

# Computing Curriculum Overview 2023-2024

## Nursery

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	<p><u>Ourselves</u></p> <p>Ourselves &amp; Settling into our surroundings/ rules/ 5Cs/ getting comfortable</p>	<p><u>Celebrations</u></p> <p>Birthdays &amp; growing older/ Eid/ Diwali/ Christmas/ Hanukkah/ bonfire night/ Are we all the same?/ differences</p>	<p><u>Traditional tales</u></p> <p>Reading a range of stories/ exploring the meaning/ dressing up/ role play/ building confidence</p>	<p><u>Settings/ animals</u></p> <p>Dinosaurs/ Jungle/ Zoo/ Farm/ Antarctica/ space/ fantasy/ paradise/ beaches/ what lives here? How can we describe these settings?</p>	<p><u>Plants/ changes</u></p> <p>Environment/ seasons/ changes from baby to now/ family/ growing plants/ trees/ animals (baby &amp; adult)/ chicks, hatching eggs</p>	<p><u>Holidays/Journeys</u></p> <p>Journeys/ travel/ adventure/transport/ imagination/ climates/ countries/ world/environments Transition to Reception</p>
Concepts and skills taught:	<p>Familiarising technology at home and in the classroom</p> <p>Use of technology for videos, songs, pictures</p> <p>Children interacting with the IWB as part of continuous provision</p>	<p>Explore how things work and what happens when buttons are pressed</p> <p>Small world/role play of technology in the world (phones, typing, mouse skills, cameras)</p>	<p>Show an interest in technological toys- (bee bots etc)</p> <p>Using technology for a range of purposes e.g listening to a story</p> <p>Retell a story using a recording device</p>	<p>Explore different features on computers and begin to retrieve information (take photos and look through)</p> <p>Direct an adult to research using a search engine</p> <p>Key features of a computer - keyboard, mouse, screen</p>	<p>Experience pointing software on J2E (fine motor skills), linked to growing</p> <p>Role play of technology needed when 'growing up' - walkie talkies, phones, laptops, cameras etc</p>	<p>Create images using cameras, painting software</p> <p>Match transport to when we use them</p>

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## Reception

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
 <p>Reception</p>	<p><u>Rules / All about me</u></p> <p>Body parts/ likes, dislikes/senses/ family &amp; friends/ job aspirations when older/ class rules/ 5 Cs/ speaking/ strengths &amp; weaknesses/ behaviours/ pets</p>	<p><u>Looking after ourselves/</u></p> <p>Around the world/Celebrations Hygiene/ washing hands/ showering/ brushing teeth/ eating lunches (school dinners)/ Asking for help/ Exercise/ road safety/ healthy eating/ Are we all the same? / different/ Countries around the world(focus on cultural backgrounds of children)</p>	<p><u>Superheroes/ Transport</u></p> <p>Looking after the environment/ people who help us/ different types of transport/ teamwork/ playing cooperatively/ feelings/ sensitivity/ turn taking/ building different types of transport/ Past &amp; present</p>	<p><u>Growing/changing</u></p> <p>Life cycles of animals/ plants &amp; trees/ humans / growing plants/ different habitats &amp; animals that live there/ Insects/ Animals/ (growing butterflies)/ planting seeds</p>	<p><u>Scientific enquiry/habitats</u></p> <p>Changes/ melting &amp; freezing/ floating &amp; sinking/ magnetism/forces/ materials/ properties/ scientific experiments/ light &amp; dark/ Electricity/ habitats/ what animals live where?</p>	<p><u>Can we build it?/ Hot &amp; Cold/Imagination</u></p> <p>Looking at different countries/ comparing settings/ hot &amp; cold countries/ maps/ creating maps/ building habitats/ boats/ cars/ junk modelling Transition to Year 1</p>
<p>Concepts and skills taught:</p>	<p>Explore technology in school and at home.</p> <p>Small world play involving technology at work e.g.</p> <p>Staying safe online and using technology safety</p> <p>Use computing software to play games and create images on painting software, exploring favourite colours</p> <p>Using software to sort animals (linked to The Lion who Wanted to Love)</p>	<p>Developing independence when using technology in school (&amp; asking for help when needed)</p> <p>Complete a programme on a computer (JIT) to create an image</p>	<p>Use computing software to play games and create images on painting software.</p> <p>Use technology to watch videos and look at images relating to Hannukah</p> <p>Technology in the real world (linked to transport topic) and comparing transport from the past</p>	<p>Use the internet to explore images online and find out facts (teacher led)</p> <p>Use technology to watch videos and look at images relating to life cycles etc</p>	<p>Logging in and logging off</p> <p>Online safety – keeping passwords private</p> <p>Small world play involving technology in the real world</p>	<p>Logging in and logging off</p> <p>Searching for images (typing skills)</p> <p>Typing name</p>

