

## 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	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.
2	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.
3	Voices of experience: this scheme explores different cultures and experiences through poetry. The poems chosen allow pupils to interpret and analyse their meanings.
4	Being resilient: this non-fiction scheme explores natural and man-made disasters where pupils will be learning new vocabulary, relating it explicitly with the help of context through short extracts.
5	Gothic Writing: this creative writing scheme focuses on a genre associated with mystery and intrigue surrounding the supernatural and the unknown. Characteristics of the Gothic include: death and decay, haunted homes/castles, family curses, madness, powerful love/romance, ghosts and vampires.
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 texts 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 Sparx Maths; 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 Sparx Maths effectively.

<b>Securing Knowledge (Sets X3 and Y3)</b>
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

<b>Developing Knowledge (Sets X2 and Y2)</b>
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

<b>Challenging Knowledge (Sets X1 and Y1)</b>
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 continue to sit formal phase tests - one for each science discipline 3 times per year. 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 Particle Model of Matter Atomic Structure

## History

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.

Term	Topic
1	Is Conflict Always Good versus Evil? 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 who 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 Holocaust? 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	How did the British treat injured soldiers in World War One?

### Geography

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

### RE

Term	Topic
1	What beliefs and practices are there around death?

2	How and why do festivals take place?
3	How can we promote community cohesion?
4	How does society deal with crime?
5	Why should we remember the Holocaust?
6	What does it mean to be non-religious?

### Spanish

Term	Topic
1	Holiday activities, holiday preferences, expressing opinions
2	Describing a trip to Barcelona, booking holiday accommodation, dealing with problems. Writing about a holiday.
3	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.

### Computer Technology

Term	Topic
1	Pupils will know how to: <ul style="list-style-type: none"> <li>● Describe copyright and digital ownership principles; and understand the potential implication of copyright infringement.</li> <li>● Explore wellbeing and mental health in relation to the use of digital technologies.</li> <li>● Explore current and topical issues around e-safety; building an awareness of potential dangers and how to protect.</li> <li>● Explore the range of malware and threats that can exploit both technical weaknesses and the human user.</li> <li>● Explore the concepts of “big data”, data protection, issues around data privacy.</li> </ul>
2	Pupils will know how to: <ul style="list-style-type: none"> <li>● Create simple applications and solve computational problems using a variety of programming tools and languages (e.g. Python)</li> </ul>
3	Pupils will know how to: <ul style="list-style-type: none"> <li>● Explore digital data transmission; cabling, data transmission speeds and protocols (WIFI, Bluetooth, 4G, 5G)</li> <li>● Understand the role and purpose of communication protocols</li> <li>● Understand the essential components of a Local Area Network, and to explore LAN topologies</li> </ul>
4	Pupils will know how to: <ul style="list-style-type: none"> <li>● Explore the components of a CPU, and to understand CPU performance (speed and number of cores).</li> <li>● Create an assembly language program using the Little Man Computer (LMC) simulator; and also to assemble into machine code for operation.</li> <li>● Identify the role and purposes of primary and secondary memory</li> </ul>
5	Pupils will know how to: <ul style="list-style-type: none"> <li>● Brainstorm and present ideas for a multimedia project</li> <li>● Gather and summarise survey data; gathering relevant data that can inform the project outcome.</li> <li>● Create a multimedia digital artefact.</li> <li>● Consider fitness-for-purpose, and usability in their outcomes; ensuring relevance for the target audience.</li> </ul> <p>Further, pupils will know how to:</p> <ul style="list-style-type: none"> <li>● Use models to make predictions and test hypotheses. They will evaluate the effectiveness of models used/created.</li> <li>● 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.</li> </ul> <p><i>*Note:</i> The multimedia product will be themed around the use - and impact - of algorithms and AI on society.</p>
6	Pupils will know how to: <ul style="list-style-type: none"> <li>● Sort and search data using standard algorithms: binary search, linear search, bubble sort, merge sort. And evaluate their relative efficiencies and deficiencies.</li> <li>● Identify the range of physical digital systems in different forms; i.e. embedded, real-time and assistive systems</li> <li>● Explore, edit and create flowchart algorithms that model the control of physical system (i.e. Flowol to control traffic-lights)</li> </ul>

