

**Key Stage 2**

The knowledge faculty consists of mathematics, science, science, technology, engineering and mathematics (STEM) and humanities (history and geography) departments. Each department has a specialist lead teacher, who oversees the teaching, learning and assessment within each subject. The subject specialists are supported by a key stage 2 link teacher who is responsible for the implementation of the subjects in their phase.

All departments within the faculty offer students the opportunity to achieve a range of qualifications:

<b>Mathematics</b>	<b>Science</b>	<b>STEM</b>	<b>Humanities</b>
Entry Level 1-3	ASDAN science (informal)	BCS Robotics Level 1	ASDAN geography (informal)
Functional Skills Level 1 and 2	Entry Level Certificate in science (level 1-3)		BTEC level 1 Introduction to travel and tourism
Edexcel GCSE	GCSE Combined science (Double award)		

When achieving these qualifications, students are encouraged to develop skills in reasoning, problem solving, analysing, social, literacy, numeracy and ICT. These skills will equip students with the ability to succeed across all subjects and within the world around them.

The faculty offers opportunities to students to participate in major national projects, such as the First Tech Robotics Challenge. This is delivered through lunchtime and after-school STEM clubs.

Due to the wide range of needs across the school, classroom learning is also supplemented by consideration of Individual Education Plans (IEPs), Educational Health Care Plans (EHCPs) and multi-agency reports. We encourage a love of learning through extracurricular activities. These include field trips, field work and practical learning opportunities. During these experiences, students apply the skills they have learned in the classroom within a practical setting, this enables the students to make links with different subjects and encourages independence.

The knowledge faculty work closely with the other faculties, ensuring we make best use of all available assessment data. Reading assessment data will inform teaching to ensure the curriculum is accessible to all learners.

The faculty strives to ensure that the learning is relevant to the students and to the world around them. This is achieved through planning current affairs, new discoveries, practical applications and localised studies into the lessons.

### **Key Stage 2 Maths and Numeracy Curriculum Map**

The aim of the Mathematics curriculum in key stage 2 is to ensure that all learners develop their mathematical fluency, are able to reason using this fluency, and apply their knowledge to solve a wide range of practical/functional problems.

We believe that all students should have the same opportunities that mainstream students would experience, so we cater for students working from EYFS up to the end of Key Stage SATs. As part of this, students will have the opportunity to demonstrate their learning in a practical context, in order to show understanding of transferable practical mathematical knowledge.

Maths and numeracy work is highly personalised depending on the needs of the individual.

Class	Autumn1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key Stage 2	Baseline assessment  Number and Place Value- Read, write and compare numbers.  Solve Number Problems	Addition and Subtraction- Across the whole primary curriculum (dependent on pupil ability)	Multiplication and Division- Problem Solving  Multiplication Tables  Prime Numbers  (Work set across the whole primary	Fractions-  Recognising, finding and naming fractions  Fractions of a object, shape or quantity  Percentages (if	Geometry-  Properties of shape  Symmetry  Angles  Statistics- Draw and interpret	Measurement  Position and Direction  Measurements including weight,height,capacity, time/money  Higher ability will look at perimeter and area

	Place Value  Multiplication Tables		curriculum dependent on ability	able)  (Work set across the whole primary curriculum dependent on ability)	tally charts, bar charts, graphs.  Compare data  Solve problems using data	
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### **Key Stage 2 Science Curriculum Map**

In Key Stage 2, we recognise the importance of Science in every aspect of daily life. As one of the core subjects taught in Primary Schools, we give the teaching and learning of Science the prominence it requires. We encourage our pupils' natural curiosity of the world and teach the knowledge and enquiry skills to develop their understanding of the world.

The scheme of work we deliver in key stage 2 is well-sequenced, practical, creative and engaging. It incorporates planned opportunities to carry out the different types of scientific investigation required by the National Curriculum programmes of study.

The key stage 2 curriculum prepares pupils for the next key stage, giving them the skills they need to make good progress.