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
 <b>Year 1</b>	Computing Systems  Technology around us	Creating Media  Digital Writers	Programming A  Moving a Robot	Programming  Introduction to animation	Data and information  Grouping data	Creating Media  Digital Painting
Cross Curricular Links	PSHE	English	English		Maths	Art
Hardware/Software	Laptops	Laptops/Chromebooks j2write/googledocs	Beebots	Laptops/Chromebooks ScratchJr	Laptops/Chromebooks j2data	Laptops J2e paint
Key Skills	To understand that technology is something that helps us in our everyday life to be more efficient/productive To identify the main parts of a computer To become confident at switching on a computer To use a mouse/trackpad confidently To develop simple typing skills To create rules to use technology safely	To use a computer to write (for a purpose) To add and remove text on a computer To adapt the look of text on a computer To double click, drag and change the font To explain why choices are made To compare this process to writing on paper	To give a command and explain what it's outcome will be To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make a sequence To plan a simple program To find more than one solution to a problem	To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has it's own instructions To design parts of a project To use my algorithm to create a program	To label objects To identify that objects can be counted To describe the objects in different ways To count objects with the same properties To compare groups of objects To answer questions about groups of objects	To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture To compare painting a picture on a computer and on paper
Education for a Connected World Statements	Health, well-being and lifestyle <ul style="list-style-type: none"> <li>I can identify rules that help keep us safe and healthy in and beyond the home when using technology</li> <li>I can give some simple examples</li> </ul> Copyright and ownership <ul style="list-style-type: none"> <li>I know that the work I create belongs to me</li> <li>I can name my work so that others know it belongs to me</li> </ul>	Privacy and security <ul style="list-style-type: none"> <li>I can give reasons why I should only share information with people I choose to and can trust. (Y1)</li> </ul>			Copyright and ownership <ul style="list-style-type: none"> <li>I know that work I create belongs to me (Y1)</li> <li>I can name my work so that others know it belongs to me (Y1)</li> </ul>	

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<p>NC Links</p>	<ul style="list-style-type: none"> <li>Recognise common uses of information technology beyond school</li> <li>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Use technology safely and respectfully, keeping personal information private</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>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>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Use technology safely and respectfully</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</li> </ul>
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 <p>Year 2</p>	<p>Computing Systems</p> <p>Technology around us</p>	<p>Creating Media</p> <p>Digital Photography</p>	<p>Programming A</p> <p>Robot Algorithms</p>	<p>Programming B</p> <p>Introduction to Quizzes</p>	<p>Data and information</p> <p>Pictograms</p>	<p>Creating Media</p> <p>Making Music</p>
<p>Cross Curricular Links</p>	<p>PSHE</p>	<p>History</p>		<p>Science</p>	<p>Maths (Y1 and Y2 links)</p>	<p>Music</p>
<p>Hardware/Software</p>	<p>Unplugged</p>	<p>iPads iPhoto</p>	<p>Beebots</p>	<p>Laptops/Chromebooks ScratchJr</p>	<p>Laptops/Chromebooks j2data</p>	<p>Laptops/Chromebooks <a href="https://musiclab.chromeexperiments.com">https://musiclab.chromeexperiments.com</a></p>
<p>Key Skills</p>	<p>To recognise the uses and features of information technology To identify IT around the home To identify IT beyond school To explain how IT benefits us To show how IT can be used safely To recognise that choices are made when using information technology</p>	<p>To explain and carry out the process of taking a photograph To identify what is wrong with a photograph and know how to correct it To use editing tools to change a photograph</p>	<p>To use key vocabulary to enact as a sequence To give clear and unambiguous instructions To give commands using a range of sequences To use logical reasoning to predict the outcome of a program To identify different routes around a mat To create an algorithm to meet an end goal To create and debug a program</p>	<p>To identify the start in a sequence of commands To predict an outcome To match two sequences with the same outcome To use blocks to meet the design To create a program based on a design To build sequences of blocks to match the design To compare the project to my design To debug and improve</p>	<p>To record and compare data in a tally chart To enter and view data in different formats To use a tally chart to create a pictogram To explain why information is presented on a computer To give examples of why some information should not be shared</p>	<p>To create a rhythmic pattern To use a computer to experiment with pitch and duration To use a computer to make music (using a sequence of pattern) To save work To reopen work To explain how work was improved</p>
<p>Education for a Connected World Statements</p>	<p>Health, well-being and lifestyle</p> <ul style="list-style-type: none"> <li>I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</li> <li>I can give some simple examples.</li> </ul>	<ul style="list-style-type: none"> <li>To identify that some images are not real (fake)</li> </ul>			<p>Self image and identity</p> <ul style="list-style-type: none"> <li>I can recognise that I can say 'no'/'please stop'/'I'll tell'/'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset</li> <li>I can explain how this could be either in real life or online</li> </ul>	<p>Copyright and ownership</p> <ul style="list-style-type: none"> <li>I know that work I create belongs to me.</li> </ul>

