

Long term computing plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Computing software and technology is used throughout EYFS to support lessons and begin to expose the children to a wider range of technology, technological language and aid them in understanding where technology fits into their lives.					
Year 1	Computing Systems and networks – Technology around us	Creating media – Digital painting	Programming A – Moving a robot	Data and information – Grouping data	Creating media – Digital writing	Programming B – Introduction to animation
Year 2	Computing systems and networks – IT around us	Creating media – Digital photography	Programming A – Robot algorithms	Data and information - Pictograms	Creating media – Making music	Programming B – An introduction to quizzes
Year 3	Computing systems and networks – Connecting computers	Creating media - Animation	Programming A – Sequence in music	Data and information – Branching databases	Creating media – Desktop publishing	Programming B – Events and actions
Year 4	Computing systems and networks – The Internet	Creating media – Audio editing	Programming A – Repetition in shapes	Data and information – Data logging	Creating media – Photo editing	Programming B – Repetition in games
Year 5	Computing systems and networks – Sharing information	Creating media – Video editing	Programming A – Selection in physical computing	Data and information – Flat-file databases	Creating media – Vector drawing	Programming B – Selection in quizzes

Year 6	Computing systems and networks - Communication	Creating media – Web page creation	Programming A – Variables in games	Data and information - Spreadsheets	Creating media – 3D modelling	Programming B – Sensing
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National curriculum statements

Key stage 1

Pupils should be taught to:

- 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.

Key stage 2

Pupils should be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.
- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.
- Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact