

COMPUTING

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.