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					<ul style="list-style-type: none"> <li>If something happens that makes me feel sad, worried, uncomfortable, or frightened I can give examples of when and how to speak to an adult I can trust</li> </ul> <p><b>Health, wellbeing and lifestyle</b></p> <ul style="list-style-type: none"> <li>I can identify rules that help keep us safe and healthy in and beyond the home when using technology</li> <li>I can give some simple examples</li> </ul> <p><b>Privacy and security</b></p> <ul style="list-style-type: none"> <li>I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location)</li> <li>I can describe the people I can trust and can share this with; I can explain why I can trust them</li> <li>I can recognise more detailed examples of information that is personal to me (e.g. where I live, my family's names, where I go to school)</li> </ul>	
NC Links	<ul style="list-style-type: none"> <li>Recognise common uses of information technology beyond school</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate, and retrieve digital content</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> </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> </ul>	<ul style="list-style-type: none"> <li>use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <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</li> </ul>	<ul style="list-style-type: none"> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> </ul>

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			<ul style="list-style-type: none"><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>• create and debug simple programs</li><li>• use logical reasoning to predict the behaviour of simple programs</li></ul>	contact on the internet or other online technologies	
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 <p>Year 3</p>	<p>Computing Systems</p> <p>Connecting Devices</p>	<p>Creating Media</p> <p>Desktop Publishing</p>	<p>Programming A</p> <p>Sequence in music</p>	<p>Programming B</p> <p>Events and actions</p>	<p>Data and information</p> <p>Branching databases</p>	<p>Creating Media</p> <p>Animation</p>
<p>Cross Curricular Links</p>	<p>Maths</p> <p>Art</p>	<p>English</p>	<p>Music</p>	<p>Maths</p> <p>PSHE</p>	<p>Maths</p>	<p>English</p>
<p>Hardware/Software</p>	<p>Unplugged (May need laptops/iPads for demos)</p>	<p>Laptops/Chromebooks j2office/googledocs</p>		<p>Laptops/Chromebooks Scratch</p>	<p>Laptops/Chromebooks j2data</p>	<p>iPads Camera App iMotion App</p>
<p>Key Skills</p>	<p>To understand the terms input, output To model a simple process To identify how different digital devices are used for different purposes. To compare using digital devices and non digital devices To understand the term network switch To identify and explore different connections and how messages can be passed on To explain the role of a switch, server, wireless access point</p>	<p>To change font style, size and colours for a given purpose To edit text To create a template To define 'page orientation' To recognize placeholders and why they're important To paste text and images</p>	<p>To explain that objects in scratch have attributes To recognise that commands are represented as blocks. To create a program that has been designed To create a sequence of connected commands To combine sound commands To implement an algorithm as code</p>	<p>To choose the correct key for the correct action To explain the relationship between an event and an action To program movement To choose blocks to set up a program To use a programming extension To match a piece of code to an outcome To modify a design</p>	<p>To arrange objects into a tree structure To select an attribute to create groups To prove a branching database works To compare two branching database structures To evaluate the effectiveness of using a computer for this data collection</p>	<p>To identify a sequence in a group of pictures To predict an animation To understand small, incremental changes To evaluate the quality of the animation To review the sequence to check it works To use onion skinning to help make small changes To explain why I made certain decisions</p>
<p>Education for a Connected World Statements</p>		<p>Managing online information</p> <ul style="list-style-type: none"> <li>I can use key phrases in search engines</li> <li>I can use search technologies effectively</li> </ul> <p>Copyright and ownership</p> <ul style="list-style-type: none"> <li>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it</li> <li>I can demonstrate the use of search</li> </ul>				<p>Managing online information</p> <ul style="list-style-type: none"> <li>I can use key phrases in search engines.</li> <li>I can use search technologies effectively.</li> </ul> <p>Copyright and ownership</p> <ul style="list-style-type: none"> <li>I can explain why copying someone else's work from the internet without permission can cause problems.</li> </ul>

