

Areas of learning	Skills and Knowledge	Nursery	Reception	Yr1	Yr2	Yr2+
	Vocabulary	Computer, Ipad, screen, keyboard, phone	Camera, phone, Ipad, mouse, headphones, app, type, speakers, click, keyboard, spacebar, hard drive, screen, icon, search engine, delete, print, cursor	Ipad, phone, monitor, interactive board, icon, font, return, space bar, save, caps lock, edit, left click, right click, arrow keys,	Shift, wavy red line, highlight, cursor, scroll, insert, bold, italic, desktop, electronic, e-safety, algorithm, debugging, technology, highlight	
E Safety	Skills	Use kind words when talking to people in all situations.	Talk about good & bad choices in real life e.g. Taking turns, saying kind things, helping others, telling an adult if something upsets you. Play appropriate games on the Internet. Talk about good and bad choices when using websites - being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private. Tell a trusted adult if technology makes them uncomfortable. Follow the school E-safety rules	Talk about how words can make someone feel Navigate familiar websites. Be able to keep private information private even when asked for details and discuss how to responsibly handle such requests. Follow the school E-safety rules	When communicating to someone else electronically, kind words are used Navigate between familiar website Explore what cyber-bullying means & what to do if they encounter it. Follow the school E-safety rules	Stay safe online by choosing websites that are good for them to visit & not inappropriate sites.
	Knowledge of:	<ul style="list-style-type: none"> • What kind words are • Who they are communicating with • How actions can affect others. • • • • 	<ul style="list-style-type: none"> • Why we use kind words • What good choices and bad choices are and how they can affect others • Which games to play • Who trusted adults are and that they can help if any technology makes them feel worried or uncomfortable • • 	<ul style="list-style-type: none"> • • That websites may ask for information that is private • School E-safety rules • • • Private information e.g. Own name, d.o.b, address • The right to remain a private individual (PSHCE) 	<ul style="list-style-type: none"> • Why we need to show kindness to others • Avoiding, ignoring or closing adverts because they are trying to sell things • Appropriate websites and age appropriate websites • Who to go to when issues arise e.g. Parents, teachers etc • All information considered private • Why a person keeps personal information private 	



Programming	Skills	Begin to explore coding toys and software such as Beebots and code-a-pillar Use a 2 button remote control toy	Play simple route games e.g. Code-a-pillar, Beebot. Use a 3 button + remote control toy Can sequence pictures from a story	Begin to write a simple algorithm Use a remote with many buttons Begin to identify errors in a simple algorithm Begin to make logical attempts to fix the algorithm.	Write a simple algorithm Identify error in a simple algorithm Fix the algorithm.	Use own knowledge to fix algorithms
	Knowledge of:	<ul style="list-style-type: none"> Pressing buttons to make a Beebot and other devices move forward and backwards. 	<ul style="list-style-type: none"> Pressing buttons to make a Beebot and other devices move to a set destination. Eg. Directionality, clear etc. Chronological order - stories and events have a logical / chronological order (sequencing) 	<ul style="list-style-type: none"> What an algorithm is and that an algorithm written for a computer is called a program or code. Algorithms being a logical set of instructions that will not work correctly if an error is made Debugging as fixing an algorithm or code 	<ul style="list-style-type: none"> Algorithms being precise to work properly Algorithms being a logical set of instructions that will not work correctly if an error is made Debugging as fixing an algorithm or code 	
Technology in our lives	Skills	Recognise and begin to use some everyday technology. Demonstrate their understanding through role-play e.g. light switch	Use everyday technology for a function.	Compare similar work made through technology to work produced manually Make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.	Begin to discuss the environmental impact of an increasing use of technology. Begin to discuss the advantages and disadvantages of technology all around us.	
	Knowledge of:	<ul style="list-style-type: none"> How some technology is used in everyday life e.g. DVD, mobile phone, automatic doors etc 	<ul style="list-style-type: none"> A greater amount of technology used in everyday life e.g. DVD, mobile phone, automatic doors etc 	<ul style="list-style-type: none"> What is meant by technology and identify a variety of examples both in and out of school. The distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair. 	<ul style="list-style-type: none"> Environmental impact of technology Pros and cons of technology 	<ul style="list-style-type: none">



