# Computing Progression: Expected Standards

| Year Group | Computer Sciences | Information Technology | Digital Literacy |
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| Year 1 | *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. | *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 *Recognise common uses of information technology beyond school. |
| Year 2 | *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. |
| Year 3 | *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 concern about content and contact. |
| Year 4 | *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 concern about content and contact. |
| Year 5 | *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 concern about content and contact. |
| Year 6 | *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 concern about content and contact. |