

Coverage against 2015 Scheme of Work – Rising Stars Switched on Computing

Year A & B overviews - Skills progression - Computing

Pupils are taught the knowledge, understanding and skills needed to engage in Computer learning Below are the skills and end points for each phase.

KS1- Y1/2

Year A (2022-2023)								
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
	2.3 We are	2.5 We are	1.5 We are TV	2.2 We are games	2.4 we are	1.6 We are		
Units	photographers	detectives	chefs	testers	researchers	Gardeners		
	(Joournalists)				(Animation)			
Area of	Digitally Literate -	Digitally Literate	Digitally Literate	Computer Science	Digitally Literate	Digitally Literate		
curriculum	Creative skills	- Creative skills	- Creative skills	- programming	- Creative skills	- Creative skills		

	Year B (2023-2024)							
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
Units	1.1 We are treasure hunters. Basic skills: word processing & imaging	1.5 We are storytellers	1.2 Woodland Documentaries	1.3 We are painters	2.4 We are time travellers	1.4 We are personal trainers		
Area of curriculum	Computer Science - programming Digitally Literate - Creative skills	Digitally Literate - Creative skills	Digitally Literate - Creative skills	Digitally Literate - Creative skills	Digitally Literate - Creative skills	Digitally Literate - Creative skills		



KS2- Y3/4

	Year A (2022-2023)							
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
	4.6 We are	3.6 We are opinion	4.3 We are	3.4 we are	4.1 We are	4.2 We are toy		
Units	meteorologists	pollsters	musicians	vloggers	software	designers		
	-				developers	-		
Area of	Digitally Literate	Communication	Digitally Literate	Communication	Computer Science	Digitally Literate		
curriculur	- Creative skills	Technology incl.	- Creative skills	Technology incl.	- programming	- Creative skills		
curriculur		online Safety		online Safety				

	Year B (2023-2024)								
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2			
Units	Basic Computer skills	4.4 We are HTML editors 4.5 We are co- authors	3.1 We are programmers	3.2 We are bug fixers	3.5 We are communicators	3.3 We are presenters			
Area of curriculum	Communication Technology incl. online Safety	Computer Science - programming Digitally Literate - Creative skills	Computer Science - programming	Computer Science - programming	Communication Technology incl. online Safety	Digitally Literate - Creative skills			



KS2- Y5/6

	Year A (2022-2023)							
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
Units	Basic skills: Word, etc	6.3 We are market researchers	5.1 We are game developers	5.5 We are bloggers	5.2 We are cryptographers (Scratch)	6.1 We are APP planners		
Area of curriculum	Communication Technology incl. online Safety	Communication Technology incl. online Safety	Computer Science - programming	Communication Technology incl. online Safety	Computer Science - programming	Computer Science - programming		

	Year B (2023-2024)							
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2		
	5.3 We are	6.6 We are	5.6 We are	6.4 We are	6.5 We are APP	5.4 We are web		
Units	artists	marketeers	architects	interface	developers	developers		
				designers		-		
Area of	Digitally Literate	Digitally Literate	Digitally Literate	Digitally Literate	Computer Science	Computer Science		
curriculum	- Creative skills	- Creative skills	- Creative skills	- Creative skills	- programming	- programming		



EYFS

Children at the expected level of development will:

• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

	Year1/2	Year 3/4	Year 5/6
Computer Science (programming)	 I am beginning to understand that sequence (order) is important when devising algorithms and programming devices. 1.1 I can describe what actions are needed for a particular task and begin to use the word algorithm. 2.1 I am able to predict what will happen in an algorithm or program. 2.1, 2.2 I can understand why algorithms are useful for solving a wide range of problems and that we use algorithms every day. 2.1 I can describe what I expect to happen while programming a robot. 1.1 I am beginning to understand that sequence (order) is important when devising algorithms and programming devices. 1.1 I can execute a program, observe the results. 1.1 	 I can work with a partner to design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. 3.1, 3.2, 4.1,4.2 I am beginning to solve problems, by decomposing them into smaller parts. 3.1, 4.1 I can use sequence in programs. 3.1, 4.1 I am beginning to work with variables. 3.1, 4.1 I can work with various forms of input and output with support. 3.3 I am beginning to use logical reasoning to explain how some simple algorithms work. 3.1, 4.1 <i>I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</i> 3.1, 4.1, 4.2 <i>I can solve problems by decomposing them into smaller parts.</i> 3.1, 4.1 <i>I can use sequence in programs.</i> 3.1, 4.1 <i>I can use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i> 3.1, 3.2, 4.1 	 I can explain and program each of the steps in my algorithm. 5.1 I can review and amend the original algorithm while programming. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can deconstruct a problem into smaller steps, recognising similarities to solutions used before. 5.1 I can recognise when a variable is needed to achieve a required result. 5.1 I can program a sprite to add to the score on a certain action. 5.1 I can evaluate the effectiveness and efficiency of an algorithm, continually testing the programming of that algorithm. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can write programs that include variables (e.g. a scoring system in a game) 5.1 I can explain and program each of the steps in my algorithm. 5.1 I can review and amend the original algorithm while programming. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can design algorithms and programs that use repetition. 5.1, 5.3, 5.4, 5.5 I can explain and program each of the steps in my algorithm. 5.1 I can review and amend the original algorithm while programming. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can review and amend the original algorithm while programming. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can review and amend the original algorithm while programming. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program for a device or onscreen activity. 5.1 I can recognise when a variable is needed to achieve a required result. 5.1
			 I can program a sprite to add to the score on a certain action. 5.1



We all love, learn and grow together. Mark izg zove oper neighbour as yearsof zove

	 I am beginning to write programs successfully to create movement onscreen. 1.1 I am beginning to use different kinds of inputs in programming (key press, mouse click tap on a sprite, automated start condition) 1.1 I can describe clearly what I expect to happen while programming a robot. 1.1 I can understand that programs respond to inputs to carry out actions. 2.1 I can use different kinds of inputs in programming (key press, mouse click tap on a sprite, automated start condition) 2.1 		 I can evaluate the effectiveness and efficiency of an algorithm, continually testing the programming of that algorithm. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can link errors in a program to a problem in the algorithm on which it is based. 5.1, 5.2, 5.3, 6.2, 6.4, 6.5 I can write programs that include variables (e.g. a scoring system in a game) 5.1 I can design algorithms and programs that use repetition. 5.1, 5.3, 6.4, 6.5
Computer Science (computers and networks)	 I am aware of obvious uses of IT in and beyond school. 1.5, 2.2 I have a growing awareness of things in and beyond the home that have some kind of computer in them (microwave, car etc.) 1.5 With support I can save and retrieve my work. 1.3 I can understand some of the things that people do with computers at work and at home. 1.5, 2.2 I can log on to a computer network. I understand how to save and retrieve my work from a shared drive. 2.3, 2.4, 2.5, 2.6 	 I understand that the Internet is a collection of computers (servers) joined together across the world. 3.4, 4.4 I know there is a difference between the internet and the world wide web. 3.5 I am aware of the basic structure of the school network, how it is connected (physical wiring, wireless) and the services that are a part of it (printing, scanning, internet via server) 3.4 I can save my work to a variety of locations on the school network, online and locally to a device. 3.4 <i>I understand that the Internet is a collection of computers (servers) joined together across the world. 3.4, 4.4</i> <i>I understand the differences between the internet and the world wide web. 3.5</i> <i>I understand the basic structure of the school network, how it is connected (physical wiring, wireless) and the services that are a part of it (printing, scanning, internet via server) 3.4</i> <i>I can save (and successfully retrieve!) their work to a variety of locations on the school network, online and locally to a device. 3.4</i> 	 I know that the internet provides different services and be able to describe some (email, www) 5.2, 5.4, 5.5, 6.1 I know that information is passed around the internet) 5.2, 5.4, 5.5, 6.1 I can explain that the internet provides different services and be able to describe some (email, www file transfer protocol, video conferencing) 5.2, 5.4, 5.5, 6.1





