

Topic Titles	WP	E-Safety & PPT	Scratch	Intro to Modelling	Code.org Course 2	KS3 – 7-9 KS4 – CS and BTEC NC – National curriculum
<b>Objectives</b>	Pupils will develop Word processing skills that will allow them to create professional documents, reports, letters etc. that they can transfer to all subjects and years throughout school.	Pupils will develop skills in identifying the dangers and moral issues in using ICT to share information. The skills and knowledge developed will be presented using Presentation software. Which they will learn how to create in a professional manner.	Pupils will develop skills in logical thinking, be able to write algorithms, complete mini projects and finish by programming their own game using the visual programming language Scratch, which they will design, test and evaluate.	Pupils will develop spreadsheet skills to produce data models. They will learn how to create formulas, functions, graphs and model real life situations	Pupils will create and test a range of programs using text commands, which allows them to gain an understanding of sequence, loops and functions. Pupils will use the program so self-evaluate their code and find fix errors.	
<b>Links to learning</b>	KS3: All written work in DL & cross curricular subjects KS4: BTEC coursework 60%	KS3: Presentations created in cross curricular subjects KS4: BTEC designing user interfaces prototype NC - understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.	KS3: Textual programming language – small basic/python/code.org KS4: Computer Science – Python and NEA assignment for testing and evaluation. NC - Graphical programming language, to solve a variety of computational problems; design and develop modular programs that use procedures or functions. NC - design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems.	KS3: Advanced Modelling KS4: BTEC Using data NC - Collecting and analysing data. Understand several key algorithms that reflect computational thinking.	KS3: Code.org course 3 KS4: Computer Science – Python NC - graphical and textual programming language, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.	
<b>Knowledge &amp; skills</b>						<b>Literacy</b>
<b>STAGE 4</b>	Can work fully independently to consistently produce a professionally formatted document.  Can align the text in the correct place unaided	Can work fully independently to explain the consequences of inappropriate use of the Internet and online services and can advise someone how to act responsibly  Creates a presentation using consistent layout with appropriate backgrounds, fonts, sizes and images and sensible animations.	Can work fully independently to create a complex program.  Can evaluate the program and can explain what the code does, with areas to improve.  Can test a program and show how the failed tests should be fixed.  Can independently use operators.	Can work fully independently to design and create a spreadsheet using the correct functions to analyse the data.  Can create and correctly label a graph using two separate data sets	Can work fully independently to solve errors  Can use functions to make code more efficient.	<ul style="list-style-type: none"> <li>• Create coherent and fluent paragraphs using appropriate conjunctions.</li> <li>• Use varied, appropriate and extensive IT related terminology.</li> <li>• Spelling, punctuation and grammar are accurate</li> </ul>
<b>STAGE 3</b>	Creates professionally laid out documents with little input.  Images are formatted appropriately to the document  Can create and tables appropriately.  Consistently uses headers and footer	Can explain how to use technologies and online services securely, and I know how to identify and report inappropriate conduct.  Creates a presentation using consistent layout with appropriate backgrounds, fonts, sizes and images.	Can create a program using Variables.  Can solve errors in the code independently.  Can explain what the program does.	Can use SUM, MIN, MAX, AVERAGE, functions confidently  Can create a graph and label the axis	Can use conditions to determine an outcome	<ul style="list-style-type: none"> <li>• Create coherent paragraphs using appropriate conjunctions.</li> <li>• Use some varied IT related terminology.</li> <li>• Spelling, punctuation and grammar are mostly accurate.</li> </ul>

<p><b>STAGE 2</b></p>	<p>Creates professionally laid out documents with help.</p> <p>Is able to align text consistently</p> <p>Uses size 12 for main text</p>	<p>Can show responsible use of technologies and online services, and I know a range of ways to report concerns.</p> <p>Creates a presentation using consistent layout with text and images</p>	<p>Can create a program using selection code.</p> <p>Can identify where there is sequence, repetition and selection in the code.</p>	<p>Can use SUM instead of +</p> <p>Can replicate formulas throughout a spreadsheet</p> <p>Can format a spreadsheet using borders, d.p and merge cells</p>	<p>Can use loops and repetition in their code</p>	<ul style="list-style-type: none"> <li>• Create coherent paragraphs using appropriate punctuation.</li> <li>• Use some IT related terminology.</li> <li>• Spelling, punctuation and grammar are usually accurate.</li> </ul>
<p><b>STAGE 1</b></p>	<p>Documents are largely unprofessional.</p> <p>Is able to change the size, font and colour of text</p>	<p>Can show use of computers safely and responsibly, knowing a range of ways to report unacceptable content and contact when online</p> <p>Creates a presentation using text and images</p>	<p>Can create a program using sequencing &amp; repetition code.</p>	<p>Can use +-* / to create simple formulas</p> <p>Can format a spreadsheet using fonts, size and colour fill</p>	<p>Can create simple commands to move</p>	<ul style="list-style-type: none"> <li>• Can use capital letters and basic punctuation so work is mostly coherent.</li> <li>• Use some IT related terminology where appropriate.</li> <li>• Spelling and grammar does not affect understanding.</li> </ul>