

Key Skills

Basic Computer Use
E-safety, Creating,
Debugging and How a
Computer Works

Computing

Computing skills should be taught when linked to topics
where possible to ensure real world application
Topics are taught on a 2 year rolling programme



	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception		Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Basic Computer Use	Turn on and off computers, laptops and iPads. Play simple games using the touch screen of an iPad and beginning to get used to the cursor of a computer or laptop.	Turning on and off. Right-clicking the mouse. Using basic keyboard functions such as backspace, enter/return, space bar, delete, tab, shift and caps lock. Basic typing skills. Researching a topic using the web. Use Microsoft Word, PowerPoint and Paint for simple tasks. Saving and then retrieving a document. Record their voices using an iPad. Observe how emails work by receiving and sending them as a class.	Turning on and off. Right-clicking the mouse. Using basic keyboard functions such as backspace, enter/return, space bar, delete, tab, shift and caps lock. Basic typing skills. Researching a topic using the web. Use Microsoft Word and PowerPoint for simple tasks. Saving and then retrieving a document. Taking photographs. Looking at photographs taken on a computer and thinking about how to edit them.	Having confidence in their keyboard use, by completing their times tables speed tests using it. Logging on and off independently. Sending emails with attachments Using PowerPoint and Publisher for projects. Basic projects on Excel, which require children to format information (make it bold, underline it). Presenting data using charts. Looking at time-lapse photographs.	Having confidence in their keyboard use, by completing their times tables speed tests using it. Logging on and off independently. Shooting and editing a video, with an audio soundtrack. Editing and putting together video and audio. Editing and recording digital music.	Be confident in cursor and keyboard use and manipulating documents, by saving, opening, creating and formatting them. Creating and editing a webpage collaboratively, using HTMLs. Using artistic and virtual space software. Independently putting together and editing a video.	Be confident in cursor and keyboard use and manipulating documents, by saving, opening, creating and formatting them. Coding games and websites, using HTMLs. Working collaboratively using email. Using locational mapping programmes.	

			Filming a video. Recording a story with sound effects.					
	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception		Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
E-safety	A different e-safety story read to them each half term to introduce the key ideas. These stories are discussed afterwards with activities relating to them.	A different e-safety story read to them each half term to introduce the key ideas. These stories are discussed afterwards with activities relating to them.	Term 1: Recording advice about how to stay safe on the internet in an 'Agony Aunt' style. Term 2: 'Digi Duck' read to them and discussed afterwards. Activities linked to what we share and send using the internet. Term 3: Activities linked to keeping our personal information safe.	Term 1: E-safety helping hand. Term 2: 'Chicken Clicking' read to them and discussed afterwards. Children to act this out afterwards (e-safety day). Term 3: Scenario games linked to protecting ourselves online.	Term 1: Making an information leaflet for parents about where to find help when online. Term 2: Interviewing/ hot seating the characters from 'Once Upon A Time Online'. Term 3: Learning about the negative behaviours they may see online and making a dangerous avatar.	Term 1: Learning about the SMART rules, which help us to find help. Term 2: Learn the song 'who do you share details with' on e-safety day. Term 3: Activities linked to positive and negative behaviour online.	Term 1: Learning about keeping their personal information private by creating some profiles. Term 2: Learning about what you should post online. Term 3: Activities linked to the ways we can stay safe online and where to find help.	Term 1: Learning about reliability and scamming online. Term 2: 'Once Upon a Time' read to them and discussed afterwards. Children to use this story to create their own (linked to a fairy tale) to tell to children in the younger years. (e-safety day). Term 3: creating a board game consolidating all e-safety knowledge.
	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception		Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Creating	Simple designs (mark making) on media such as paint.		Files in Microsoft Word, which involve typing simple sentences and editing these. Shapes drawn by a sprite. A collection of organised images	Taking photographs based on a topic. Creating a celebration card using either PowerPoint or Word. Filming a cookery video.	Creating Mondrian Art on Publisher. Make an information leaflet on Publisher. Making a collaborative informative presentation on their topic.	An interactive toy using Scratch. A sports video with running commentary. An animation, using Scratch. Digital music using Audacity.	Their own webpage on a chosen topic. A filmed news report on e-safety. Their own Mayan inspired art gallery using a programme called 'Sketch Up'.	Their own languages using ciphers. An e-safety story, linked to a fairy tale. An interactive game using Scratch and Python.