**PE**

Term	Topic
1	Boys - Football Girls - Netball/ Basketball Mixed - Basketball/ Badminton
2	Boys - Basketball/ Badminton Girls - Gymnastics/ Fitness Mixed - Badminton/ Gymnastics
3	Boys - Fitness/ Handball Girls - Trampolining/ Football Mixed - Fitness/ Handball
4	Boys -Table Tennis/ Rugby Girls - Handball/ Dance Mixed - Dance Fitness/ Hockey
5	Boys - Striking and Fielding Girls - Striking and Fielding Mixed - Striking and Fielding
6	Boys - Athletics/ Golf Girls - Athletics/ Lacrosse Mixed - Athletics/ Tennis

**Art: Fine Art**

Term	Topic: Fine Art
1	Baseline Assessment & 3D Shading  Pupils will know how to create a series of observational drawings of a 3D object using pencil and pen creating these drawings experimentally following instructions.  Pupils will know how to use shading to transform a basic shape into a 3D form
2	Jim Dine Nuts & Bolts Pencil Study, Ian Murphy Monoprints & Cubist Collage  Pupils will know how to study a composition, looking at accurate shape, size and proportion and translate this into a monoprint and collage study focusing on purposeful marks.
3	Chuck Close Grid Portrait, Henry Moore figure drawings & Timed Observational Studies.  Pupils will know how to create an accurate portrait drawing using the gridding method inspired by Chuck Close.



	<p>Pupils will know how to observationally draw a live figure using charcoal or graphite- focussing on shape, proportion and Henry Moore’s standing figures.</p> <p>Pupils will know how to draw accurately your chosen object from different viewpoints, using different media, focussing on shape and proportion.</p>
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## Drama

Term	
1 Unit 1: The Examination	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● how to use ‘given circumstances’ to support performance work</li> <li>● how to use status to develop performances</li> <li>● how to create more fully rounded and believable characters</li> </ul>
2 Unit 2: Design Skills	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● the basic principles of each of the design options (Lighting, Sound, Set, Costume)</li> </ul>
3 Unit 3: GCSE Taster: Godber	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● Context of John Godber and a selection of his plays</li> <li>● Further use of rehearsal techniques and strategies</li> </ul>
4 Unit 4: GCSE Taster: Pinter	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● Context of Harold Pinter and a selection of his plays</li> <li>● Further use of rehearsal techniques and strategies</li> <li>● How to use props effectively within performances</li> </ul>
5 Unit 5: Text in Performance	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● a number of different theatrical styles to support their work at GCSE</li> </ul>
6 Unit 6: Devising as a company	<p>By the end of the unit pupils will know:</p> <ul style="list-style-type: none"> <li>● how the differing design skills can combine to produce a piece of performance whilst working as a theatrical company</li> </ul>

## Art: Graphic art

Term	
1	<p>Pupils will learn how to</p> <ul style="list-style-type: none"> <li>● Create vector graphics with Adobe Illustrator: <ul style="list-style-type: none"> <li>○ Manipulating and building basic shapes</li> <li>○ Merging shapes and pathfinder</li> <li>○ Layers and using shapes to build up an illustration</li> <li>○ Practice with the pen tool</li> <li>○ Working with the shapebuilder tool</li> </ul> </li> </ul>

