

Eastbury Primary School: Computing Progression Map 2020

SUBJECT: COMPUTING						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	<p>Topic Title: Introduction to Computing</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: Establish rules of ICT suite Knowledge and skills in using keyboard keys</p> <p>Key vocabulary: Safety Log in Devices (laptop, ipad, desktop) Password Files Folders Typing Keyboard Keys Text Input output Input device/s</p>	<p>Topic Title: Introduction to Computing</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: Establish rules of ICT suite Knowledge and skills in using keyboard keys</p> <p>Key vocabulary: Safety Log in Devices (laptop, ipad, desktop) Password Files Folders Typing Keyboard Keys Text</p>	<p>Topic Title: Internet Safety</p> <p>Key knowledge: NC objectives: To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies To recognise common uses of information technology beyond school.</p> <p>Key Skills: Understand how to stay safe online Be respectful online Understand what personal information is Know where to go for help and support.</p> <p>Key vocabulary: Internet safety Online</p>	<p>Topic Title: Internet Safety</p> <p>Key knowledge: NC objectives: To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies To recognise common uses of information technology beyond school.</p> <p>Key Skills:</p>	<p>Topic Title: We are Painters</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: We are painters: To be able to change the colour and thickness of a brush. To create special effects. To draw a picture to illustrate a story</p> <p>Key vocabulary: Digital media- text, sound, video Drawing Presenting Publishing</p>	<p>Topic Title: Hour of coding</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: Hour of coding: Begin to understand what algorithm is Begin to create simple programs (eg. in Beebots, Hour of coding) Begin to debug simple programs</p> <p>Key vocabulary: Algorithm Program Debug</p>

		Input output Input device/s	Report problems	Understand how to stay safe online Be respectful online Understand what personal information is Know where to go for help and support. Key vocabulary: Internet safety Online Report problems		
Year 2	<p>Topic Title: Introduction to Computing (Autumn 1 and 2)</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: To learn how to use the computer room safely and how to sit safely at the computer. Switch on and log on to various devices (eg. ipads, Laptops, PC etc)</p>	<p>Topic Title: Introduction to Computing (Autumn 1 and 2)</p> <p>Key knowledge: NC objectives: To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Key Skills: To learn how to use the computer room safely</p>	<p>Topic Title: Internet Safety (Spring 1 and 2)</p> <p>Key knowledge: NC objectives: To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies To recognise common uses of information technology beyond school.</p> <p>Key Skills:</p>	<p>Topic Title: Internet Safety (Spring 1 and 2)</p> <p>Key knowledge: NC objectives: To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies</p>	<p>Topic Title: we are zoologists</p> <p>Key knowledge: NC objectives: we are zoologists (summer 1) To use technology purposefully to create, organise, store, manipulate and retrieve digital content To recognise common uses of information technology beyond school.</p> <p>Key Skills: We are zoologists Sort and classify a group of items by answering questions, collect data using charts use simple chart software (Spreadsheet).</p>	<p>Topic Title: Hour of coding</p> <p>Key knowledge: NC objectives: Hour of coding (summer 2) Understand what algorithms are. Create and debug simple programs.</p> <p>Key Skills: Hour of coding: Understand what algorithm is To create simple programs (eg. In Hour of coding)</p>

