a multimedia digital artefact. * Consider fitness-for-purpose, and usability in their outcomes; ensuring relevance for the target audience.   Further, pupils will know how to:   * Use models to make predictions and test hypotheses. They will evaluate the effectiveness of models used/created. * Describe the social and practical impact of algorithms on individuals and society. Exploring how algorithms are used in a range of computing and industry contexts.   *\*Note:* The multimedia product will be themed around the use - and impact - of algorithms and AI on society. |
| 6 | Pupils will know how to:   * Sort and search data using standard algorithms: binary search, linear search, bubble sort, merge sort. And evaluate their relative efficiencies and deficiencies. * Identify the range of physical digital systems in different forms; i.e. embedded, real-time and assistive systems * Explore, edit and create flowchart algorithms that model the control of physical system (i.e. Flowol to control traffic-lights) |

# PE

| Term | Topic |
| --- | --- |
| 1 | Boys - Football, Badminton  Girls - Netball, Basketball  Mixed - Basketball, Dodgeball |
| 2 | Boys - Basketball, Table Tennis  Girls - Fitness, Trampoline  Mixed - Scooting, Fitness |
| 3 | Boys - Fitness, Handball  Girls - Badminton, Gym  Mixed - HRF, Dance |
| 4 | Boys - Rugby, Gym  Girls - Dance  Mixed - Gym, Badminton |
| 5 | Boys - Athletics  Girls - Athletics  Mixed - Athletics |
| 6 | Boys - Cricket, Tennis  Girls - Rounders, Stoolball  Mixed - Stoolball, Rounders |

Art: Fine Art

| **Term** | **Topic:Fine Art** |
| --- | --- |
| 1 | Assessment / Architecture/ Human environment:  Jim Dine Nuts & Bolts |
| 2 | Architecture/ Human environment:  Jim Dine Nuts & Bolts  Ian Murphy Tools |
| 3 | Natural Forms:  Peter Randall-Page/ Karl Blossfeldt- Walnut studies |
| 4 | Natural Forms:  Kate Malone Ceramics |
| 5 | Being Human:  Henry Moore Forms & Figures |
| 6 | Being Human:  Jesse Reno Dreams |

Drama

| **Term** |  |
| --- | --- |
| 1  Unit 1: The Examination | By the end of the unit pupils will know:   * how to use ‘given circumstances’ to support performance work * how to use status to develop performances * how to create more fully rounded and believable characters |
| 2  Unit 2: Design Skills | By the end of the unit pupils will know:   * the basic principles of each of the design options (Lighting, Sound, Set, Costume) |
| 3  Unit 3: GCSE Taster: Godber | By the end of the unit pupils will know:   * Context of John Godber and a selection of his plays * Further use of rehearsal techniques and strategies |
| 4  Unit 4: GCSE Taster: Pinter | By the end of the unit pupils will know:   * Context of Harold Pinter and a selection of his plays * Further use of rehearsal techniques and strategies * How to use props effectively within performances |
| 5  Unit 5: Live Theatrical analysis | By the end of the unit pupils will know:   * the basic principles of evaluating a piece of live theatre |
| 6  Unit 6: Devising as a company | By the end of the unit pupils will know:   * how the differing design skills can combine to produce a piece of performance whilst working as a theatrical company |

Art: Graphic art

| **Term** |  |
| --- | --- |
| 1 | Pupils will learn how to   * Create vector graphics with Adobe Illustrator:   + Manipulating and building basic shapes   + Merging shapes and pathfinder   + Layers and using shapes to build up an illustration   + Practice with the pen tool   + Working with the shapebuilder tool |
| 2 | Pupils will learn how to:   * Successfully work towards a given design brief by working through the stages of a ‘workflow’;   + Creating thumbnails and sketching initial ideas   + Developing and refining ideas   + Experimentally making * Produce a space themed illustration for a children’s book. |
| 3 | Pupils will learn how to:   * Edit and manipulate bitmap images with Adobe Photoshop:   + Selecting and editing pixels   + Building up an image over layers and layer FX   + Use a wide range of Photoshop tools |
| 4 | Pupils will learn how to:   * Use a digital drawing and painting app (Autodesk Sketchbook) for mark-making and digital painting. * Digitally enhance and manipulate artwork produced in other media (digital and non-digital) |
| 5 | Pupils will learn how to:   * Apply colour theory and theories of Composition:   + Rule of thirds and the golden section   + Principles of art * Combining vector, bitmap and traditional media to create composite artwork (for a given design brief) |
| 6 | Pupils will learn how to:   * Work independently to meet a design brief; * To present a design journey - and final outcomes - in a structured and visually interesting way. |