Information Technology (multimedia)	 I can use a painting app to create a picture to communicate ideas. 1.3 I can use a camera or camcorder to take a picture or record my work. 1.2 I can begin to edit digital photographs. 1.3 I understand the differences between a graphics apps and traditional art activities. 1.3 I can talk about my use of a painting app and my choice of tools. 1.3 I can experiment with a range of devices that create and record sound. 1.5 I can understand that devices have record and playback functions. 1.5 I can access different information using a range of equipment (apps, website, TV, DVD etc.) 1.4 <i>I can use brush and pen tools, create lines and textures and use the flood fill spray and stamp tools. 1.2, 1.3</i> <i>I can demonstrate good control when using still and video cameras understanding the need to frame an image or scene and keep the camera still. 2.3</i> <i>I am beginning to discuss the quality of my image and make decisions (e.g. delete a blurred image) 2.3</i> 	 I can use different font effects, layout, format, graphics and illustrations. 3.3 I can use editing tools. 3.3 I can log on to an email account or forum. 3.5 I can capture "footage" from different devices into simple movie editing software. 3.3 I can use IT to select and record voice and sounds. 4.3 I can select sound files in sound editing software / app. 4.3 I can use music software or app to experiment with sound patterns. 4.3 I can use music software / app to create a simple composition. 4.3 I can use different font effects, layout, format, graphics and illustrations to communicate for a given audience. 3.3 I can use appropriate editing tools to ensure my work is clear and error free. 3.3 I can create a short-animated sequence from captured images. 3.3 I can use IT to select and record voice and sounds. 4.3 I can use different fort effects and performs out of from a given audience. 3.3 I can use appropriate editing tools to ensure my work is clear and error free. 3.3 I can log on to an email account or forum, open emails, create and send appropriate replies, use attachments. 3.5 I can create a short-animated sequence from captured images. 3.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use IT to select and record voice and sounds. 4.3 I can use music software / app. 4.3 I can use music software / a	 I can independently create, send and respond to emails, blogs and forums. 5.5 I can independently create, send and respond to email, blogs and forums. 5.5
Information Technology	• I can entertext into a search engine to find specific given web sites. 1.3, 1.4	I can develop key questions and key words to search for specific information. 4.5	 I can use strategies for finding information. 5.4, 6.1 I understand the possible impact of using incorrect data. 5.4, 6.1



(data handling) I am aware of responsible internet use I can use information purposefully to complete I can modify a search pattern in order to find • and the school's acceptable use policy. specific tasks. 3.6 specific information. 5.4, 5.6, 6.1, 6.6 1.3 I can use search engines for different media. 4.5 I can use strategies for finding information. 5.4, ٠ I can develop simple classification skills I understand a website has a unique address. 4.4 5.6, 6.1, 6.6 • • by carrying out simple sorting activities I can explain that some information found through *I recognise the impact of using incorrect* (probably away from the computer) 1.4 information in my work. 5.4, 5.6, 6.1, 6.6 searching is more relevant than others. 4.5 I can sort and classify a group of items by I understand the possible impact of using • I can collect appropriate information, enter it into ٠ asking simple yes / no questions. 1.4 incorrect data. 5.4, 5.6, 6.1, 6.6 a database or spreadsheet. 3.6 I can talk about the different ways I can generate and compare different charts and ٠ • technology can be used to collect graphs. 3.6 information, (e.g. camera, microscope or I can organise, present, analyse and interpret the • sound recorder). 1.2 data in tables, tally charts, charts / graphs. 3.6, 4.6 I can interpret graphs, discuss ٠ I am beginning to develop skills to identify what • information contained and answer data needs to be collected. 3.6 simple questions. 2.6 I can change the contents of cells in a spreadsheet. • I can use appropriate buttons, menus 3.6 and hyperlinks to navigate web sites for I can use a spreadsheet to record data. 3.6 stored information.1.3, 1.4, 2.4 I can use a spreadsheet to explore simple patterns. ٠ I can locate specific sites by typing a ٠ 4.6 website address (URL) into the address I can develop key questions and key words to • bar in a web browser. 1.3, 1.4, 2.4 search for specific information. 4.4 I am beginning to develop key questions ٠ I can use information purposefully to complete • to help find information. 2.4 specific tasks. 3.6 • I am aware of responsible internet use I can use search engines for different media. 4.5 • and the school's acceptable use policy. I understand a website has a unique address. 4.4 2.4 I can explain that some information found • I can use simple graphing programs to • through searching is more relevant than others. produce pictograms and other simple 4.5 graphs. 2.6 I can describe the process of finding specific ٠ I can use graphing software to change information. 4.5 the way a graph type (e.g. pictogram to • I can collect appropriate information, enter it into bar chart) 3.6 a database or spreadsheet and use this to answer ٠ I understand that IT can be used to simple questions. 3.6 create, display and change graphs quite I can generate and compare different charts and easily. 3.6 graphs (using graphing software / app, spreadsheet etc.) 3.6 I can organise, present, analyse and interpret the • data in tables, tally charts, charts / graphs, using IT where appropriate. 3.6