<b>Class</b>	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>KS2</b>	Living things and their habitats  Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.	Animals Including Humans  Describe the changes as humans develop to old age.  Drawing timelines	Properties and Changes of Materials  Compare and group together everyday materials on the basis of their properties.	Earth and Space  Describe movement of the earth and other planets.  Describe the movement of the moon relative to the earth.	Forces  Light  Gravity Air resistance Water resistance Friction	Evolution and Inheritance  Recognise that living things have changed over time.  Fossils  Offspring

	<p>Describe the life processes of reproduction in some plants and animals</p> <p>Classify plants and animals.</p>	<p>Researching gestation periods</p> <p>Identify and name parts of the human circulatory system.</p> <p>Recognise the impact of diet and exercise on a healthy lifestyle</p> <p>Transportation of nutrients and water</p>	<p>Describe how to recover a substance from a solution.</p> <p>Separating mixtures</p> <p>Reversible and irreversible changes</p>	<p>Describe the sun, earth and moon as spherical bodies.</p> <p>Explain the rotation of the earth.</p> <p>Day and night.</p>	<p>Recognise mechanisms including levers, pulleys and gears.</p> <p>Experiments</p> <p>Fair tests</p> <p>Reliable tests</p> <p>Recognise light travels in straight lines</p> <p>Shadows</p> <p>reflection</p>	<p>Identify how animals and plants adapt to their environment</p>
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### Key Stage 2 History Curriculum Map

Class	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p style="text-align: center;"><b>Key Stage 2</b></p> <ul style="list-style-type: none"> <li>Pupils should continue to develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study.</li> <li>They should note connections, contrasts and trends over time and develop the appropriate use of historical terms.</li> <li>They should regularly address and sometimes devise historically valid questions about change, cause, similarity and difference, and significance.</li> <li>They should construct informed responses that involve thoughtful selection and organisation of relevant historical information.</li> <li>They should understand how our knowledge of the past is constructed from a range of sources.</li> </ul>						
Year 5	<p><b><u>The Great Fire of London</u></b> <b><u>&amp;</u></b> <b><u>The Plague</u></b></p> <p>Learning about the Plague and Plague doctor</p> <p>Impact of the fire of London</p> <p>Differences between London</p>	<p><b><u>The Stuarts and Charles I</u></b></p> <p>Charles I: the lead up to his death</p> <p>The impact his death had on Britain</p> <p>What could have changed- Christmas banned!</p>	<p><b><u>Ancient Egypt</u></b></p> <p>Locate on map</p> <p>Hieroglyphics</p> <p>Gods- sun, harvest, night, death</p> <p>Preparing the body for death- make cartouche</p> <p>Pyramids and functions- make their own.</p>	<p><b><u>Ancient Egypt</u></b></p> <p>Pharaohs</p> <p>Tutankhamun</p> <p>Biography on god or pharaoh</p> <p>River Nile and past and current uses.</p>	<p><b><u>Tudors</u></b></p> <p>Life in Tudor England</p> <hr/> <p>Henry VIII and his wives</p> <p>Importance of art in Tudor Times</p>	<p><b><u>Tudors</u></b></p> <p>Crime and Punishment</p> <p>Tudor Monarchs</p> <p>Battle of Bosworth</p>

	then and now	Stuart medicines				
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### Key Stage 2 Geography Curriculum Map

Class	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Key Stage 2</p> <p>Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.</p>						
	<p>Baseline Test</p> <p><u>Countries, Counties and Capital Cities of the UK</u></p> <p>Locate UK on a map</p> <p>Locate cities and identify capital cities</p> <p>Locate Counties</p>	<p><u>Where in the World is the UK?</u></p> <p>Label the continents and locate UK</p> <p>Look at the position of the UK in the world.</p> <p>Describe in terms of hemisphere, continent, proximity to other countries, north, south, east, west.</p>	<p><u>Rivers</u></p> <p>The water cycle</p> <p>Physical features of rivers and valleys</p> <p>How people use rivers</p> <p>Why was the River Nile so important in Ancient Egypt? (link to History)</p> <p>Research worlds</p>	<p><u>Countries in Europe</u></p> <p>On a map of Europe, Locate the countries/some capital cities</p> <p>Countries in the EU</p> <p>Comparison study between the UK and another European Country (weather,</p>	<p><u>South America</u></p> <p>Countries</p> <p>Climate in South America</p> <p>The Andes</p> <p>Human Geography</p>	<p><u>North/South America</u></p> <p>Trade and History</p> <p>Physical and Human features</p> <p>Rainforests</p>

	<p>Comparison between two countries of the UK</p> <p>Locating rivers in the UK</p>	<p>Compare UK with another European country</p>	<p>biggest rivers (compare to the Nile)</p>	<p>population etc.)</p>		
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