

Sunnyside Primary Academy Computing Overview							
		Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
Year 1	Unit	Technology All Around Us	Digital Painting	Moving a robot	Grouping Data	Digital Writing	Programming Animations
	Computing Strands	Computing Systems Algorithms	Effective use of Tools, Creating Media	Algorithms, Programming	Data and Information, Algorithms	Effective use of Tools, Creating Media	Programming, Design and Development
	Key Learning	Recognising technology in school and using it responsibly.	Choosing appropriate tools in a program to create art and making comparisons with working non-digitally.	Writing short algorithms and programs for floor robots and predicting program outcomes.	Exploring object labels, then using them to sort and group objects by properties.	Using a computer to create and format text, before comparing to writing non-digitally.	Designing and programming the movement of a character on screen to tell stories.
Year 2	Unit	Information Technology Around Us	Digital Photography	Robot Algorithms	Pictograms	Digital Music	Programming Quizzes
	Computing Strands	Networks, Computing Systems	Effective use of Tools, Creating Media	Algorithms, Programming	Data and Information, Effective use of Tools	Creating Media, Design and Development	Programming Design and Development
	Key Learning	Identifying IT and how its responsible use improves our world in school and beyond.	Capturing and changing digital photographs for different purposes.	Creating and debugging programs and using logical reasoning to make predictions.	Collecting data in tally charts and using attributes to organise and present data on a computer.	Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
Year 3	Unit	Connecting Computers	Stop-Frame Animation	Sequencing Sounds	Branching Databases	Desktop Publishing	Events and Actions in Programs
	Computing Strands	Networks, Computing Systems	Effective use of Tools, Creating Media	Programming, Design and Development	Data and Information, Effective use of Tools	Effective use of Tools, Creating Media	Programming, Design and Development
	Key Learning	Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	Capturing and editing digital still images to produce a stop frame animation that tells a story	Creating sequences in a block-based programming language to make music.	Building and using branching databases to group objects using yes/no questions.	Creating documents and modifying text, images and page layouts for a specific purpose.	Writing algorithms and programs that use a range of events to trigger sequences of actions.
Year 4	Unit	The Internet	Audio Production	Repetition in Shapes	Data Logging	Photo Editing	Repetition in Games
	Computing Strands	Networks, Safety and Security	Effective use of Tools, Creating Media	Algorithms, Programming	Computing Systems, Design and Development	Effective use of Tools, Creating Media	Programming, Design and Development
	Key Learning	Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Using a text-based programming language to explore count-controlled loops when drawing shapes.	Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Manipulating digital images and reflecting on the impact of the changes and whether the required purpose is fulfilled.	Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5	Unit	Systems and Searching	Video Production	Selection in Physical Computing	Flat-File Databases	Vector Graphics	Selection in Quizzes
	Computing Strands	Networks Effective use of Tools	Creating Media Design and Development	Programming Computing Systems	Data and Information Effective use of Tools	Effective use of Tools, Creating Media	Algorithms, Programming
	Key Learning	Recognising IT systems in the world and how some can enable searching on the internet.	Planning, capturing, and editing video to produce a short film.	Exploring conditions and selection using a programmable microcontroller.	Using a database to order data and create charts to answer questions.	Creating images in a drawing program by using layers and groups of objects.	Exploring selection in programming to design and code an interactive quiz.
Year 6	Unit	Communication and Collaboration	Webpage Creation	Variables in Games	Introduction to Spreadsheets	3D Modelling	Sensing Movement
	Computing Strands	Networks Effective use of Tools	Creating Media, Design and Development	Programming, Design and Development	Data and Information Effective use of Tools	Effective use of Tools, Creating Media	Programming Computing Systems
	Key Learning	Exploring how data is transferred by working collaboratively online.	Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.	Exploring variables when designing and coding a game.	Answering questions by using spreadsheets to organise and calculate data.	Planning, developing, and evaluation 3D computer models of physical objects.	Designing and coding a project that captures inputs from physical devices.