		using PowerPoint. Voice recordings Illustrations using Paint.	Creating a simple game on Scratch. Recording an audio story with sound effects. Displaying some research on a topic.	Answers to problems using excel. A survey using Google Forms. Presenting a weather forecast using an excel spreadsheet with data collected and time lapse photographs.	Shapes using a programmable avatar. An educational game using excel.	A Mayan Mood Board. Games, using skills learnt on Excel and Scratch.	A blog for a class webpage. Some travel writing, using locational photographs.	
	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception		Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Debugging	Practising and learning what to do if something goes wrong / doesn't look the way you expect.		Creating shapes using a sprite - correcting it, if it does not make the correct shape. Solving simple Scratch activities. Creating projects using PowerPoint and Paint and editing these when they do not look as expected.	Editing a card to look the way they want it. Moving a sprite to a named location. Editing / reshooting a video / photo / voice recording. Displaying research in a way of their choice.	Editing HTMLs. Fixing projects on Excel. Analysing weather data.	An interactive toy and animation on scratch. An education game on excel. Various other projects / games on scratch.	Edit and improve their web pages, by debugging the HTMLs and hyperlinks. Sorting games on Scratch. Their virtual galleries. Their codes when programming their game. Any glitches when putting together their video and audio. Their excel formulas in this game.	Encode cipher languages Edit their interactive games on Scratch. Edit and improve their HTMLs on their web blogs. Edit and improve their python language when programming their own game. Manipulate GPS data to create some travel writing.

	EYFS	KS1		LKS2		UKS2	
	Nursery & Reception	Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A
How a computer works	<p>Learning how to turn on a monitor, tower, laptop, ipad and understanding how these are connected.</p> <p>Using the touch screen, cursor and keyboard.</p>	<p>Becoming more fluent at manipulating the keyboards and cursors.</p> <p>Switched off lessons looking at algorithms.</p> <p>Learning about and using search engines.</p>	<p>Becoming more fluent at manipulating the keyboards and cursors.</p> <p>Learning about how devices take photographs.</p> <p>Learning about algorithms by instructing a teacher to follow instructions.</p> <p>Controlling a sprite.</p>	<p>Continuing to increase confidence in turning and logging on and off and switching users on computers / laptops, being able to problem solve while doing this.</p> <p>Learning about URLs, HTTPs and HTMLs.</p> <p>Understanding the difference between the internet and the web.</p> <p>Learning about the recording of the weather.</p>	<p>Continuing to increase confidence in turning and logging on and off and switching users on computers / laptops, being able to problem solve while doing this.</p> <p>Programming interactive toys and making games using algorithms (scratch and excel)</p> <p>Sound, video and editing knowledge.</p> <p>Inputting formula into Excel and understanding the output.</p>	<p>Create and edit our own webpage, manipulating the HTMLs and making our own URL.</p> <p>Understanding the algorithms used to make a game.</p> <p>Learn how to code a game.</p> <p>Understand the process of recording and editing audio and visual clips.</p> <p>Learn how to input more complex formulae into excel and understand what the outcome will be. Debug this if errors are made.</p>	<p>How to encode and decode languages, which are input into computers and used for passwords and security.</p> <p>Creating and debugging the algorithms for an interactive game.</p> <p>Using HTMLs to edit a blog online.</p> <p>Learn about the processes involved in the inner workings of a computer; including taking a computer apart, to learn about each part in more detail.</p> <p>Use the python language to program a game. Use and understand GPS.</p>

Blue text signifies statutory requirement.