



## Long Term Curriculum Overview 2020-21

## Subject: Computing

*'We create a nurturing environment which both inspires and challenges our whole school family, equipping our children to have high aspirations to: 'Dream big, love God and live well.'*

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p><b><u>Online Safety (Unit: 1.1)</u></b> 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. This should include the discussion of Radicalisation.</p> <p><b><u>Grouping and sorting (Unit 1.2)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Pictograms (Unit 1.3)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p> <p><b><u>Lego builders (Unit 1.4)</u></b> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p>	<p><b><u>Maze Explorers (Unit 1.5)</u></b> Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.</p> <p><b><u>Technology outside school (Unit 1.9)</u></b> Recognise common uses of information technology beyond school.</p>	<p><b><u>Animated story books (unit 1.6)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Spreadsheets (Unit 1.8)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Coding (Unit 1.7)</u></b> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>
Year 2	<p><b><u>Online Safety (Unit 2.2)</u></b> 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. This should include the discussion of Radicalisation.</p> <p><b><u>Making Music (Unit 2.7)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Questioning (Unit 2.4)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Creating pictures (Unit 2.6)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p> <p><b><u>Effective searching (Unit 2.5)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school.</p>	<p><b><u>Presenting ideas (Unit 2.8)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Spreadsheets (Unit 2.3)</u></b> Use technology purposefully to create, organize, store, manipulate and retrieve digital content.</p>	<p><b><u>Coding (Unit 2.1)</u></b> 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.</p>
Year 3	<p><b><u>Online Safety (Unit 3.2)</u></b> Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. This should include the discussion of</p>	<p><b><u>Branching databases (Unit 3.6)</u></b> 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, analyzing, evaluating</p>	<p><b><u>Email (Unit 3.5)</u></b> 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.</p>	<p><b><u>Simulations (Unit 3.7)</u></b> 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, analyzing, evaluating</p>	<p><b><u>Spreadsheets (Unit 3.3)</u></b> 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</p>	<p><b><u>Coding (Unit 3.1)</u></b> Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing them into smaller parts. Use sequence, selection and</p>

	<p>Radicalisation.</p> <p><b><u>Touch typing (Unit 3.4)</u></b></p>	<p>and presenting data and information.</p>		<p>and presenting data and information.</p> <p><b><u>Graphing (Unit 3.8)</u></b>  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, analyzing, evaluating and presenting data and information.</p>	<p>and presenting data and information.</p>	<p>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>
Year 4	<p><b><u>Online Safety (Unit 4.2)</u></b>  Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. This should include the discussion of Radicalisation.</p> <p><b><u>Hardware investigators (Unit 4.8)</u></b>  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.</p>	<p><b><u>Writing for different audiences (Unit 4.4)</u></b>  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.</p>	<p><b><u>Effective searching (Unit 4.7)</u></b>  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.</p>	<p><b><u>Animation (Unit 4.6)</u></b>  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.</p> <p><b><u>Logo (Unit 4.5)</u></b>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing 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>	<p><b><u>Spreadsheets (unit 4.3)</u></b>  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.</p>	<p><b><u>Coding (Unit 4.1)</u></b>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing 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.  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.</p>
Year 5	<p><b><u>Online Safety (Unit 5.2)</u></b>  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. This should include the discussion of Radicalisation.</p>	<p><b><u>Databases (Unit 5.4)</u></b>  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.</p>	<p><b><u>Game Creator (Unit 5.5)</u></b>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing them into smaller parts.  Select ,use and combine a variety of software (including internet services) on a range of</p>	<p><b><u>3D Modelling (Unit 5.6)</u></b>  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.</p>	<p><b><u>Spreadsheets (Unit 5.3)</u></b>  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.</p>	<p><b><u>Coding (Unit 5.1)</u></b>  Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing them into smaller parts.  Use sequence, selection and repetition in programs; work with variables and various forms</p>

	<p><b>Concept maps (Unit 5.7)</b> 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.</p>		<p>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>			<p>of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 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.</p>
Year 6	<p><b>Online Safety (Unit 6.2)</b> 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. Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. This should include the discussion of Radicalisation.</p> <p><b>Networks (Unit 6.6)</b> 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.</p>	<p><b>Blogging (Unit 6.4)</b> 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. 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; recognize acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p><b>Networks (Unit 6.6)</b> 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.</p>	<p><b>Text Adventures (Unit 6.5)</b> 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. 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.</p>	<p><b>Spreadsheets (Unit 6.3)</b> 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.</p>	<p><b>Coding (Unit 6.1)</b> Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decompressing 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. 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.</p>