



# Computing Overview

'Working together to achieve success'



	<b>Internet safety</b> (Internet Safety Week coincides with the national Safer Internet Day in February)	<b>Coding</b>	<b>ICT Skills</b>	
<b>Y1</b>	Internet safety: Safe Searching and Personal Information  Internet Safety Week: Jesse and Friends Session 2	BeeBots	Paint (T)	Computer Skills (T)
<b>Y2</b>	Internet safety: Digital Footprints and Website Evaluation  Internet Safety Week: Jesse and Friends Session 2 and 3	Scratch Junior	Presentation (T)	Film Making
<b>Y3</b>	Internet safety: Cyber bullying and Online Communication  Internet Safety Week: Google Be Internet Legends	Espresso Coding (From Y4)	Presentation (T)	Word Processing (T)
<b>Y4</b>	Internet safety: Cyber Super Heroes  Internet Safety Week: NSPCC - Share Aware	Espresso Coding (From Y5)	Drawing and Desktop Skills (T Y3)	Databases and Word Processing (T)
<b>Y5</b>	Internet safety: SPAM and Sites to Cite  Internet Safety Week: Think U Know - Play, Like and Share	HTML Unit 1 (From Y6)	3D Modelling (T)	
<b>Y6</b>	Internet safety: Secure Websites and Girls and Boys online  Internet Safety Week: Google Be Internet Legends	HTML Unit 2 & 3	Film Making (Twinkl)	Spreadsheets (Twinkl)



Y1	Internet Safety	Coding: BeeBots	ICT: Paint	ICT: Computer Skills
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To create, name and date my digital creative work.</li> <li>To safely search for images online.</li> <li>To understand how to communicate safely online.</li> <li>To understand what personal information I need to keep safe.</li> <li>To explore how to use email to safely communicate.</li> <li>To apply my online safety knowledge to help others make good choices online.</li> </ul>	<ul style="list-style-type: none"> <li>To understand how a BeeBot moves.</li> <li>To turn an algorithm into code.</li> <li>To identify and fix simple bugs.</li> <li>To predict what might happen from a simple piece of code.</li> </ul>	<ul style="list-style-type: none"> <li>To paint with different colours.</li> <li>To paint with different brushes.</li> <li>To create shapes and fill areas.</li> <li>To make changes to improve my work.</li> <li>To add text to a painting.</li> <li>To use a computer program to make a poster.</li> </ul>	<ul style="list-style-type: none"> <li>To use a computer mouse</li> <li>To switch on and shutdown a computer</li> <li>To launch an application and manipulate windows.</li> <li>To save a file</li> <li>To drag objects</li> </ul>
<b>National Curriculum Coverage</b>	<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> <li>Recognise common uses of information technology beyond school</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To create and debug simple programs</li> <li>To use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Use technology safely and respectfully</li> </ul>

Y2	Internet Safety	Coding: Scratch Jnr	ICT: Presentation	ICT: Film Making
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To understand that the information I put online leaves a digital footprint.</li> <li>To use keywords in an online search to find out about a topic.</li> <li>To recognise whether a website is appropriate for children.</li> <li>To rate and review informative websites.</li> <li>To be able to identify kind and unkind behaviour online.</li> <li>To apply our knowledge of safe and sensible online activities to different situations.</li> </ul>	<ul style="list-style-type: none"> <li>To turn dance moves into a dance algorithm.</li> <li>To convert dance algorithm into code.</li> <li>To decompose a simple game.</li> <li>To program a simple game.</li> <li>To debug their game.</li> </ul>	<ul style="list-style-type: none"> <li>To use basic computer skills.</li> <li>To use a folder.</li> <li>To organise ideas for a presentation.</li> <li>To create a simple presentation with text.</li> </ul>	<ul style="list-style-type: none"> <li>To use the Ipad to take pictures and video for a purpose.</li> <li>To edit video using Imovie.</li> <li>To import video.</li> <li>To crop footage.</li> <li>To add titles and import music.</li> </ul>
<b>National Curriculum Coverage</b>	<ul style="list-style-type: none"> <li>Recognise common uses of information technology beyond school.</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 contact on the internet or other online technologies.</li> <li>Use technology safely and respectfully.</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> <li>Use technology safely and respectfully.</li> </ul>



Y3	Internet Safety	Coding: Espresso Coding	ICT: Presentation	ICT: Word Processing
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To know what cyberbullying is and how to address it.</li> <li>To understand how websites use advertisements to promote products.</li> <li>To create strong passwords and understand privacy settings.</li> <li>To safely send and receive emails.</li> <li>To explore different ways children can communicate online.</li> <li>To use knowledge about online safety to plan a party online.</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to use variables to keep track of the score in a game.</li> <li>Practise using variables to keep track of the score in a game; practise using conditional events in your code.</li> <li>Learn how to count and total up objects and prices, simulating a shop till.</li> <li>Learn how to design and make your own app. Practise using variables and conditional events in code and debugging when there is a problem.</li> <li>Learn how to use a loop to do something repeatedly in a program and create a timer.</li> <li>Learn how to use a loop to make a space animation.</li> <li>Learn how to combine start events and click events to make a simple game.</li> <li>Learn how to program an object to change direction when different keys are pressed on a keyboard.</li> <li>Practise using time to program a sequence of actions and make simple animation.</li> <li>Learn how to use conditional 'if' statements to program a maze game.</li> </ul>	<ul style="list-style-type: none"> <li>To create a hyperlink to another slide.</li> <li>To use slide transitions.</li> <li>To insert audio and video files where possible.</li> <li>To record audio onto a slide.</li> <li>To plan a branching story.</li> <li>To create simple slide templates.</li> <li>To copy and organise slides as required.</li> </ul>	<ul style="list-style-type: none"> <li>To select single words.</li> <li>To cut, copy and paste text.</li> <li>To format the font.</li> <li>To insert images.</li> <li>To copy a screenshot into another application.</li> <li>To use a secure password.</li> <li>To use &lt;ctrl&gt; keyboard shortcuts.</li> </ul>
<b>National Curriculum Coverage</b>	<ul style="list-style-type: none"> <li>Use technology safely, respectfully and responsibly; recognise acceptable and unacceptable behaviour; identify a range of ways to report concerns about content and contact.</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>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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>To use technology safely, respectfully and responsibly.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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>To use technology safely, respectfully and responsibly.</li> </ul>

