

The Year 7 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	Myths, legends and tales - This scheme studies a variety of myths, legends and tales to expose students to well known narratives, with the aim to create their own characters and short stories.
2	A Christmas Carol - This scheme explores Victorian Britain and the theme of poverty and redemption through the well-known character of Ebenezer Scrooge. Students will develop their inference skills, as well as their knowledge of the time.
3	World Poetry - pupils explore different attitudes from around the globe through the medium of poetry
4	A Midsummer Night's Dream - pupils explore the fantasy world of the mythological fairies, as well as comedy and romance in Shakespeare's writing
5	Creative Writing - pupils learn how to channel their creativity into writing. Expect animal voices and eerie endings.
6	Holiday Project - pupils research, create, advertise and review different holidays.

Maths

Classes in Maths are set from the beginning of Year 7. 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 and 6)

Unit 1: Graphs
Unit 2: Arithmetic: Addition and Subtraction of Decimals
Unit 3: Angles
Unit 4: Number Patterns and Sequences
Unit 5: Arithmetic: Multiplication of Decimals
Unit 6: Areas and Perimeters
Unit 7: Arithmetic: Fractions
Unit 8: Arithmetic: Division of Decimals
Unit 9: Data Collection, Presentation and Analysis
Unit 10: Arithmetic: Time and Timetables
Unit 11: Negative Numbers and Linear Equations
Unit 12: Arithmetic: Decimals, Fractions and Percentages
Unit 13: Nets, Surface Area and Volume
Unit 14: Factors
Unit 15: Probability of One Event
Unit 16: Estimating and Calculating
Unit 17: Expressions and Sequences

Developing Knowledge (Sets 3 and 4)
Unit 1: Graphs
Unit 2: Arithmetic:Decimals
Unit 3: Angles
Unit 4: Number Patterns and Sequences
Unit 5: Arithmetic: Multiplication and Division of Decimals
Unit 6: Areas and Perimeters
Unit 7: Arithmetic: Fractions
Unit 8: Data Collection, Presentation and Analysis

Unit 9: Linear Equations
Unit 10: Arithmetic: Decimals, Fractions and Percentages
Unit 11: Probability
Unit 12: Nets, Surface Area and Volume
Unit 13: Factors
Unit 14: Estimating and Calculating
Unit 15: Pythagoras's Theorem
Unit 16: Arithmetic: Fractions and Percentages
Unit 17: Algebra: Expressions

Challenging Knowledge (Sets 1 and 2)
Unit 1: Graphs
Unit 2: Angles
Unit 3: Sequences
Unit 4: Arithmetic: Multiplication and Division of Decimals
Unit 5: Areas and Perimeters
Unit 6: Arithmetic: Fractions
Unit 7: Data Collection, Presentation and Analysis
Unit 8: Algebra: Linear Equations
Unit 9: Arithmetic: Decimals, Fractions and Percentages
Unit 10: Probability
Unit 11: Nets, Surface Area and Volume
Unit 12: Factors
Unit 13: Algebra: Brackets
Unit 14: Estimating and Calculating
Unit 15: Pythagoras's Theorem
Unit 16: Arithmetic: Fractions and Percentages

Unit 17: Algebra: Equations

Science

In Science pupils are taught a range of Biology, Chemistry and Physics topics. They rotate throughout the topics set out below throughout the year. Pupils sit knowledge tests in lessons for each topic, as well as 3 formal Phase Tests a year. These results are combined to inform the grades that are reported home to parents.

Phase 1:

Cells
Movement
The Particle Model
Separating Mixtures
Speed
Gravity

Phase 2:

Variation
Human Reproduction
Acids/Alkalis
Metals/Non-metals
Light
Sound

Phase 3:

Interdependence
Plant Reproduction
Earth Structure
Universe
Current
Potential Difference and Resistance
Energy Costs and Transfer

History

Term	Topic
1	How do we Study History?
2	Was William a Good King?
3	Which Tudor Monarch Should Be Forgotten?

4	Was the World Turned Upside Down in Stuart England?
5	Are Pirates more Myth than Fact?
6	How Should the British Empire be Remembered?

Geography

Term	Topic
1	Eastbourne Geography
2	Europe
3	European Hazards
4	Africa
5	Africa
6	Oceans

RE

Term	Topic
1	What do people believe about God?
2	What is Islam?
3	How and why do Muslims complete Hajj?
4	What makes a Christian?
5	What difficulties do Christians face in their beliefs
6	How do Christians deal with moral issues?