Handling Data	Skills	Sort objects with a specific criterion.	Sort objects and pictures into lists or simple tables. Begin to enter data into a program eg. barcharts	Interpret data represented in a variety of ways, Enter data into a program to present it ie pictogram, table, barchart, block graph.	Analyse data and answer questions about it Choose information to put into a data table. Use a questionnaire/tally charts to collect information. Recognise which information is suitable for their topic.	Design a questionnaire/tally chart.
	Knowledge of:	<ul style="list-style-type: none"> • Colour and size for sorting objects • • 	<ul style="list-style-type: none"> • • Simple recording methods such as charts and graphs. • 	<ul style="list-style-type: none"> • • Pictograms, Block charts and Bar charts • 	<ul style="list-style-type: none"> • Analysing data • Bar charts and how they can be made on a computer or devise using Purple Mash. • How questionnaires and tally charts can be used in collecting data 	



Word processing	Skills	<p>Make marks on a tablet or interactive white board and begin to be able to say what their marks mean.</p> <p>Begin to use the correct hand placement on the mouse.</p> <p>Begin to move the cursor to the required place.</p>	<p>Use space bar and identifying keys on the key board and enter button.</p> <p>Correct hand placement on the mouse.</p> <p>Move the cursor to the required place by controlling the mouse.</p> <p>Type single words / short phrases.</p> <p>Access a computer by pressing any key to start and copying password</p>	<p>Use non alphanumeric keys on the keyboard appropriately. i.e. return, shift, space bar, full stop, arrow keys appropriately.</p> <p>Can right or left click as desired.</p> <p>Move the cursor to the required place with control and confidence</p> <p>Type simple sentences using a keyboard.</p> <p>Use caps lock</p> <p>Experiment with changing the font, colour and size on a device.</p> <p>Save work in a variety of programmes.</p>	<p>Independently use non alphanumeric keys on the keyboard appropriately and with purpose. i.e. return to organize into paragraphs and shift key to type capital letters</p> <p>Can use the mouse to scroll</p> <p>Can use the mouse to highlight text</p> <p>Type sentences.</p> <p>Use spell check to spell words correctly.</p> <p>Change the font, colour and size appropriate to the piece of work.</p> <p>Save work using 'save as' and open the same piece of work again.</p> <p>Edit piece of work to improve it.</p> <p>Insert picture using clipart</p>
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	<p>Knowledge of:</p>	<ul style="list-style-type: none"> • The key computer vocabulary. • Letter strings being words • The correspondence between mouse/finger position and the cursor on the screen • Position of hand on a mouse 	<ul style="list-style-type: none"> • The key computer vocabulary. • Letter strings being words that can be typed on a screen using the keyboard • The functions of a mouse. • Correct hand position on mouse 	<ul style="list-style-type: none"> • The correspondence between keys on the keyboard and what comes on the screen - letters, numbers and some non alphanumeric keys on the keyboard. I.e. Return, space bar, full stop, arrow keys • Correct hand position on mouse • That work can be saved and accessed at a later date 	<ul style="list-style-type: none"> • Non alphanumeric keys • The correspondence between non alphanumeric keys on the keyboard and the effect on the screen. ie. return, full stop, arrow keys, shift key, back space, delete • What a wavy red line means under a word • Highlighting using a mouse • Functions of both sides of a mouse • Saved work can be edited • Icons in word e.g. font, size, clipart, text colour, bold, italic, underline 	
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Drawing/Multimedia	Skills	<p>Begin to use a drawing programme on the interactive white board and on the desktop computers.</p>	<p>Use a drawing programme on the interactive white board, the desktop computers and on Ipad with good control</p> <p>Add 'stickers'</p> <p>Change the colour of the tools, thickness of the pens/paintbrush used.</p> <p>Begin to erase mistakes</p> <p>Take photos and videos</p>	<p>Explore and use various tools such as brushes, pens, rubber, stamps, shapes within a multimedia program ie. Artrage and 2 paint.</p> <p>Use photos or images within a program or app</p> <p>Explore sound effects using various programs ie purple mash, 2simple</p> <p>Erase mistakes</p> <p>Take photos and video accurately using an appropriate level of focus and magnification (zoom in/out). Save, retrieve and print work.</p>	<p>Use an increasing range of tools within multimedia programs e.g. Artrage to add details to pictures.</p> <p>Change the size of and position of pictures</p> <p>Record sound using various programs i.e. Purple Mash, 2Simple</p> <p>Take videos of the required length and begin to edit.</p> <p>Open and edit pieces of electronic art.</p>	<p>Arrange clips to create a short film.</p>
	Knowledge of:	<ul style="list-style-type: none"> • Appropriate implements to draw on an Ipad and computer etc. 	<ul style="list-style-type: none"> • Appropriate implements to draw on an Ipad, Tech writer, computer etc. • • 	<ul style="list-style-type: none"> • • Some of the features of Artrage studio • A range of programs that can be used to create art 	<ul style="list-style-type: none"> • • Different tools in Artrage and what they do. • • The pros and cons of creating art on a computer compared to creating by hand 	

