

Clifton-upon-Teme Primary School Medium Term Plan

KS1 Computing – Cycle B

Statement Number	National Curriculum Statement
1.1	understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
1.2	create and debug simple programs
1.3	use logical reasoning to predict the behaviour of simple programs
1.4	use technology purposefully to create, organise, store, manipulate and retrieve digital content
1.5	recognise common uses of information technology beyond school
1.6	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.

Abbreviations based on Teach Computing Taxonomy		
Abbreviation	Strand	Description
NW	Networks	Understand how networks can be used to retrieve and share information and come with associated risks
CM	Creating Media	Select and create a range of media including text, images, sounds and video.
DI	Data & Information	How is data stored, organised and used to represent real world artefacts and scenarios
DD	Design & Development	The activities involved in planning, creating and evaluating computing artefacts
CS	Computing Systems	What is a computer, how do it's constituent parts function together as a whole
IT	Impact of Technology	How individuals, systems and society as a whole interact with computer systems
AL	Algorithms	Being able to comprehend, design, create and evaluate algorithms
PG	Programming	Creating software to allow computers to solve problems
ET	Effective Use of tools	Use software tools to support computing work
SS	Safety & Security	Understanding risks when using technology and how to protect individuals and systems

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National Curriculum Coverage Year 1/2

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 on the internet or other online technologies	✓			✓	✓		✓	✓	✓	✓		

Units of work covered in Cycle B are highlighted below along with Unit Summaries:

	Computing systems and networks ¹	Creating media	Programming A	Data and information	Creating media	Programming B
Year 1	Technology around us (1.1)*	Digital painting (1.2)	Moving a robot (1.3)	Grouping data (1.4)	Digital writing (1.5)	Programming animations (1.6)
Year 2	Information technology around us (2.1)	Digital photography (2.2)	Robot algorithms (2.3)	Pictograms (2.4)	Digital music (2.5)	Programming quizzes (2.6)

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 2	Information technology around us Identifying IT and how its responsible use improves our world in school and beyond.	Digital photography Capturing and changing digital photographs for different purposes.	Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions.	Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer.	Digital music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.

Software and hardware overview

Requirements for pupils - below

✓ Reflected in the unit screenshots

◆ Alternative software available

	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 or other 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 or other floor robot
2.4 Pictograms	✓	✓	◆	j2data Pictogram
2.5 Digital music	✓	✓	◆	Chrome Music Lab
2.6 Programming quizzes	◆	◆	✓	ScratchJr

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