



## Computing

<b>Intent</b>	At Brotherton and Byram, computing is an integral part of learning. As the world around us becomes more and more digitally dependent, ensuring that all children learn the necessary skills and knowledge to help navigate the virtual world in a safe and respectful manner becomes increasingly essential. We invest in Chromebooks and interactive whiteboards across school to enhance each child's capabilities and encourage them to take ownership of their learning. When engaging with computing, children are encouraged to develop their vital life skills of communication, collaboration, critical thinking and creativity to overcome ample challenge.
<b>Implementation</b>	The programmes of study from the National Curriculum are delivered across both Key Stage 1 and Key Stage 2. The curriculum is broken down into three main parts: control systems (where children learn to write and debug algorithms), information technology (where the children use technology to research and present information), and digital literacy (which covers everything from e-safety to reliability of sources). At Brotherton and Byram, children have 1:1 access to a Chromebook from Years 1 - 6 and they apply their computing skills across the curriculum. Our teachers differentiate the learning to ensure all children can access it effectively. The teaching of computing is enhanced through a range of online programmes, including IDL to assist children who find reading and writing challenging. Teachers refer to a clear progression document that ensures the full coverage of the curriculum.
<b>Impact</b>	Teachers monitor the progress of their children against the curriculum objectives. Where possible, Google Drive and Seesaw are used to evidence the learning of pupils. Our vision is to ensure all pupils leave school with the skills and knowledge to navigate a world where technology is increasingly commonplace.

<div>  BB Computing Knowledge and Skills Progression Overview  </div>							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Control systems	<ul style="list-style-type: none"> <li>- Completes a simple program on a computer.</li> <li>- They select and use technology for particular purposes.</li> <li>- Uses ICT hardware to interact with appropriate computer software.</li> </ul>	<ul style="list-style-type: none"> <li>- Write a simple program (including unplugged/ plugged)</li> <li>- Write a simple program (which follows precise instructions)</li> </ul>	<ul style="list-style-type: none"> <li>-Use logical reasoning to predict the behaviour of a simple program</li> <li>-Identify and debug a simple program.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand how programs can run using various forms of input and output (e.g. Bee bots/ micro bits).</li> <li>- Understand how programs are used to control everyday devices. (e.g. toys, drones, traffic lights etc.)</li> </ul>	<ul style="list-style-type: none"> <li>-Use decomposition (breaking things down) to solve problems linked to programs.</li> <li>-Use logical reasoning to detect and correct errors in algorithms and programs (for various purposes).</li> </ul>	<ul style="list-style-type: none"> <li>- Use sequencing effectively within programs.</li> <li>- Use repetition (loops) effectively within programs.</li> </ul>	<ul style="list-style-type: none"> <li>- Use variables purposefully within programs to achieve specific goals.</li> <li>- Use selection purposefully within programs.</li> </ul>
Information Technology	<ul style="list-style-type: none"> <li>- Knows that information can be retrieved from computers</li> <li>- Knows technology is used for a y of reasons within communities.</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise common uses of information technology beyond school (in the real world).</li> <li>- Use technology purposefully to change pre-made digital content.</li> </ul>	<ul style="list-style-type: none"> <li>-Recognise common uses of information technology within school.</li> <li>-Use technology purposefully to create, organise, store and retrieve digital content.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand how software can be used to collect and present data.</li> <li>- Understand how to use search technologies effectively.</li> </ul>	<ul style="list-style-type: none"> <li>-Collaborate and communicate</li> <li>-Use filters to find specific information.</li> </ul>	<ul style="list-style-type: none"> <li>- Select, use and combine a variety of softwares to accomplish given goals (analyse and evaluate data/information)</li> <li>- To evaluate digital content.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify the parts within the schools computer network (eg. servers, router; ports)</li> <li>- Select, use and combine a variety of software to create a database for a specific goal.</li> </ul>
Digital Literacy	<ul style="list-style-type: none"> <li>- Talk about how we use technology and what we use it for:</li> </ul>	<ul style="list-style-type: none"> <li>- Keep personal information private.</li> <li>- Recognise inappropriate online content.</li> </ul>	<ul style="list-style-type: none"> <li>-Use usernames and passwords safely.</li> <li>-Respond appropriately to inappropriate online content.</li> </ul>	<ul style="list-style-type: none"> <li>- Understand how to use safely, respectfully and responsibly.</li> <li>- Understand that there are a range of ways to report concerns online about content and contact.</li> </ul>	<ul style="list-style-type: none"> <li>-Recognise acceptable and unacceptable behaviours online and</li> <li>-Recognise if a/my device has been scammed, spammed or hacked.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify positive and negative digital footprints.</li> <li>- Acting on personal judgement to determine whether to allow/deny cookie usage.</li> </ul>	<ul style="list-style-type: none"> <li>- Find and use copyright free online content.</li> <li>- Be a responsible digital citizen (including social media usage).</li> </ul>