2	<p>Pupils will learn how to:</p> <ul style="list-style-type: none"> <li>● Successfully work towards a given design brief by working through the stages of a 'workflow'; <ul style="list-style-type: none"> <li>○ Creating thumbnails and sketching initial ideas</li> <li>○ Developing and refining ideas</li> <li>○ Experimentally making</li> </ul> </li> <li>● Produce a space themed illustration for a children's book.</li> </ul>
3	<p>Pupils will learn how to:</p> <ul style="list-style-type: none"> <li>● Edit and manipulate bitmap images with Adobe Photoshop: <ul style="list-style-type: none"> <li>○ Selecting and editing pixels</li> <li>○ Building up an image over layers and layer FX</li> <li>○ Use a wide range of Photoshop tools</li> </ul> </li> </ul>
4	<p>Pupils will learn how to:</p> <ul style="list-style-type: none"> <li>● Use a digital drawing and painting app (Autodesk Sketchbook) for mark-making and digital painting.</li> <li>● Digitally enhance and manipulate artwork produced in other media (digital and non-digital)</li> </ul>
5	<p>Pupils will learn how to:</p> <ul style="list-style-type: none"> <li>● Apply colour theory and theories of Composition: <ul style="list-style-type: none"> <li>○ Rule of thirds and the golden section</li> <li>○ Principles of art</li> </ul> </li> <li>● Combining vector, bitmap and traditional media to create composite artwork (for a given design brief)</li> </ul>
6	<p>Pupils will learn how to:</p> <ul style="list-style-type: none"> <li>● Work independently to meet a design brief;</li> <li>● To present a design journey - and final outcomes - in a structured and visually interesting way.</li> </ul>

## Photography

Term	Topic
1 Photography Terms Editing	<p>By the end of this unit pupils will know</p> <ul style="list-style-type: none"> <li>- About key photography terms.</li> <li>- How to annotate photos.</li> <li>- How to use Google Drive</li> <li>- How to upload and download photos</li> <li>- How to make a contact sheet</li> <li>- Edit using photoshop</li> </ul>
2 Editing	<p>By the end of this unit pupils will know:</p> <ul style="list-style-type: none"> <li>- Edit by hand</li> </ul>

Mini Art	<ul style="list-style-type: none"> <li>- Different methods on how to research an artist</li> <li>- How to respond to an artist.</li> <li>- What is a theme</li> <li>- How we edit our theme photos.</li> <li>- What a presentation looks like</li> </ul>
3 Natural World	<p>By the end of this project pupils will know:</p> <ul style="list-style-type: none"> <li>- How to set up a project</li> <li>- Independently research ideas and find relevant artists</li> <li>- Understand the importance of a final idea.</li> </ul>

These term swill then be repeated for the next class.

### Music

Term	Topic
1	Hooks and Riffs
2	Minimalism
3	Band Ensemble Skills
4	Film Music (analysis and devices)
5	Film Music (Composition)
6	Songwriting

### Design Technology

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

Subject	Topics
Food technology	<p>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:</p> <ul style="list-style-type: none"> <li>● apply the principles of <i>The Eatwell Guide</i> and relate this to diet through life</li> <li>● understanding of micro and macro nutrients.;</li> <li>● list and explain the dietary needs throughout life stages;</li> <li>● investigate information and guidance available to the consumer regarding food labelling, availability, traceability, food certification and assurance schemes and animal welfare;</li> </ul>

	<ul style="list-style-type: none"> <li>● explain the characteristics of ingredients and how they are used in cooking;</li> <li>● 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.</li> <li>● secure and demonstrate a range of food skills and techniques;</li> <li>● secure and demonstrate the principles of food hygiene and safety in a range of situations;</li> <li>● investigate and discuss new food trends;</li> <li>● secure and demonstrate the knowledge, understanding and skills needed to engage in an iterative process of planning and making;</li> <li>● extend and consolidate their literacy and numeracy skills by using them purposefully in a range of everyday situations;</li> </ul>
Textiles	<p>Independent learning and developing skills is the focus of Textiles in Year 9. Pupils will learn new skills and revise prior learning to work on a project based on the theme 'Lunchbox'.</p> <p>Areas of study include:</p> <ul style="list-style-type: none"> <li>● Adapting the sewing machine to stitch different stitches and to 'draw' with (free machine stitching).</li> <li>● Studies of textile artists/designers.</li> <li>● Colouring fabrics using a range of printing methods.</li> </ul>
DT	<p>Students will design and make a moodlight based on a music genre of their choice. Students will revise and 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.</p> <p>Theory knowledge will be developed in looking at product analysis, sustainable design and the concept of "cradle to grave."</p>