<p>Use a QWERTY keyboard correctly</p> <p>Sit correctly when using a computer</p> <p>Save and retrieve files on student shared drive.</p> <p>Key vocabulary: Safety</p> <p>Log in</p> <p>Devices (laptop, ipad, desktop)</p> <p>Password</p> <p>Files</p> <p>Folders</p> <p>Typing</p> <p>Keyboard</p> <p>Keys</p> <p>Text</p> <p>Input</p> <p>output</p> <p>Input device/s</p>	<p>and how to sit safely at the computer.</p> <p>Switch on and log on to various devices (eg. ipads, Laptops, PC etc)</p> <p>Use a QWERTY keyboard correctly</p> <p>Sit correctly when using a computer</p> <p>Save and retrieve files on student shared drive.</p> <p>Key vocabulary: Safety</p> <p>Log in</p> <p>Devices (laptop, ipad, desktop)</p> <p>Password</p> <p>Files</p> <p>Folders</p> <p>Typing</p> <p>Keyboard</p> <p>Keys</p> <p>Text</p>	<p>Understand how to stay safe and be respectful online</p> <p>Understand what personal information is</p> <p>Know where to go for help and support.</p> <p>Know the rules for use of digital equipment in and out of the classroom safely.</p> <p>Key vocabulary: Internet safety</p> <p>Online</p> <p>Report problems</p> <p>Appropriate/ inappropriate</p>	<p>To recognise common uses of information technology beyond school.</p> <p>Key Skills: Understand how to stay safe and be respectful online</p> <p>Understand what personal information is</p> <p>Know where to go for help and support.</p> <p>Know the rules for use of digital equipment in and out of the classroom safely.</p> <p>Key vocabulary: Internet safety</p> <p>Online</p> <p>Report problems</p> <p>Appropriate/ inappropriate</p>	<p>Take photos and edit/enhance them. Record information on digital map.</p> <p>Key vocabulary: create</p> <p>organise</p> <p>manipulate</p> <p>digital content</p> <p>Photos</p> <p>Videos</p> <p>Charts/ tables</p>	<p>Debug simple programs</p> <p>Key vocabulary: Algorithm</p> <p>Program</p> <p>Debug</p>
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		Input output Input device/s				
Year 3	<p>Topic Title: Introduction to Computing (Autumn 1)</p> <p>Key knowledge: NC objectives: Introduction to Computing (Autumn 1) To use technology safely, respectfully and responsibly.</p> <p>Key Skills: Introduction to Computing: Learn to use a keyboard (Dance Mat typing)</p> <p>Key vocabulary: Input/output QWERTY Keyboard Respect</p>	<p>Topic Title: We are programmers (Autumn 2)</p> <p>Key knowledge: NC objectives: We are programmers (Autumn 2) To use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Key Skills: We are programmers:</p>	<p>Topic Title: Internet Safety (Spring 1)</p> <p>Key knowledge: NC objectives: Internet Safety (Spring 1) To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Key Skills: Internet Safety: Know what is appropriate and inappropriate content online Understand how to stay safe and be respectful online. Know where to get help and report problems Understand what personal information is and how to keep it secure.</p> <p>Key vocabulary: Internet safety Online Report problems Appropriate/ inappropriate Reliable/Unreliable</p>	<p>Topic Title: We are Vloggers (Spring 2)</p> <p>Key knowledge: NC objectives: We are Vloggers (Spring 2) To 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>Key Skills: We are Vloggers: Understand computer networks including WWW Research information from a variety of sources Making sharing a short screen cast</p>	<p>Topic Title: We are opinion pollsters (Summer 1)</p> <p>Key knowledge: We are opinion pollsters (Summer 1) NC objectives: To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Key Skills: We are opinion pollsters: Word processing for writing questionnaires, editing font styles and size, experimenting with layout and using tools in Word. Spreadsheet/ table for analysing results.</p> <p>Key vocabulary: World Wide Web Communication Collaboration Word processors Spreadsheets Opinions Questionnaire Analysis</p>	<p>Topic Title: Hour of coding (Summer 2)</p> <p>Key knowledge: NC objectives: Hour of coding (Summer 2) To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Key Skills: Hour of coding: Understand what algorithm is Create simple programs, use sequence and select programming Debug simple programs</p> <p>Key vocabulary: Algorithm Sequence Select Repeat Debug</p>