Y4	Internet Safety	Coding: Espresso Coding	ICT: Drawing and Desktop Skills	ICT: Databases and Word Processing
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To identify how a message can hurt someone's feelings.</li> <li>To say how I should respond to a hurtful message online.</li> <li>To use a search engine accurately.</li> <li>To understand the term 'plagiarism' and how to avoid it.</li> <li>To create a safe online profile.</li> <li>To explain how to be a responsible digital citizen.</li> <li>To create an online safety superhero character.</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to set values in code to program the speed of an object.</li> <li>Learn how to change an object's direction and heading to create a driving game.</li> <li>Practise changing an object's direction and heading to create a sailing game. Learn to change its co-ordinates to move it around.</li> <li>Learn to make an object rotate to the orientation (angle) of an iPad.</li> <li>Learn how to set friction to effect the speed and movement of a car in a driving game.</li> <li>Learn how to code a game that uses random numbers to move objects in random directions.</li> <li>Learn how to program your own app, choosing your own objects and events; practice using random numbers to control the movement of objects.</li> </ul>	<ul style="list-style-type: none"> <li>To draw objects.</li> <li>To insert text boxes and images.</li> <li>To order and group objects.</li> <li>To move, resize and arrange text boxes efficiently.</li> </ul>	<ul style="list-style-type: none"> <li>To add/delete rows/columns to or from a table.</li> <li>To suggest ways to improve a layout.</li> <li>To create bar charts and line graphs using Excel (Not on Twinkl).</li> </ul>
<b>National Curriculum Coverage</b>	<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> <li>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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>To use technology purposely to create, organise, store and manipulate and retrieve digital content.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>



Y5	Internet Safety	Coding: HTML Unit 1	ICT: 3D Modelling
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To identify spam emails and what to do with them.</li> <li>To write citations for the websites I use for research.</li> <li>To create strong passwords.</li> <li>To recognise when, why and how photographs we see online may have been edited.</li> <li>To apply online safety rules to real-life scenarios.</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to get started with HTML by adding paragraphs of text to a page.</li> <li>Learn how to add images to a web page using HTML.</li> <li>Understand new vocabulary associated with using HTML, including: images, jpps, text, headings and paragraphs.</li> <li>Learn how to create a web page using headings, paragraphs and images.</li> <li>Learn how to apply knowledge of HTML to create a web page using headings, paragraphs and images.</li> <li>Learn how to apply knowledge of HTML to create a web page using headings, paragraphs and images.</li> <li>Learn more about how web developers structure their web pages using HTML standards.</li> </ul>	<ul style="list-style-type: none"> <li>To draw and manipulate 3D models independently.</li> <li>To use inference points to draw lines and shapes.</li> <li>To use a wide range of Sketchup tools and concepts including the dimensions tool bar and guides, tape measure, zoom extents and the 3D warehouse.</li> </ul>
<b>National Curriculum Coverage</b>	<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> <li>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital.</li> </ul>	<ul style="list-style-type: none"> <li>To 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>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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>

Y6	Internet Safety	Coding: HTML Unit 2	ICT: Film Making	ICT: Spreadsheets
<b>Key Learning</b>	<ul style="list-style-type: none"> <li>To find similarities and differences between in-person and cyberbullying.</li> <li>To identify good strategies to deal with cyberbullying.</li> <li>To identify secure websites by identifying privacy seals of approval.</li> <li>To understand the benefits and pitfalls of online relationships.</li> <li>To identify information that I should never share.</li> <li>To identify how the media play a powerful role in shaping ideas about girls and boys.</li> <li>To apply my online safety knowledge to my online activities.</li> </ul>	<ul style="list-style-type: none"> <li>Learn how to change the colour of text using the colour property.</li> <li>Learn how to change the size and font of text using the font-size and font-family properties.</li> <li>Learn how to change the 'background', 'margin' and 'padding' properties of different parts of a web page.</li> <li>Learn how to apply knowledge of HTML to make a web page using text, headings, images and styling.</li> <li>Learn how to apply knowledge of HTML to make a web page using text, headings, images and styling.</li> <li>Learn more about how web developers structure their pages and HTML standards.</li> </ul>	<ul style="list-style-type: none"> <li>To plan additional elements for film making such as location and props.</li> <li>To evaluate whether information is reliable or not.</li> <li>To speak clearly into the camera when being recorded.</li> <li>To frame an appropriate filming shot when interviewing.</li> <li>To speed footage up or down for effect.</li> </ul>	<ul style="list-style-type: none"> <li>To be able to enter formulae into cells.</li> <li>To edit data and discuss the effect on results.</li> <li>Use further functions including AVERAGE, MIN and MAX.</li> <li>To create graphs.</li> <li>To design their own spreadsheet for a specific purpose.</li> </ul>
<b>National Curriculum Coverage</b>	<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>	<ul style="list-style-type: none"> <li>To 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>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</li> <li>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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 search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</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>Use a variety of software on a range of digital devices to design and create a range of content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information in the context of filming documentaries using digital devices and importing them into video editing software.</li> </ul>	<ul style="list-style-type: none"> <li>To select, use and combine a variety of software 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>