KS1 themes	Year 1 units		Year 2 units	
Computing systems and networks	**Technology around us** Recognising technology in school and using it responsibly.		**Information technology around us** Identifying IT and how its responsible use improves our world in school and beyond.	
Creating media	**Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	**Digital writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Digital photography** Capturing and changing digital photographs for different purposes.	**Making music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.
Data and information	**Grouping data** Exploring object labels, then using them to sort and group objects by properties.		**Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	

Programming The units must be covered in order A before B	Programming A **Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes.	Programming B **Programming animations** Designing and programming the movement of a character on screen to tell stories.	Programming A **Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	Programming B **Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
These strands come through all learning	Safety and security			
	Effective use of tools			
	Impact of technology			

National Curriculum Coverage — Years 1 and 2	1.1 Technology around us	1.2 Digital painting	1.3 Moving a robot	1.4 Grouping data	1.5 Digital writing	1.6 Programming animations	2.1 Information technology around us	2.2 Digital photography	2.3 Robot algorithms	2.4 Pictograms	2.5 Digital music	2.6 Programming quizzes
Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions			✔			✔			✔			✔
Create and debug simple programs			✔			✔			✔			✔
Use logical reasoning to predict the behaviour of simple programs			✔			✔			✔			✔
Use technology purposefully to create, organise, store, manipulate, and retrieve digital content	✔	✔		✔	✔		✔	✔		✔	✔	✔
Recognise common uses of information technology beyond school	✔		✔				✔	✔				
Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	✔			✔	✔		✔	✔	✔	✔		

Software and hardware overview

Requirements for pupils — below

✓ Used for the unit — reflected in screenshots   ● Could be used as an alternative

	Desktop or laptop	Chromebook	Tablet	Software or hardware
1.1 Technology around us	✓	✓	●	paintz.app
1.2 Digital painting	✓	✓	●	Microsoft Paint or similar
1.3 Moving a robot				Bee-Bot, Blue-Bot, or other fixed-movement floor robot
1.4 Grouping data	✓	✓		Google Slides or Microsoft PowerPoint
1.5 Digital writing	✓	✓	●	Google Docs or Microsoft Word
1.6 Programming animations	●	●	✓	ScratchJr
2.1 Information technology around us	✓	✓		Google Slides or Microsoft PowerPoint
2.2 Digital photography	✓		●	Digital camera
2.3 Robot algorithms				Bee-Bot, Blue-Bot, or other fixed-movement floor robot
2.4 Pictograms	✓	✓	●	j2data Pictogram
2.5 Digital music	✓	✓	●	Chrome Music Lab
2.6 Programming quizzes	●	●	✓	ScratchJr