



Sutton Bonington  
Primary School

## Sutton Bonington Primary School

### Computing Coverage



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#### Key Ideas taught through Computing

- Computer Science – this covers programming (both block-based and text-based), including computational thinking using web-based software such as Scratch. Pupils across Key Stage 1 and 2 will write code to program physical and on-screen objects, interactive games and use text-based language, such as HTML and Python by the end of Key Stage 2.
- Information Technology – this covers the use of applications to create digital content, including document creation and editing, video making, digital art, graphic design, animation, 3D modelling and website building.
- Digital Literacy – covers skills to find, evaluate, utilise and share using technologies and the Internet. This includes important e-safety and internet research skills, as well as an understanding of computer networks in Key Stage 2.

#### Early Years Foundation Stage

Children at the expected level of development will:

- Complete a simple program e.g. online game, digital art activity etc
- Operate some simple programmable and electronic toys
- Know that they should always ask for permission before using a device
- Know some different technologies used at home and school and associated vocabulary

The skills and knowledge that allow children to achieve the Early Learning Goal are taught within focused tasks and the continuous provision throughout the Reception year.

#### Key Stage 1 – National Curriculum Computing

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

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Throughout Year
Year 1	Mouse and Keyboard Skills	Digital Art	Design	Introduce Programming	Text and Images	Music Creation	Online Safety
Year 2	Developing Programming	Digital Art	Recognise Uses of IT EBook Creation	Introduction to Animation	Internet Research	Introduce Data Handling	Online Safety

## Key Stage 2 – National Curriculum Computing

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

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Throughout Year
<b>Year 3</b>	Programming in Scratch	Digital Art	3D Design	Comic Creation	Document Editing and Creation	Music Creation	Online Safety
<b>Year 4</b>	Programming in Scratch	Video Editing	3D Design	Animation	Internet Research EBook Creation	Data Handling	Online Safety
<b>Year 5</b>	Programming in Scratch	App Design	EBook Creation	Physical Devices	Computer Networks and the Internet	Data Handling	Online Safety
<b>Year 6</b>	Programming in Scratch	Image Editing	Graphic Design	Virtual Reality	Web Design	Data Detectives	Online Safety