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		tools to find and access online content which can be reused by others				<ul style="list-style-type: none"> <li>I can give examples of what those problems might be.</li> <li>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</li> <li>I can give some simple examples.</li> <li>I can give examples of content that is permitted to be reused.</li> <li>I can demonstrate the use of search tools to find and access online content which can be reused by others.</li> </ul>
NC Links	<ul style="list-style-type: none"> <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>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</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</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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information</li> <li>Use technology safely, respectfully, and responsibly</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 content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>

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 <p>Year 4</p>	<p>Computing Systems</p> <p>The Internet</p>	<p>Creating Media</p> <p>Photo Editing</p>	<p>Programming A</p> <p>Repetition in Shapes</p>	<p>Programming B</p> <p>Repetition in Games</p>	<p>Data and Information</p> <p>Data logging</p>	<p>Creating Media</p> <p>Audio editing</p>
<p>Cross Curricular Links</p>	<p>PSHE</p> <p>Art</p>	<p>PSHE</p>	<p>Maths (KS1 Shapes)</p>		<p>Science</p>	<p>English</p> <p>Music</p> <p>Science</p>
<p>Hardware/Software</p>	<p>Laptops/Chromebooks/iPads</p>	<p>Laptops/iPads</p>	<p>Laptops/Chromebooks Scratch</p>	<p>Laptops/Chromebooks Scratch</p>	<p>Laptops/Chromebooks Data Loggers &amp; Google Sheets</p>	<p>Laptops Audacity</p>
<p>Key Skills</p>	<p>To understand how information is shared across the internet            To explain what the internet is and why a network needs protecting            To understand the difference between the internet and the WWW            To create new content to share online            To explore content permissions and ownership            To understand 'fake news' - linked to legality</p>	<p>To identify that not all images online are true            To consider what changes have been made and why they might have been changed            To explore appropriate tools to retouch an image            To sort images into fake and real</p>	<p>To create a code snippet for a given purpose            To explain the effect of changing value of a command            To test an algorithm in text-based language            To write an algorithm to produce a given outcome            To use a count controlled loop            To use a procedure in a program</p>	<p>To modify a set of code to give a certain outcome            To predict an outcome            To re-use existing code            To use repetition in a project</p>	<p>To identify that sensors are input devices            To import a data set            To sort and view data using a computer (and explore whether this would be better done non-digitally)            To use a data logger to collect data            To interpret data collected using sorting tools</p>	<p>To identify devices that can record sound            Recap of input and output from Y3            To record an effective audio for a podcast            To save a digital recording as a file            To explore how digital recordings can be edited            To export a recording for sharing</p>
<p>Education for a Connected World Statements</p>		<p>Self-image and identity</p> <ul style="list-style-type: none"> <li>I can describe ways in which people might make themselves look different online.</li> </ul> <p>Copyright and ownership</p> <ul style="list-style-type: none"> <li>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</li> </ul>				<ul style="list-style-type: none"> <li>I can explain why copying someone else's work from the internet without permission can cause problems (Y3)</li> <li>I can give examples of what those problems might be (Y3)</li> <li>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it (Y4)</li> </ul>

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						<ul style="list-style-type: none"> <li>I can give some simple examples (Y4)</li> </ul>
<p>NC Links</p>	<ul style="list-style-type: none"> <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>Use search technologies effectively</li> <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, analysing, evaluating and presenting data and information</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</li> </ul>	<ul style="list-style-type: none"> <li>...work with various forms of input</li> <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, analysing, evaluating and presenting data and information</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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information</li> <li>Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>

