

## Year 7 Computing

<b>Curriculum intent</b>	<p>We believe that students deserve a Computing and ICT curriculum which prepares them for the digital and fast paced world they live in. Covering the three strands of the computing national curriculum, Computer Science, ICT and Digital Literacy, our aim is to give our students the skills and abilities to engage positively with the digital world and take advantage of all the opportunities that come their way both in the UK and in the wider world.</p> <p>Our computing key stage 3 curriculum enables students to use computational thinking and creativity to solve real world problems by developing a wide range of skills in both programming and ICT, using multiple packages selected to spark and foster interest and creativity. Students will learn resilience and that making mistakes is part of learning, giving them the confidence to tackle a variety of independent learning activities.</p> <p>Students will be taught to navigate this new digital world safely and be aware of the dangers that they now face.</p> <p>Students will also begin studying for their IDEA Programme Bronze badge which will help develop their digital, employability and entrepreneurial skills.</p>					
<b>Term</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>Knowledge</b>	<p style="text-align: center;"><b>E-Safety</b></p> <p>How to access the network in school and at home and send emails</p> <p>The impact of social media on society</p> <p>What is your digital footprint</p> <p>Importance of keeping your data safe</p> <p>Other threats to your computer</p>	<p style="text-align: center;"><b>E-Safety</b></p> <p>What is fake news and the dangers of fake news</p> <p>Dangers of Cyber Bullying</p> <p><b>The internet and the WWW</b></p> <p><b>Binary</b> Introduction to Binary</p> <p>Converting numbers to denary and vice versa</p>	<p style="text-align: center;"><b>Basic Spreadsheets</b></p> <p>How to format, complete calculations and sort and filter data using a spreadsheet</p> <p style="text-align: center;"><b>Algorithms and Flowol</b></p> <p>To establish the idea of computational thinking and to introduce the concept of algorithms.</p>		<p style="text-align: center;"><b>Introduction to Scratch</b></p> <p>Students will begin using code to make their sprite move in various directions. They will learn what a variable is, what selection is and what integration is.</p>	
<b>Skills</b>	<p>Log onto the network Sending and receiving emails Word PowerPoint</p>	<p>Recall and application of binary</p>	<p>Formatting cells Calculations Sorting Data Filtering Data</p>	<p>Flowol will be used to develop students logical reasoning and problem-solving talents, develop programming skills and explore the world of automatic control systems and robots. Flowol is the first step in</p>	<p>Writing code to: Allow movement Create variables Allow selection Allow integration</p>	

				learners journey to be confident computer programmers.	
<b>Assessments</b>	PowerPoint presentation on the impact of cyber bullying	Creation of Powtoon animation  Binary Assessment	Spreadsheet Assessment  Completed logo	Flowol Assessment	Scratch Assessment using all key skills to create codes to solve real world problems
<b>Curiosity</b>	<a href="https://www.youtube.com/watch?v=yjT8m0hcKU">https://www.youtube.com/watch?v=yjT8m0hcKU</a> – Impact of Cyber Bullying  <a href="https://www.youtube.com/watch?v=PluTCxb61Jk">https://www.youtube.com/watch?v=PluTCxb61Jk</a> – How easily your personal data can be taken  <a href="https://www.youtube.com/watch?v=idyXOMAZOUg">https://www.youtube.com/watch?v=idyXOMAZOUg</a> – Little Mix star Jessy Nelson talks about the impact of Cyberbullying on her	<a href="https://www.youtube.com/watch?v=YgVNJ2v9IPA">https://www.youtube.com/watch?v=YgVNJ2v9IPA</a> – Binary use in real life	<a href="https://www.youtube.com/watch?v=fNqkiNJPIU">https://www.youtube.com/watch?v=fNqkiNJPIU</a> - the first ever spreadsheet inventors  <a href="https://learntocodewith.me/posts/excel-skills/">https://learntocodewith.me/posts/excel-skills/</a> - advanced skills on excel	<a href="https://www.youtube.com/watch?v=irhNLRWwhv0">https://www.youtube.com/watch?v=irhNLRWwhv0</a> - how to make a virtual pet in scratch  <a href="https://www.youtube.com/watch?v=YpTPKiPN9G4">https://www.youtube.com/watch?v=YpTPKiPN9G4</a> – how to create a story in scratch	

**Extra Curricular:**

- Coding Club
- Internet Safety Day Logo Competition

- Bebras Challenge
- Completion of ideas programme bronze badge