## **Computing**

## Year 7



Our curriculum aims to facilitate students with knowledge, understanding and skills about three disciplines within Computing: IT, Digital Literacy and Computer Science.

In Year 7, Units 1 to 6 provide an understanding of the interconnectedness between the three disciplines and the world. Students gain significant context and foundational knowledge about how computers work and understanding the impact of computing in the digital world. The concepts of programming and computational thinking are developed through units such as Scratch Animation and Spreadsheet modelling. Students explore why computational thinking helps us solve problems and how to create algorithms and programs to achieve our goals. Digital Literacy, staying safe online and how computers communicate globally are developed through units 4 and units 5. Understanding how changes in technology affect safety, protecting their online privacy and identify and how to identify and report a range of concerns are embedded throughout the key stage 3 curriculum.

	7.1 – Introduction to Computers	7.2 – Scratch Animation	Assessment
	<b>Big Question:</b> How do I use a computer?	<b>Big Question:</b> How do I program a computer?	Socrative Assessment:
	<ul> <li>Using the keyboard and mouse, signing in, choosing a strong password, accessing our files, using Office and Teams</li> <li>Hardware and Software</li> <li>Internal Components of a Computer: CPU, RAM, ROM, Registers</li> <li>What is embedded systems</li> </ul>	<ul> <li>Basic programming with blocks of code.</li> <li>Writing sequences, selection, and iteration.</li> <li>Putting it all together in a game.</li> </ul>	Term 1: Topic Assessment: Introduction to Computers Programming Techniques.

	7.3 – Spreadsheets	7.4 – Digital Citizen	Assessment
Term	<b>Big Question:</b> How can data help me make decisions?	<b>Big Question:</b> How do I become an effective digital citizen?	Socrative Assessment: Term 2: Topic
Spring Te	<ul> <li>Learning our way around a spreadsheet and using it to plan a party.</li> <li>Cell Referencing</li> <li>Formulas</li> <li>Functions</li> <li>Charts</li> <li>Project Planning</li> </ul>	<ul> <li>Staying safe online,</li> <li>What the dangers are</li> <li>Knowing how to spot a phish or fake news,</li> <li>Behaving ethically and reporting problems.</li> </ul>	Assessment: Spreadsheet Modelling Digital Literacy and digital safety

Summer Term	7.5 – Networks	Programming Assessment	Activities		Assessment
	Big Question: How does the internet work?				Socrative Assessment:
	<ul> <li>Connecting computers together,</li> <li>Breaking data into packets,</li> <li>How Wifl works, what's my IP?</li> <li>How the internet is not the WWW!</li> </ul>				Term 3: Topic Assessment: Networking End of year exam

Verview

Useful Resources for Supporting Your Child at Home:	Homework:
BBC Bitesize Seneca Learning Quizlet IDEA	Seneca Learning, IDEA or Quizlet set on Teams