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 <p>Year 5</p>	<p>Computer Systems</p> <p>Sharing Information</p>	<p>Creating Media</p> <p>Video Editing</p>	<p>Programming A</p> <p>Selection in physical computing</p>	<p>Programming B</p> <p>Selection in Quizzes</p>	<p>Data and Information</p> <p>Flat file databases</p>	<p>Creating Media</p> <p>Vector Drawing</p>
<p>Cross Curricular Links</p>	<p>PSHE</p>		<p>Science</p>		<p>Science</p>	
<p>Hardware/Software</p>	<p>Laptops/Chromebooks GoogleDocs/Google Classroom</p>	<p>iPads - capturing video Laptops - editing video</p>	<p>Laptops Crumble Sets x 15 per class</p>	<p>Laptops/Chromebooks Scratch</p>	<p>Laptops/Chromebooks j2data</p>	<p>Laptops/Chromebooks GoogleDrawing app</p>
<p>Key Skills</p>	<p>To understand how computers are connected To identify human elements to a computer system To understand how data is transferred over in packets To understand that devices have unique addresses To compare working online with working offline To work collaboratively on a project</p>	<p>To recognise that video can be both audio and visual To identify digital devices that record video To handle devices safely To select the correct tools to edit video footage To store, retrieve and export the recording</p>	<p>To build a simple circuit to connect a microcontroller to a computer To use an infinite loop To connect more than one output device to a microcontroller To experiment with a 'do until' loop To create a physical project that includes selection</p>	<p>To identify, modify and recall how conditions are used To relate that a conditional statement connects a condition to an outcome To explain how selection directs the flow of a program To identify the outcome of user input in an algorithm To test a program</p>	<p>To create a controllable system that includes selection To order, sort and group data cards To compare paper and computer based databases To use specific tools to select specific data To refine a chart by selecting a specific filter</p>	<p>To identify common drawing tools To identify that shapes make up a vector drawing To move, resize and rotate duplicated objects To use alignment grids To use the zoom detail to add more detail to drawings To change the order of layers in the drawing</p>
<p>Education for a Connected World Statements</p>	<ul style="list-style-type: none"> <li>I can assess and justify when it is acceptable to use the work of others</li> <li>I can give examples of content that is permitted to be reused</li> </ul>	<p><b>Self-image and Identity</b></p> <ul style="list-style-type: none"> <li>I can explain how I can represent myself in different ways online</li> <li>Knowing this, I can describe the right decisions about how I interact with others and how others perceive me</li> </ul> <p><b>Online relationships</b></p> <ul style="list-style-type: none"> <li>I can recognise some ways in which the internet can be used to communicate</li> <li>I can give examples of how to be respectful to others online</li> </ul>				<p><b>Copyright and ownership</b></p> <ul style="list-style-type: none"> <li>I can explain why copying someone else's work from the internet without permission can cause problems.</li> </ul>

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		<p>Online reputation</p> <ul style="list-style-type: none"> <li>I can search for information about an individual online and create a summary report of the information I find</li> <li>I can explain ways that some of the information about me online could have been created, copied, or shared by others</li> </ul> <p>Managing online information</p> <ul style="list-style-type: none"> <li>I can evaluate digital content (and can explain how I make choices from search results)</li> </ul>				
NC Links	<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>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> <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, analysing, evaluating and presenting data and information</li> <li>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour;</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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information</li> <li>Recognise inappropriate content, contact, and conduct and know how to report concerns</li> <li>Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour</li> <li>Identify a range of ways to report concerns about content and contact</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</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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information</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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.</li> </ul>

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	identify a range of ways to report concerns about content and contact					
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 Year 6	Computing Systems Communication	Creating Media Web page creation	Programming A Variables in Games	Programming B Sensing	Data and information Spreadsheets	Creating Media 3D Modelling
Cross Curricular Links		English			Maths	Art D&T Maths
Hardware/Software	iPads/Laptops/Chromebooks	Laptops/Chromebooks GoogleSites	Laptops/Chromebooks Scratch	Laptops Micro:bit	Laptops/Chromebooks GoogleSheets	Laptops/Chromebooks TinkerCad <a href="https://www.tinkercad.com">https://www.tinkercad.com</a>
Key Skills	To identify how to use a search engine To describe how search engines select results To explain how search results are ranked To recognise why the order of results is important To recognise how we communicate using technology To evaluate different methods of online communication	To review an existing website and consider its structure To plan the features of a webpage To consider the ownership and use of images To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking content owned by other people	To define a variable as something that is changeable To explain why a variable is used in a program To choose how to improve a game by using variables To design a project that builds on a given example To use my design to create a project To evaluate my project	To create a program to run on a controllable device To explain that selection can control the flow of a program To update a variable with a user input To use a conditional statement to compare a variable to a value To design a project that uses inputs and outputs on a controllable device To develop a program to use inputs and outputs on a controllable device	To identify questions which can be answered using data To explain that objects can be described using data To explain that formula can be used to produce calculated data To apply formulas to data, including duplicating To create a spreadsheet to plan an event To choose suitable ways to present data	To use a computer to create and manipulate 3D objects To compare working digitally with 2D and 3D graphics To construct a digital 3D model of a physical object To identify that physical objects can be broken down into a collection of 3D objects To design a digital model by combining 3D objects To develop and improve a digital 3D model
Education for a Connected World Statements	<ul style="list-style-type: none"> <li>I can describe and assess the benefits and the potential risks of sharing information online.</li> <li>I can use various additional tools to refine my searches (e.g. search filters: size, type, usage rights etc.).</li> </ul>	Online relationships <ul style="list-style-type: none"> <li>I can use the internet with adult support to communicate with people I know. (EY-7)</li> </ul> Managing information online <ul style="list-style-type: none"> <li>I can navigate online content, websites, or social media feeds using more sophisticated tools</li> </ul>			Managing information online <ul style="list-style-type: none"> <li>I can describe how I can search for information within a wide group of technologies (e.g. social media, image sites, video sites).</li> <li>I can use different search technologies.</li> </ul>	<ul style="list-style-type: none"> <li>Lesson 1 and Lesson 3 – Privacy and Security (Y4) – I can describe strategies for keeping my personal information private, depending on context</li> </ul>

