

National Curriculum
Subject Content

Key Stage 1

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| 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 |
| Understand what algorithms are | Create simple programs | Use logical reasoning to predict the behaviour of own programs | Use technology purposefully to create digital content | Recognise common uses of information technology at home | Use technology safely |
| Understand that algorithms are implemented as programs on digital devices | Debug simple programs | Use logical reasoning to predict the behaviour of others' programs | Use technology purposefully to store digital content | recognise common uses of information technology beyond school | Keep personal information private |
| Understand that programs execute by following precise and unambiguous instructions | | | Use technology purposefully to retrieve digital content | | Use technology respectfully |
| | | | Use technology purposefully to organise digital content | | Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies |
| | | | Use technology purposefully to manipulate digital content | | |

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| | Computer science statement |
| | Information technology statement |
| | Digital literacy statement |

Key Stage 2

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| 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. |
| Write programs that accomplish specific goals | Use sequence in programs | Use logical reasoning to detect and correct errors in programs | Understand how computer networks can provide multiple services, such as the world wide web | Use search technologies effectively | Select, use and combine software | Use technology responsibly |
| Design programs that accomplish specific goals | Use selection in programs | Use logical reasoning to explain how some simple algorithms work | Understand computer networks, including the internet | Appreciate how search results are selected | Design and create content | Identify a range of ways to report concerns about contact |
| Debug programs that accomplish specific goals | Use repetition in programs | Use logical reasoning to detect and correct errors in algorithms | Understand the opportunities computer networks offer for communication | Appreciate how search results are ranked | Design and create systems | Identify a range of ways to report concerns about content |
| Control or simulate physical systems | Work with variables | | Understand the opportunities computer networks offer for collaboration | Be discerning in evaluating digital content | Collect, analyse, evaluate and present data | Recognise acceptable/unacceptable behaviour |
| Solve problems by decomposing them into smaller parts | Work with various forms of input and output | | | | Collect, analyse, evaluate and present information | |

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