	 I am beginning to develop skills to identify what data needs to be collected and design a questionnaire or survey to aid its collection. 3.6 I can use a spreadsheet to record data and produce graphs. 3.6 I can use a spreadsheet to explore simple patterns (e.g. in a number square) 4.6 I understand the need to structure information properly in a database or spreadsheet. 4.6 I know, understand and use the vocabulary: file, record, field, data and information. 4.6
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Digital Literacy	I can use technology saf	ely. 1.3 •	I make sensible decisions if content is	I can demonstrate safe practice when selecting
(e-safety)	I can identify where to g		inappropriate or upsetting. 3.4	images or content for uploading to a personal
· //	support when I have cor		I can explain why we must keep personal	profile. 5.2, 5.4, 5.5, 6.2, 6.3, 6.4, 6.6
	content or contact on th		information and passwords private when	I can explain the importance of appropriate online
	other online technologi		communicating online. 3.5	behaviour and that online bullying is unacceptable.
	 I can recognise acceptate 	• • • •	I can tell you how to deal with unpleasant	5.2, 5.4, 5.5, 6.2, 6.3, 6.4, 6.6
	behaviour. 1.3I know what to do wher		communications via mobile, text, chat rooms. 3.5	I can demonstrate safe practice when selecting images or content for uploading to a personal
	 I know what to do when about content or being 		I know why it is important to respect others' feelings and electronic work. 3.5	profile. 5.2, 5.4, 5.5, 6.2
	 I can recognise what is a 			 I understand the importance of appropriate
	unacceptable behaviour	-	inappropriate or upsetting. 3.4	online behaviour and that online bullying is
	technologies and online		I can explain why we must keep personal	unacceptable. 5.2, 5.4, 5.5, 6.2, 6.3, 6.4, 6.6
	 I understand the import 		information and passwords private when	
	communicating safely a		communicating online. 3.5	
	online, and the need for	keeping •	I can tell you how to deal with unpleasant	
	personal information pr	ivate. 1.3	communications via mobile, text, chat rooms. 3.4,	
	 I can keep personal info 	ormation private.	4.4, 4.5	
	2.2	•	I can choose when to use appropriate writing	
	• I can use technology res		conventions for electronic communication. 3.5	
	I can use technology res		I know why it is important to respect others'	
	 I can identify a range of 		feelings and electronic work. 4.3	
	concerns about contact.			
	 I am discerning in evalu content. 2.3, 2.4, 2.5, 2. 			
	 I understand the import 			
	communicating safely a	-		
	online, and the need for			
	personal information p			
	• I can demonstrate use of			
	safely and responsibly,	knowing a range		
	of ways to report unacc			
	and contact when onlin	e. 2.3, 2.4, 2.5,		
	2.6			
	I can demonstrate response			
	technologies and online			
	know a range of ways t	-		
	concerns. 2.3, 2.4, 2.5, 2	2.0		



Vocabulary	Computer	Action	Debug	Control	Analyse	Algorithms
	Device	Арр	Design	Editing	Avatar	Collaboration
	Digital	Content	Information	Email	Cropping	Communication
	Internet	Image	Input	Graphics	Download	Copyright
	iPad	Keyboard	Logon	Repetition	E-safety	Cyberbullying
	Online	Network	Organise	Retrieve	Evaluate	Orientation
	Phones	Program	Output	Selection	Password	Photo-manipulation
	Screen	Save	Table	Sequence	Resizing	Plagiarism
	Search	Store	Website	Simulate	Software	Processing
	Tablets	Text	Write	Technology	Upload	Spreadsheet