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	<ul style="list-style-type: none"> <li>I can explain how to use search effectively and use examples from my own practice to illustrate this.</li> <li>I can explain how search engine rankings are returned and can explain how they can be influenced (e.g. commerce, sponsored results).</li> </ul>	<p>to get to the information I want (e.g. menus, sitemaps, breadcrumb-trails, site search functions). (11-14)</p> <p><b>Copyright and ownership</b></p> <ul style="list-style-type: none"> <li>I can explain why copying someone else's work from the internet without permission can cause problems.</li> <li>I can give examples of what those problems might be.</li> <li>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</li> <li>I can give some simple examples.</li> <li>I can assess and justify when it is acceptable to use the work of others.</li> <li>I can give examples of content that is permitted to be reused.</li> <li>I can demonstrate the use of search tools to find and access online content which can be reused by others.</li> <li>I can demonstrate how to make references to and acknowledge sources I have used from the internet.</li> <li>I can explain the principles of fair use and apply this to case studies. (11-14)</li> </ul>			<ul style="list-style-type: none"> <li>I can evaluate digital content and can explain how I make choices from search results.</li> </ul>	
NC Links	<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> </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 content that accomplish given goals,</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</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</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 content that</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 content that accomplish given goals, including</li> </ul>

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	<ul style="list-style-type: none"> <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> <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, analysing, evaluating and presenting data and information</li> <li>• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<p>including collecting, analysing, evaluating, and presenting data and information.</p> <ul style="list-style-type: none"> <li>• use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour.</li> </ul>	<p>decomposing them into smaller parts</p> <ul style="list-style-type: none"> <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>	<p>decomposing them into smaller parts</p> <ul style="list-style-type: none"> <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>	<p>accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p>	<p>collecting, analysing, evaluating and presenting data and information</p> <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> </ul>
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# Computing Curriculum Overview 2023-2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y1	Laptops/Chromebooks	Chromebooks GoogleDocs	Beebots/iPads	Laptops ScratchJr	Laptops/Chromebooks j2data	Laptops/Chromebooks J2e paint
Y2	Unplugged	iPads iPhoto	Beebots/iPads	Laptops/Chromebooks ScratchJr	Laptops/Chromebooks j2data	Laptops/Chromebooks <a href="https://musiclab.chromeexperiments.com">https://musiclab.chromeexperiments.com</a>
Y3	Unplugged (May need laptops/iPads for demos)	Laptops/Chromebooks j2office/googledocs	Laptops	Laptops/Chromebooks Scratch	Laptops/Chromebooks j2data	iPads Camera App iMotion App
Y4	Laptops/Chromebooks/iPads	Laptops/iPads	Laptops/Chromebooks Scratch	Laptops/Chromebooks Scratch	Laptops/Chromebooks Data Loggers & Google Sheets	Laptops Audacity
Y5	Laptops/Chromebooks GoogleDocs/Google Classroom	iPads - capturing video Laptops - editing video	Laptops Crumble Sets x 15 per class	Laptops/Chromebooks Scratch	Laptops/Chromebooks j2data	Laptops/Chromebooks GoogleDrawing app
Y6	iPads/Laptops/Chromebooks	Laptops/Chromebooks GoogleSites	Laptops/Chromebooks Scratch	Laptops Micro:bit	Laptops/Chromebooks GoogleSheets	Laptops/Chromebooks TinkerCad <a href="https://www.tinkercad.com">https://www.tinkercad.com</a>