

# KS3 Computing

Class Group	Autumn Term		Spring Term		Summer Term	
	First half	Second half	First half	Second half	First half	Second half
Year 7N	<p><b>Clear messaging in digital media:</b> collaborating online respectfully as well as teaching them how to use Google Classroom.</p>	<p><b>Programming essentials in Scratch: part I</b> Applying the programming constructs of sequence, selection, and iteration in Scratch.</p>	<p><b>Programming essentials in Scratch: part II</b> Using subroutines to decompose a problem that incorporates lists in Scratch.</p>	<p><b>Modelling data: spreadsheets</b> Sorting and filtering data and using formulas and functions in spreadsheet software.</p>	<p><b>Networks: from semaphores to the internet</b> Recognising networking hardware and explaining how networking components are used for communication.</p>	<p><b>Using media: gaining support for a cause</b> Creating a digital product for a real-world cause.</p>
Year 8B	<p><b>Clear messaging in digital media:</b> collaborating online respectfully as well as teaching them how to use Google Classroom.</p>	<p><b>Programming essentials in Scratch: part I</b> Applying the programming constructs of sequence, selection, and iteration in Scratch.</p>	<p><b>Programming essentials in Scratch: part II</b> Using subroutines to decompose a problem that incorporates lists in Scratch.</p>	<p><b>Modelling data: spreadsheets</b> Sorting and filtering data and using formulas and functions in spreadsheet software.</p>	<p><b>Networks: from semaphores to the internet</b> Recognising networking hardware and explaining how networking components are used for communication.</p> <p><b>Representations – from clay to silicon</b> Representing numbers and text using binary digits.</p>	<p><b>Using media: gaining support for a cause</b> Creating a digital product for a real-world cause.</p> <p><b>Vector graphics</b> Creating vector graphics through objects, layering, and path manipulation.</p>

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Year 8P	<p><b>Programming essentials in Scratch: part II</b> Using subroutines to decompose a problem that incorporates lists in Scratch.</p>	<p><b>Introduction to Python programming</b> Applying the programming constructs of sequence, selection, and iteration in Python</p>	<p><b>Representations – from clay to silicon</b> Representing numbers and text using binary digits.</p>	<p><b>Developing for the Web</b> Using HTML and CSS to create webpages.</p>	<p><b>Vector graphics</b> Creating vector graphics through objects, layering, and path manipulation.</p>	<p><b>Layers of computing systems</b> Exploring the fundamental elements that make up a computer system.</p>
Year 9	<p><b>Python programming with sequences of data</b> Manipulating strings and lists. Creating a programming project.</p>	<p><b>Applying programming skills with physical computing</b> Sensing and controlling with the micro:bit.</p>	<p><b>Introduction of cybersecurity</b> Identifying how users and organisations can protect themselves from cyberattacks</p>	<p><b>Layers of computing systems</b> Exploring the fundamental elements that make up a computer system.</p>	<p><b>Media - Animations</b> Creating 3D animations through object manipulation, and tweaking and adjusting lighting and camera angles.</p>	<p><b>Data Science</b> Using data to investigate problems and make real-world changes.</p>