		<p>To understand what algorithm is Begin to create simple programs that accomplish a specific goal (eg. Short animation in Scratch) Begin to solve problems by decomposing tasks into smaller parts with the help of an adult To debug my program with help from an adult.</p> <p>Key vocabulary:</p> <p>Algorithm Program Sequence Decompose tasks</p>		<p>presentation using appropriate software (Powerpoint, Word, Publisher) Work collaboratively.</p> <p>Key vocabulary:</p> <p>Presentation WWW Powerpoint Word Publisher</p>		
Year 4	<p>Topic Title: Introduction to Computing (Autumn 1)</p> <p>Key knowledge: NC objectives: Introduction to Computing (Autumn 1) To use technology safely, respectfully and responsibly.</p> <p>Key Skills: Introduction to Computing: To understand input and output devices and recognise a keyboard as an input device. To learn how to type correctly using a QWERTY keyboard. Save and retrieve files on student shared drive.</p>	<p>Topic Title: We are toy designers (Autumn 2)</p> <p>Key knowledge: NC objectives: We are toy designers (Autumn 2) To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Topic Title: Internet Safety (Spring 1)</p> <p>Key knowledge: NC objectives: Internet Safety (Spring 1) To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Key Skills: Internet Safety: Know what is appropriate and inappropriate content online</p>	<p>Topic Title: We are HTML editors (Spring 2)</p> <p>Key knowledge: NC objectives: We are HTML editors (Spring 2) To 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>Topic Title: We are meteorologists (Summer 1)</p> <p>Key knowledge: NC objectives: We are meteorologists (Summer 1) To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>To 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,</p>	<p>Topic Title: Hour of coding (Summer 2)</p> <p>Key knowledge: NC objectives: Hour of coding (Summer 2) To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Key Skills: Hour of coding:</p>

	<p>Key vocabulary: QWERTY Keyboard Touch type Input/output Device Respect</p>	<p>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Key Skills: We are toy designers: To design and make an on-screen prototype of a computer-controlled toy. Understand different forms of input and output (such as sensors, switches, motors, lights and speakers).</p> <p>Key vocabulary: Algorithm Logical reasoning Program Control Simulate Debug</p>	<p>Understand how to stay safe and be respectful online. Know where to get help and report problems Understand what personal information is and how to keep it secure.</p> <p>Key vocabulary: Internet safety Online Report problems Appropriate/ inappropriate Reliable/Unreliable</p>	<p>To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Key Skills: We are HTML: understand different ways to communicate online understand what the Internet is and how it works Begin recognise simple HTML codes.</p> <p>Key vocabulary: HTML WWW Tags/ lines of codes</p>	<p>systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p> <p>Key Skills: We are meteorologists: Understand different measurement techniques for weather, both analogue and digital. If possible, use computer-based data logging to automate the recording of some weather data. Use spreadsheets to create charts analyse data, explore inconsistencies in data and make predictions. Practise using presentation software and, optionally, video</p> <p>Key vocabulary: Data Weather Measurements Spreadsheets Charts Graphs</p>	<p>Understand what algorithm is Create programs, use sequence and select programming Debug programs</p> <p>Key vocabulary: Algorithm Sequence Select Repeat Debug</p>
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Year 5	<p>Topic Title: Introduction to Computing (Autumn 1)</p> <p>Key knowledge: NC objectives:</p> <p>Introduction to Computing (Autumn 1) To use technology safely, respectfully and responsibly.</p> <p>Key Skills: Improve keyboard skills. To identify a wide range of input and output devices that can be found on a computer system.</p> <p>Key vocabulary: QWERTY Keyboard Input/output Respect</p>	<p>Topic Title: We are game developers (Autumn 2)</p> <p>Key knowledge: NC objectives:</p> <p>We are game developers (Autumn 2) To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts To use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Key Skills: To understand algorithm and use sequence, select and repetition in programs To solve problems by decomposing tasks into smaller sub tasks Write programs to accomplish specific goals.</p>	<p>Topic Title: Internet Safety(Spring 1)</p> <p>Key knowledge: NC objectives:</p> <p>Internet Safety(Spring 1) To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Key Skills: Internet Safety: Know what is appropriate and inappropriate content online Understand how to stay safe and be respectful online. Know where to get help and report problems Understand what personal information is and how to keep it secure To confidently explain the risks of social media and understand the impact of their digital footprint.</p> <p>Key vocabulary: Internet safety Online Report problems Appropriate/ inappropriate Reliable/Unreliable</p>	<p>Topic Title: We are HTML editors (Spring 2)</p> <p>Key knowledge: NC objectives:</p> <p>We are HTML editors (Spring 2) To 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 To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Key Skills: We are HTML: understand different ways to communicate online</p>	<p>Topic Title: We are Blogger (Summer 1)</p> <p>Key knowledge: NC objectives:</p> <p>We are Blogger (Summer 1) To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content To 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>Key Skills: We are Bloggers: Research using a range of sources Work collaboratively Use presentation software such as Word or PowerPoint.</p> <p>Key vocabulary: Digital media- text, sound, video Manipulate Drawing</p>	<p>Topic Title: Hour of coding (Summer 2)</p> <p>Key knowledge: NC objectives:</p> <p>Hour of coding (Summer 2) To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Key Skills: Hour of coding: To understand algorithm and use sequence, select and repetition in programs Write programs to accomplish specific goals. Solve problems by decomposing them into smaller parts Use logical reasoning to debug a program.</p> <p>Key vocabulary: Hour of coding: Algorithm Sequence</p>

