Computing

Progression of Skills and Knowledge in Computing

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computer Science						
	Begin to develop an understanding of algorithms Begin to understand that programs work by following instructions Create simple programs and begin to debug them Develop reasoning to predict the behaviour of simple programs	Understand what algorithms are Understand how algorithms are implemented as programs on digital devices Understand that programs execute by following precise and unambiguous instructions Use logical reasoning to predict the behaviour of simple programs Create and debug simple programs	Start to use reasoning to understand how algorithms work Detect errors in algorithms and programs Begin to solve problems by decomposing them into smaller parts Start to use sequence and selection in programs Begin to develop understanding of how to write and debug programs that accomplish specific goals, including controlling or simulating physical systems Begin to work with various forms of input/output	Communicate, generate and develop ideas using a range of strategies eg prototypes, pattern pieces Use research to inform design and develop design criteria Take risks to become innovative and resourceful	Communicate, generate, develop and model ideas using a range of strategies eg computer-aideddesign, cross-sectional and exploded diagrams Use research to inform design and generate own design criteria Communicate, generate and develop ideas, drawing on other disciplines eg science, maths, computing Confidently take calculated risks to become innovative, resourceful and enterprising	Communicate, generate and develop ideas, drawing on other disciplines eg science, maths, computing Use research to inform innovative design and generate own design criteria Confidently take calculated risks to become innovative, resourceful and enterprising
Digital Literacy						
	Use technology to create, store and retrieve digital content	Use technology purposefully to create, store, retrieve, organise and manipulate digital content	Use a variety of software on digital devices	Select and use a variety of software on digital devices	Express own ideas by selecting, using and combining a variety of software on digital devices to design and create programs	Express own ideas by selecting, using and combining a variety of vsoftware on a range of digital devices and create programs

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Information Technology						
	Begin to recognise common uses of information technology beyond school	Recognise common uses of information technology beyond school	Show emerging understanding of computer networks including the internet and how they provide multiple services such as the World Wide Web Use some search technologies effectively and appreciate how results are selected Decide which questions to ask when using search engines	Understand computer networks including the internet and how they provide multiple services such as the World Wide Web Use search technologies effectively and appreciate how results are selected and ranked Evaluate the reliability of digital content Begin to ask and answer questions based on the reliability of digital content	Recognise the opportunities computer networks offer for communication and collaboration Use a wide range of search technologies effectively and appreciate how results are selected and ranked Be discerning in evaluating the reliability of digital content	Use the opportunities computer networks offer for communication and collaboration Appreciate how results are selected and ranked and use this to retrieve accurate content Be discerning in evaluating the reliability of digital content
E-Safety						
	Develop an understanding of how to use technology safely Know where to go for help/support when they have concerns about content/contact on internet	Use technology safely and respectfully, keeping personal information private Identify where to go for help/support when concerned about content/contact on internet/other online technologies	Use technology safely, respectfully and responsibly Recognise acceptable/unacceptable behaviour and identify ways to report concerns about content and contact	Recognise acceptable/unacceptable behaviour and identify ways to report concerns about content and contact	Confidently, competently and responsibly use information and communication technology	Confidently, competently and responsibly use information and communication technology