



# Key Stage 3 – Computing

## Computing

C1 - Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C2 - Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C3 - Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C4 - Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C5 - Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C6 - Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C7 - Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C8 - Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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C9 - understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.

Not Met	Shallow	Emerging	Developing	Deepening	Functional
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