Spanish

Term	Topic
1	Personal information, numbers, alphabet, classroom description
2	School subjects, lesson activities, teachers, snacks

3	Family members, pets, colours, personal appearance and character
4	Free time activities, telling the time, sports
5	Express preferences, use of future tense
6	Places in town, description of their town, weather

French

Term	Topic
1	Personal information, numbers, colours, family, pets, opinions, school items
2	School subjects, telling the time, typical school day, food
3	Free time activities, media & internet, sports, preferences
4	Places in town, going out with friends.
5	Holiday plans, drinks and snacks, use of future tense
6	Writing a poem, describing a painting

Computer Technology

Term	Topic
1	<p>Getting starting and programming with Scratch</p> <p>Students are introduced to the IT systems and applications that support their learning in Computer Technology, and across the curriculum.</p> <p>Students will also code a Scratch application to solve a given problem.</p>
2	<p>How do Computers Work?</p> <ul style="list-style-type: none"> ● Understand that computer systems are made up of hardware and software. ● Understand the Von Neumann architecture for a computer system, and the input-process-output model of a computer's operation. ● Explore the physical components of the computer such as the CPU, RAM and ROM memory, graphics cards, storage, and peripherals.
3	E-safety

	<p>Students will recognise the importance of being safe and responsible users of technology. They explore explore e-safety based around 5 key principles:</p> <ul style="list-style-type: none"> ● Think before you share (“be sharp”), ● Check it’s for real (“be alert”), ● Protect your stuff (“be secure”), ● Respect each other (“be kind”). ● When in doubt, Discuss (“be brave”)
4	<p>Brilliant Binary</p> <ul style="list-style-type: none"> ● Understand 8 bit binary (byte) representation of decimal numbers ● Can convert between a decimal number and 8 bit binary ● Understand binary storage amounts: b, B, kB, MB, GB, TB ● Can add two binary (8bit) numbers together ● Understand the purpose of the ASCII character map ● Can convert characters into 8-bit binary, and vice-versa.
5	<p>Sounds and images</p> <ul style="list-style-type: none"> ● Understand the representation of a digital image. Can explore pixel values in conjunction with a graphic program. ● Understand the representation of a digital sound file, including sample rate and bit resolution. Can explore and edit data values in conjunction with a sound editing program. ● Can create, edit and manipulate digital images in a graphics application. ● Can create, edit and manipulate digital sounds in a sound editing application.
6	<p>Computational Thinking</p> <ul style="list-style-type: none"> ● Explore example algorithms and how they solve a computational problem for a given scenario. ● Explore and edit a program that shows an abstracted representation of a real-world problem. ● Explore and edit spreadsheet models to explore abstract representations of real-world problems.

PE

Term	Topic
1	Boys – Football/ Badminton Girls – Netball/ Football Mixed – Basketball Dodgeball
2	Boys – Basketball, HRF Girls – HRF, Football Mixed – Basketball, Scooting

3	Boys – Dance, Handball Girls – Badminton, Gym Mixed – HRF, Dance
4	Boys – Rugby, Gym Girls – Dance, Trampoline Mixed – Badminton, Football
5	Boys – Athletics Girls – Athletics Mixed – Athletics
6	Boys – Cricket, Tennis Girls – Rounders, Stoolball Mixed – Stoolball, Rounders

Art

Term	Topic: Texture Through Mark-Making
1	Baseline Assessment Charcoal Textures (dictionary of marks/ textured words).
2	Newspaper Textures
3	Stains and Implements
4	Ernst Haeckel Origami Shells
5	Mixed Media Shell Sections
6	Ceramic (Clay) Pots

Drama

Term	Topic
1	Darkwood Manor – Building atmosphere
2	Storytelling – including stage configurations
3	East – Japanese Theatre
4	Shakespeare – Text in Performance
5	Improvisation - including stage combat
6	Mask work

Music

Term	Topic
1	Building Blocks
2	Popular Song
3	Programmatic Music
4	Minimalism
5	Musical Theatre
6	Soundtracks

Design Technology

Pupils will be introduced to a range of specialisms during the year, developing a variety of new skills, knowledge and understanding.

Subject	Topics
Food technology	This scheme of work has been developed to enable pupils to acquire a range of food preparation and cooking techniques, increasing in complexity and accuracy, to cook a range of dishes, safely and hygienically, and to apply their knowledge of nutrition and food provenance. In addition pupils will evaluate and test their ideas and the work of others.
Textiles	Students are introduced to the Textiles room and what 'textiles' are. Areas of study are based around: Health and safety in the textiles room Materials theory Felted fabric construction Using the sewing machine Hand stitching Design and make project based on the theme 'Micro'
DT	Students will be working on a design and make project, developing a range of practical skills, based on the theme 'Wildlife.' Students will have an introduction to the workshop and develop their knowledge of health and safety in the workshop environment. They will build confidence in using a range of hand tools and machines including coping saw, files, bradle, sanding belt and pillar drill. Students will be introduced to CAD and CAM, using 2D design to produce an outcome to be laser cut and etched.

	<p>Alongside this, students will develop research skills and technical drawing skills with a focus on isometric drawing. Theory will focus on understanding the difference between man made and natural materials and their properties and an introduction to sustainable design.</p>
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