

Computing Long Term Plan

Year Group: 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Fine motor skills	Programming: All about instructions	Computer systems and networks: Exploring Hardware	Programming: Beebots	Data Handling: Introduction to Data	Computer systems and Networks: Using a Computer
Year 1	Computing Systems and Networks Improving mouse skills Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 1 – Algorithms Unplugged Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Skill Showcase – Rocket to the Moon Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Creating Media – Digital Imagery Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling Introduction to Data Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 2: Beebot Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.
Year 2	Computing Systems and Network 1 – What is a computer? Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 1 – Algorithms and Debugging Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Computing Systems and Network 2 – Word Processing Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 2 – Scratch Jr Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Creating Media – Stop Motion Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling – International Space Station Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.

Computing Long Term Plan

Year 3	Computer Systems and Networks 1 – Networks and the Internet Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Computer Systems and Networks 2 – Emailing Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming - Scratch Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Computer Systems and Networks 3 – Journey Inside the Computer Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Creating Media – Video Trailers Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling – Comparison Cards Databases Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.
Year 4	Computing Systems and Networks – Collaborative Learning Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 1 – Further Coding with Scratch Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Creating Media – Website Design Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Skills Showcase – HTML Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming – Computational Thinking Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling – Investigating Weather Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.

Computing Long Term Plan

Year 5	Computing Systems and Networks; Search Engines Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 1 Music Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling Mars Rover 1 Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Creating Media Stop Motion Animation Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming 2 Micro:Bit Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Skills Showcase Mars Rover Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.
Year 6	Computing Systems and Networks Bletchley Park and the history of computers Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Computer Systems and networks: Exploring AI Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling 1 – Big Data 1 Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Programming: Intro to Python Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Data Handling 2 – Big Data 2 Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.	Skills Showcase: Inventing a product Online Safety session to be taught at the beginning of the topic and interwoven through all sessions.

Computing Long Term Plan

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



Computing Long Term Plan

- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.