# 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	Торіс
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 Ebeneezer 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 -This is a non-fiction scheme where 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 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.

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 (Set 2)

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)	
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	

### 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	
States of Matter	
Atoms	
Forces 1	
Phase 2:	
Animal Reproduction	
Plant Reproduction	
Reactions 1	
Electricity	
Phase 3:	
Ecosystems 1	
Energy 1	
Space	

### History

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

#### RE

Term	Торіс
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 Christian's face in their beliefs
6	How do Christian's deal with moral issues?

# Spanish

Term	Торіс
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

Places in town, description of their town, weather

## French

Term	Торіс
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	Торіс
1	Getting starting and programming with Scratch Students are introduced to the IT systems and applications that support their learning in Computer Technology, and across the curriculum. Students will also code a Scratch application to solve a given problem.
2	<ul> <li>How do Computers Work?</li> <li>Understand that computer systems are made up of hardware and software.</li> <li>Understand the Von Neumann architecture for a computer system, and the input-process-output model of a computer's operation.</li> <li>Explore the physical components of the computer such as the CPU, RAM and ROM memory, graphics cards, storage, and peripherals.</li> </ul>
3	<ul> <li>E-safety</li> <li>Students will recognise the importance of being safe and responsible users of technology. They explore explore e-safety based around 5 key principles:</li> <li>Think before you share ("be sharp"),</li> <li>Check it's for real ("be alert"),</li> <li>Protect your stuff ("be secure"),</li> <li>Respect each other ("be kind").</li> <li>When in doubt, Discuss ("be brave")</li> </ul>

4	<ul> <li>Brilliant Binary</li> <li>Understand 8 bit binary (byte) representation of decimal numbers</li> <li>Can convert between a decimal number and 8 bit binary</li> <li>Understand binary storage amounts: b, B, kB, MB, GB, TB</li> <li>Can add two binary (8bit) numbers together</li> <li>Understand the purpose of the ASCII character map</li> <li>Can convert characters into 8-bit binary, and vice-versa.</li> </ul>
5	<ul> <li>Sounds and images <ul> <li>Understand the representation of a digital image. Can explore pixel values in conjunction with a graphic program.</li> <li>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.</li> <li>Can create, edit and manipulate digital images in a graphics application.</li> <li>Can create, edit and manipulate digital sounds in a sound editing application.</li> </ul> </li> </ul>
6	<ul> <li>Computational Thinking <ul> <li>Explore example algorithms and how they solve a computational problem for a given scenario.</li> <li>Explore and edit a program that shows an abstracted representation of a real-world problem.</li> <li>Explore and edit spreadsheet models to explore abstract representations of real-world problems.</li> </ul> </li> </ul>

# PE

Term	Торіс
Theory	Link to Theory Content: <u>Theory</u>
1	Mixed Groups: Group 1 - Gym/ Invasion Games Group 2 - Invasion Games/ Gym Group 3 - Invasion Games/ Dance
2	Mixed Groups: Group 1 - Dance/ Invasion Games Group 2 - Invasion Games/ Dance Group 3 - Gym/ Invasion Games
3	Boys – Football/ Table Tennis Girls – Basketball/ Trampolining Mixed – Badminton/ Football

4	Boys – Rugby/ OAA Girls – Netball/ OAA Mixed – Trampolining/ OAA
5	Boys – Striking and Fielding Girls – Striking and Fielding Mixed – Striking and Fielding
6	Boys – Athletics/ Tennis Girls – Athletics/ Golf Mixed – Athletics/ Lacrosse

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	Торіс
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	Торіс
1	Building Blocks - I've got rhythm
2	Keyboard skills
3	Sonority City
4	Dance Macabre (Programmatic Music)
5	Form and Structure
6	Ukulele Skills

# **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 Fibre and 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, bradawl, belt sander and pillar drill. Students will be introduced to CAD and CAM, using 2D design to produce an outcome to be laser cut and etched.

Γ	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.