		<p>Create own digital content like character and background To program a working game (eg. In Scratch). To use logical reasoning to debug a program.</p> <p>Key vocabulary:</p> <p>Algorithm Sequence Select Repeat Decomposing tasks debug</p>		<p>understand what is HTML and what it is used for understand what the Internet is and how it works Recognise simple HTML codes Use simple HTML codes.</p> <p>Key vocabulary:</p> <p>HTML WWW Communication Online. Tags/ lines of codes</p>	Presenting Publishing	Select Repeat Debug
Year 6	<p>Topic Title: Introduction to Computing (Autumn 1)</p> <p>Key knowledge: NC objectives:</p> <p>Introduction to Computing (Autumn 1) To use technology safely, respectfully and responsibly.</p> <p>Key Skills: To improve keyboard skills and learn short cuts.</p> <p>Key vocabulary: Input/output QWERTY Keyboard</p>	<p>Topic Title: We are adventure gamers (Autumn 2)</p> <p>Key knowledge: NC objectives:</p> <p>We are adventure gamers (Autumn 2) To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p>	<p>Topic Title: Internet Safety (Spring 1)</p> <p>Key knowledge: NC objectives:</p> <p>Internet Safety (Spring 1) To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Key Skills: Internet Safety: Know what is appropriate and inappropriate content online</p>	<p>Topic Title: We are network technicians (Spring 2)</p> <p>Key knowledge: NC objectives:</p> <p>We are network technicians (Spring 2) To 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>Topic Title: We are publishers (Summer 1)</p> <p>Key knowledge: NC objectives:</p> <p>We are publishers (Summer 1) To 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>Key Skills: We are publishers:</p>	<p>Topic Title: Hour of coding (Summer 2)</p> <p>Key knowledge: NC objectives:</p> <p>Hour of coding (Summer 2) To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Key Skills: Hour of coding:</p>

	Respect	<p>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Key Skills: Learn commands of a text based programming language (python) enabling progression from Scratch. Create an adventure game (in Scratch or another software of choice).</p> <p>Solve problems by decomposing them into smaller parts Use logical reasoning to debug a program.</p> <p>Key vocabulary:</p> <p>Programming platforms/languages Scratch Python Algorithm Sequence Select Repeat Decomposing tasks debug</p>	<p>Understand how to stay safe and be respectful online. Know where to get help and report problems Understand what personal information is and how to keep it secure To confidently explain the risks of social media and understand the impact of their digital footprint. To be aware of social pressures and targeted marketing online</p> <p>Key vocabulary: Internet safety Online Report problems Appropriate/ inappropriate Reliable/Unreliable Digital footprint Social media Pressure</p>	<p>Key Skills:</p> <p>We are network technicians: Develop an understanding of networks, learning about the domain name system Explore school's network. Use e-mail.</p> <p>Key vocabulary:</p> <p>Networks</p>	<p>Produce a class yearbook or school magazine using desktop publishing tools. Source, write edit and combine images and text from ranges of sources.</p> <p>.</p> <p>Key vocabulary: Image Text Video Editing Layout Font Collaboration</p>	<p>To understand algorithm and use sequence, select and repetition in programs Write programs to accomplish specific goals. Solve problems by decomposing them into smaller parts Use logical reasoning to debug a program.</p> <p>Key vocabulary: Hour of coding: Algorithm Sequence Select Repeat Debug</p>
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