



2022-2023

	Knowledge/ coverage/ what are we teaching?	Computer Science	Digital Literacy	Online Safety	Possible use of software- this is not an exhaustive list and should be used for guidance only
Year 1	<p>By the end of KS1:</p> <ul style="list-style-type: none"> 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 <p>use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or</p>	<p>Understand what algorithms are.</p> <p>Create and debug simple programs.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>To be able use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p>	<p>To be able to use technology safely, respectfully and responsibly.</p> <p>Recognise acceptable/ unacceptable behaviour.</p> <p>Identify a range of ways to report concerns about content and contact.</p>	<p>Timbuktu Pizza</p> <p>Busy Things Path Puzzler</p> <p>Textease Turtle</p> <p>Beebots</p> <p>Colour Magic</p> <p>Scratch Junior</p>



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	contact on the internet or other online technologies.				
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Year 2	<p>By the end of KS1:</p> <ul style="list-style-type: none">• 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.	<p>To create and design simple programs.</p> <p>Understand how algorithms are implemented as programs on digital devices.</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>To be able use technology purposefully to create, organise, store, present manipulate and retrieve digital content</p> <p>Recognise common uses of information technology beyond school</p>	<p>To be able to use technology safely, respectfully and responsibly.</p> <p>Recognise acceptable/ unacceptable behaviour.</p> <p>Identify a range of ways to report concerns about content and contact.</p>	<p>Rapid Router Code Boogie Scratch Junior</p>
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<p>Year 3</p>	<p>By the end of KS2:</p> <ul style="list-style-type: none">• 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)	<p>To design, write and debug programs that accomplish specific goals using block based programming.</p> <p>To be able to use sequence, selection and repetition in programs.</p> <p>Be able to use logical reasoning to explain how some simple algorithms work and to detect and debug errors in algorithms and programs.</p>	<p>Be able to select, use and combine a variety of software (including internet services) on a range of digital devices.</p> <p>To design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Can use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</p>	<p>Kodable Hour of Code Scratch Microsoft Word</p>
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	<p>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</p> <ul style="list-style-type: none">• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.				
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2022-2023

<p>Year 4</p>	<p>By the end of KS2:</p> <ul style="list-style-type: none">• 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	<p>To solve problems through decomposition.</p> <p>To be able to use sequence, selection and repetition in programs.</p> <p>To begin to work with variables and various forms of input and output.</p>	<p>To design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>Can use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</p>	<p>Kodable Scratch IMovie PowerPoint</p>
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2022-2023

	<ul style="list-style-type: none">• 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.				
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2022-2023

<p>Year 5</p>	<p>By the end of KS2:</p> <ul style="list-style-type: none">design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller partsuse sequence, selection, and repetition in programs; work with variables and various forms of input and outputuse logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programsunderstand 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 collaborationuse search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital contentselect, use and combine a variety of software (including internet services)	<p>Design, write and debug programs that accomplish specific goals; including controlling or simulating physical systems.</p> <p>Use sequence, selection and repetition in programs.</p> <p>Be able to use logical reasoning to explain how some complex algorithms work and to detect and debug errors in algorithms and programs.</p> <p>Begin to consider the use of text based editor to code programs.</p>	<p>To design and create a database that can collect, analyse, evaluate and present data in a range of formats.</p>	<p>Can use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</p>	<p>Micro:Bits Scratch IMovie PowerPoint</p>
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2022-2023

	<p>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</p> <ul style="list-style-type: none">• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.				
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2022-2023

<p>Year 6</p>	<p>By the end of KS2:</p> <ul style="list-style-type: none">• 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	<p>To design, write and debug program using both block and text based editors.</p> <p>Create programs that accomplish specific goals; including controlling or simulating physical systems and solving problems by decomposing them into smaller parts</p> <p>To be able to create a basic website using HTML and CSS languages.</p> <p>Understand computer networks including the internet.</p>	<p>To design and create a database that can collect, analyse, evaluate and present data in a range of formats.</p>	<p>Can use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content</p>	<p>Scratch Excel iMovie</p>
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	<ul style="list-style-type: none">• 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.				
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