# Photography

| Term | Topic |
| --- | --- |
| 1 Architecture | By the end of this unit pupils will know   * About key photography terms. * How to annotate photos. * How to use Google Drive * How to upload and download photos * How to make a contact sheet * How to use photoshop |
| 2 |
| 3  Conflict | By the end of this unit pupils will know:   * Different methods on how to research an artist * How to respond to an artists. * What is a theme * How we edit our theme photos. * What a presentation looks like |
| 4 |
| 5  Natural Form | By the end of this project pupils will know:   * How to set up a project * Independently research ideas and find relevant artists * Understand the importance of a final idea. |
| 6 |

# Music

| Term | Topic |
| --- | --- |
| 1 | Introduction to area of study 1:  Elements, Forms and Devices with terminology as appropriate:   * DR F SMITH * binary, ternary and rondo forms * repetition, contrast, sequence, ostinato, dotted rhythms, conjunct and disjunct movement, broken chord/arpeggio, melodic and rhythmic motifs, simple chord progressions * Performing - establishing standards and setting targets: first practical assessment * Notating a simple melody * Using ICT in the music department * Appreciating and using the elements/ ‘building blocks’ * Recapping the basics – aural, notational and listening skills |
| 2 | Introduction to area of study 4:  Popular Music, with terminology as appropriate:   * rock and pop styles (revisiting Blues from KS3) * strophic form, 32 bar song form, verse, chorus, middle 8, riffs, bridge, fill, break, intros and outros, backing tracks, improvisation * Appraising - more challenging theoretical and aural work: * primary and secondary chords, cadences, standard chord progressions, power chords, rhythmic devices such as syncopation, driving rhythms * the relationship between melody and chords * How to ‘describe’ a piece using the elements of musical language |
| 3 | Introduction to area of study 2: Music for Ensemble   * Performing in smaller ensembles; (e.g. chamber music, jazz, musical theatre etc.) as suited to learner interests (cover other additional ensembles in year 10). * Composing using texture and sonority (chords and melody) including: * Monophonic, homophonic, unison, chordal, melody and accompaniment, countermelody * Introducing additional concepts of melody, harmony and tonality:   inversions, dissonance, range, intervals, pentatonic, blue notes, modulations to relative major/minor |
| 4 | Introduction to area of study 3: Film Music, with devices and terminology:   * Layering, further examples of imitation, chromatic movement and dissonance in harmonic work, leitmotifs, thematic transformation of ideas * The relationship between the story and the music: choosing appropriate elements of music to represent characters and plot * The effect of audience, time and place, and how to achieve this through use of the musical elements * Use of sonority, texture and dynamics to create a mood * How to achieve contrasts and develop initial ideas when composing |
| 5 | * Revisit all topics from year 9 using different pieces as listening and performing examples * Pupils to choose one area of study to do a longer assessed composition. * Continue to build aural skills through frequent practice. |
| 6 |

# Design Technology

Pupils will build on skills learnt in Year 8 and rotate through a range of DT specialisms during the year.

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| Subject | Topics |
| --- | --- |
| Food technology | In Year 9 work has been developed to enable pupils to secure and demonstrate a range of food skills, increasing in complexity and accuracy, to cook a wider range of dishes, safely and hygienically, and to apply their knowledge of nutrition and food provenance. In addition, they will consider consumer issues, food and its functions and new trends in food. This will include:   * apply the principles of *The Eatwell Guide* and relate this to diet through life * understanding of micro and macro nutrients.; * list and explain the dietary needs throughout life stages; * investigate information and guidance available to the consumer regarding food labelling, availability, traceability, food certification and assurance schemes and animal welfare; * explain the characteristics of ingredients and how they are used in cooking; * adapt and follow recipes to prepare and cook a range of predominantly savoury dishes;look at themes of food from around the world and British food. * secure and demonstrate a range of food skills and techniques; * secure and demonstrate the principles of food hygiene and safety in a range of situations; * investigate and discuss new food trends; * secure and demonstrate the knowledge, understanding and skills needed to engage in an iterative process of planning and making; * extend and consolidate their literacy and numeracy skills by using them purposefully in a range of everyday situations; |
| Textiles | Independent learning is the focus of Textiles in Year 9. Pupils will use new skills and learning from previous years to work on a project based on the theme ‘Endangered Species’.  Areas of study include:   * Adapting the sewing machine to stitch different stitches and to ‘draw’ with (free machine stitching) * Study of a textile artist/designer * Colouring fabrics using resist techniques and dyes |
| DT | Students will design and make a moodlight based on a music genre of their choice. Students will develop their CAD/CAM skills, using 2D design and the laser cutter to produce the light up element of their moodlight. Workshop skills will be built on with students developing accurate marking out and cutting skills to produce the moodlight base. Students will develop awareness of electrical components and solder their own moodlight circuits to include 3 colour changing LED’s. They will apply decorative finishes using paints and vinyl stickers.  Theory knowledge will be developed in looking at product analysis, sustainable design and the concept of “cradle to grave.” |