Computing Curriculum Overview 25-26

National Curriculum Coverage — Key Stage 1 Computing Curriculum	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 Making 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	✓				✓	✓	✓			✓		

	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
	How does your garden grow?	**Earth and Beyond**	**Where the Wild Things Are**	**Ready, steady, cook!**	**Islands/ water**	**Home Sweet Home**
EYFS - Understanding the world & Computational Thinking (Barefoot Computing)	Children can point to and use simple programmable toys like BeeBots, recognise familiar technology noises, notice technology used at home and in their setting, and begin to spot technology in the environment such as lights, buttons, or hand dryers. They can also watch adults use digital tools for drawing or music and listen to adults' guidance to stay safe when using technology. Creating, Tinkering Awesome Autumn	Children can repeat actions they have seen, such as pressing buttons on programmable toys to cause an effect, and they role-play using familiar technology appropriately. They show curiosity with cause-and-effect toys, begin to use mark-making tools in apps with support, and understand they must ask an adult before using devices. Collaboration Persevering Winter Warmers	Children can make a BeeBot move by pressing its buttons and continue to role-play with technology such as iPads, cameras, and phones. They can choose and use technology for a specific purpose, identify familiar household and everyday devices like tablets, microwaves, and remotes, and create simple digital drawings or patterns. They are also beginning to understand the idea of time limits when using technology. Pattern Logical reasoning	Children can make a BeeBot move for a purpose and select technology to use appropriately. They can access and control simple touch-screen activities, use electronic toys with support, and create simple digital drawings or patterns. They also begin to understand basic online rules, such as only talking to people they know and asking an adult for help if they are unsure. Abstraction Algorithms	Children can predict what will happen when they press buttons on a BeeBot or an adult-chosen app and can use technology to take photos, record videos, or create artwork. They can name ways IT is used beyond school, talk about what everyday technology does, and use more advanced apps like Tux Paint, Scribble, or PaintZ to make digital pictures. They also know that adults help keep them safe online. Decomposition Summer Fun	Children can make predictions about what a programme will do and can name and select a keyboard, mouse and screen. They can describe some uses of IT beyond school, begin to understand how technology helps us in places like shops and homes, and use more advanced apps such as Tux Paint, Scribble or PaintZ to create digital pictures. They can also talk to an adult about what they've seen online, say when something makes them feel uncomfortable, and understand the need to stay safe when using technology. Experience logging on and typing their names using a keyboard Review of concepts

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Year 1 Overview of curriculum areas: links to the Education for a Connected World framework (ncce.io/efacw)	Computing systems and networks (Tech all around us: 1.1) - Copyright and ownership - Health, well-being and lifestyle Technology around us Recognising technology in school and using it responsibly	Creating Media (Digital painting 1.2) Digital painting Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally – compare to painting in Term 1 art skills.	Programming A (Moving a Robot: 1.3) Privacy & security E-safety: Real or Fake? Moving a robot Writing short algorithms and programs for floor robots, and predicting program outcomes.	Creating Media (Digital Writing: 1.5) Digital writing Using a computer to create and format text, before comparing to writing non-digitally	Programming B (Programming animations:1.6) Programming animations Designing and programming the movement of a character on screen to tell stories.	Data and information (Grouping data: 1.4) Copyright & ownership Grouping data (1.4) Exploring object labels, then using them to sort and group objects by properties.

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Year 2 Overview of curriculum areas: links to the Education for a Connected World framework (ncce.io/efacw)	Creating Media (Digital Photography: 2.2) - Self-image and identity Digital photography Capturing and changing digital photographs for different purposes	Computing systems and networks (IT around us: 2.1) - Health, well-being and lifestyle Information technology around us Identifying IT and how its responsible use improves our world in school and beyond	Creating Media (Making music: 2.5) Copyright and ownership Making music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Data and information (Pictograms 2:4) - Privacy and security Pictograms (2.4) Collecting data in tally charts and using attributes to organise and present data on a computer.	Programming A (Robot Algorithms 2.3) - Copyright and ownership Robot algorithms Creating and debugging programs, and using logical reasoning to make predictions.	Programming B (Programming quizzes:2.6) Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.