

## Bournmoor Primary School Progression of Skills Computing

### Computer Science

**Computer Science** - the study of the foundational principles and practices of computation and computational thinking, and their application in the design and development of computer systems.

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>•Explore using algorithms with Bee Bots</li> </ul>	<ul style="list-style-type: none"> <li>•Understand what algorithms are, how they are implemented as programs on digital devices</li> <li>•Create simple programs with Bee Bots</li> </ul>	<ul style="list-style-type: none"> <li>•Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>•Create and debug simple programs</li> <li>•Use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>•Design and write programs that accomplish specific goals</li> <li>•Work with various forms of input and output</li> <li>•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</li> </ul>	<ul style="list-style-type: none"> <li>•Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems</li> <li>•Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<ul style="list-style-type: none"> <li>•Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>•Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>•Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<ul style="list-style-type: none"> <li>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>•Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>•Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Children should be able to independently carry out activities</li> </ul>

### Information Technology

**Information Technology** - the creative and productive use and application of computer systems, hardware and software.

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>•Know how to operate simple equipment</li> <li>•Show interest in technological toys with knobs or</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology purposefully to create, store, and retrieve digital content Use the software section to support this</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology purposefully to organise, manipulate and retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>•Use search technologies effectively</li> <li>•Select, use and combine a variety of software (including</li> </ul>	<ul style="list-style-type: none"> <li>•Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> </ul>	<ul style="list-style-type: none"> <li>•Use search technologies effectively, appreciate how results are selected and ranked</li> <li>•Select, use and combine a variety of software</li> </ul>	<ul style="list-style-type: none"> <li>•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</li> </ul>

<p>pulleys, or real objects</p> <ul style="list-style-type: none"> <li>•Show skills in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images</li> <li>•Know that information can be retrieved from computers</li> <li>•Complete a simple program on a computer</li> <li>•To interact with age appropriate computer software</li> <li>•Recognise that a range of technology is used in places such as homes and school</li> <li>•Select and use technology for particular purposes</li> </ul>		<ul style="list-style-type: none"> <li>•Recognise common uses of information technology beyond school</li> </ul>	<p>internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, and present information</p>	<ul style="list-style-type: none"> <li>•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, and presenting data and information</li> </ul>	<p>(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, analysing and evaluating data and information</p>	<p>content that accomplish given goals</p>
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## Digital literacy

Digital Literacy - the ability of learners to use, express themselves and develop their ideas through information and communication technology with regard to online safety and etiquette.

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>•Use technology safely and learn where to go for help</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology safely and respectfully, keeping personal information private; identify where to go for help</li> <li>•Using a website – online safety</li> </ul>	<ul style="list-style-type: none"> <li>•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</li> <li>•Navigate the web and complete simple searches – online safety</li> <li>•Web searches at home may be different to school – restriction and safe searches</li> <li>•Email - keeping information private, safe people to email/open email from - online safety</li> </ul>	<p>Use technology safely, respectfully and responsibly; identify a range of ways to report concerns about content and contact</p> <ul style="list-style-type: none"> <li>•Email/ communication (blogs) – online safety</li> <li>•Web searches at home may be different to school – restriction and safe searches</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour</li> <li>•Online Safety: use of social media - Facebook, Twitter etc keeping children safe (personal information/photos, other’s information, reporting)</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>•Online Safety: use of social media - Facebook, Twitter etc. keeping children safe (personal information/photos, other’s information, trusted people, reporting)</li> <li>•Web searches at home may be different to school – restriction and safe searches</li> </ul>	<ul style="list-style-type: none"> <li>•Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>•Online Safety: use of social media - Facebook, Twitter etc. keeping children safe (personal information/photos, other’s information, trusted people, reporting)</li> </ul>