

Structure of Units of Work













	<u>Autumn Term</u>		<u>Spring Term</u>		<u>Sumer Term</u>	
Year 5	Y5- Computing Systems and Networks- Systems and Searching	Y5-Creating Media- Video Production	Y5- Programming A- Selection in Physical Computing	Y5- Data and Information- Flat-file databases	Y5- Creating Media- Introduction to Vector Graphics	Y5- Programming B- Selection in Quizzes
Year 6	Y6- Computing Systems and Networks- Communication and Collaboration	Y6- Creating Media- Web page Creation	Y6- Programming A- Variables in Games	Y6- Data and Information- Introduction to Spreadsheets	Y6- Creating Media- 3D Modelling	Y6- Programming B- Sensing Movement

Unit Summaries

	<u>Computer Systems and Networks</u>	<u>Creating Media</u>	<u>Programming A</u>	<u>Data and Information</u>	<u>Creating Media</u>	<u>Programming B</u>
Year 5	<u>Systems and Searching</u> Recognising IT systems in the world and how some can enable searching on the internet.	<u>Video Production</u> Video production Planning, capturing, and editing video to produce a short film.	<u>Selection in Physical Computing</u> Exploring conditions and selection using a programmable microcontroller.	<u>Flat-file databases</u> Using a database to order data and create charts to answer questions.	<u>Introduction to Vector Graphics</u> Creating images in a drawing program by using layers and groups of objects.	<u>Selection in Quizzes</u> Exploring selection in programming to design and code an interactive quiz.
Year 6	<u>Communication and Collaboration</u> Exploring how data is transferred by working collaboratively online.	<u>Web page Creation</u> Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.	<u>Variables in Games</u> Exploring variables when designing and coding a game.	<u>Introduction to Spreadsheets</u> Answering questions by using spreadsheets to organise and calculate data.	<u>3D Modelling</u> Planning, developing, and evaluation 3D computer models of physical objects.	<u>Sensing Movement</u> Designing and coding a project that captures inputs from physical devices.

<u>National Curriculum Coverage- Years 3 and 4</u>												
	<u>5.1- Systems and Searching</u>	<u>5.2- Video Production</u>	<u>5.3- Selection in Physical Computing</u>	<u>5.4- Flat-file Database</u>	<u>5.5- Introduction to Vector Graphs</u>	<u>5.6- Selection in Quizzes</u>	<u>6.1- Communication and Collaboration</u>	<u>6.2- Webpage Creation</u>	<u>6.3 Variables in Games</u>	<u>6.4- Introduction to spreadsheets</u>	<u>6.5- 3D Modelling</u>	<u>6.6- Sensing Movement</u>
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts			✓			✓	✓		✓			✓
use sequence, selection, and repetition in programs; work with variables and various forms of input and output			✓			✓			✓			✓
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs			✓			✓			✓			✓
understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	✓						✓					
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content		✓		✓				✓				

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select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information												
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	