
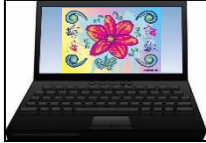






Whole School Progression of Knowledge and Skills

Computing - Learn how basic technology works and how we can use it in our everyday lives.

	Computing systems and networks 	Creating media 	Data and Information 	Programming 
Nursery	<p>I can identify devices</p> <p>I can recognise some ways in which the internet can be used to communicate.</p> <p>I can give examples of how I (might) use technology to communicate with people I know.</p>	<p>I can play on a touch screen game and use computers/keyboards/mouse in role play</p> <p>I can dictate short, clear sentences into a digital device.</p> <p>I know the difference between a photography and video.</p> <p>I can take a photograph</p> <p>I can use a painting app and explore the paint and brush tools</p> <p>I can record sounds with different resources</p>	<p>I can sort physical objects, take a picture and discuss what I have done.</p>	<p>I can follow simple oral algorithms</p> <p>I can spot simple patterns</p> <p>I can sequence simple familiar tasks</p> <p>I can use a mouse, touch screen or appropriate access device to target and select options on screen</p>
Reception	<p>I can identify ways that I can put information on the internet.</p> <p>I can talk about how I can use the internet to find things out.</p> <p>I can identify devices I could use to access information on the internet.</p> <p>I can give simple examples of how to find information (e.g. search engine, voice activated searching).</p>	<p>I can type letters with increasing confidence using a keyboard and tablet.</p> <p>I can record my voice over a picture.</p> <p>I can create a simple digital collage.</p> <p>I can move and resize images with my fingers or mouse.</p> <p>I can record a short video using the camera</p> <p>I can record and play a video</p> <p>I can watch videos back</p> <p>I can take a photograph and use it in an app</p> <p>I can find ways to change your voice (tube, tin can, shouting to create an echo)</p> <p>I can record sounds/voices in storytelling and explanations</p>	<p>I can identify a chart.</p> <p>I can present simple data on a digital device.</p> <p>I can scan a QR code.</p> <p>I can explore a 360 image.</p> <p>I can talk about AR objects in my class</p>	<p>I can create a simple picture to tell part of a story including more than one character.</p> <p>I can input a simple sequence of commands to control a digital device with support (Bee Bot)</p>

Year 1	Computing systems and networks Technology around us 	Creating media Digital painting 	Creating media Digital writing 	Data and Information Grouping data 	Programming Moving a robot 	Programming Introduction to animation 
	<p>Technology in our classroom</p> <p>I can explain technology as something that helps us</p> <p>I can locate examples of technology in the classroom</p> <p>I can explain how these technology examples help us</p> <p>Using technology</p> <p>I can name the main parts of a computer</p> <p>I can switch on and log into a computer</p> <p>I can use a mouse to click and drag</p> <p>Developing mouse skills</p> <p>I can use a mouse to open a program</p> <p>I can click and drag to make objects on a screen</p> <p>I can use a mouse to create a picture</p> <p>Using a computer keyboard</p> <p>I can say what a keyboard is for</p>	<p>How can we paint using computers?</p> <p>I can make marks on a screen and explain which tools I used</p> <p>I can draw lines on a screen and explain which tools I used</p> <p>I can use the paint tools to draw a picture</p> <p>Using shapes and lines</p> <p>I can make marks with the square and line tools</p> <p>I can use the shape and line tools effectively</p> <p>I can use the shape and line tools to recreate the work of an artist</p> <p>Making careful choices</p> <p>I can choose appropriate shapes</p> <p>I can make appropriate colour choices</p> <p>I can create a picture in the style of an artist</p> <p>Why did I choose that?</p> <p>I know that different paint tools do different jobs</p>	<p>Exploring the keyboard</p> <p>I can open a word processor</p> <p>I can recognise keys on a keyboard</p> <p>I can identify and find keys on a keyboard</p> <p>Adding and removing text</p> <p>I can enter text into a computer</p> <p>I can use letter, number, and space keys</p> <p>I can use backspace to remove text</p> <p>Exploring the toolbar</p> <p>I can type capital letters</p> <p>I can explain what the keys that I have learnt about already do</p> <p>I can identify the toolbar and use bold, italic, and underline</p> <p>Making changes to text</p>	<p>Label and match</p> <p>I can describe objects using labels</p> <p>I can match objects to groups</p> <p>I can identify the label for a group of objects</p> <p>Group and count</p> <p>I can count objects</p> <p>I can group objects</p> <p>I can count a group of objects</p> <p>Describe an object</p> <p>I can describe an object</p> <p>I can describe a property of an object</p> <p>I can find objects with similar properties</p> <p>Making different groups</p> <p>I can group similar objects</p> <p>I can group objects in more than one way</p> <p>I can count how many objects share a property</p>	<p>Buttons</p> <p>I can predict the outcome of a command on a device</p> <p>I can match a command to an outcome</p> <p>I can run a command on a device</p> <p>Directions</p> <p>I can follow an instruction</p> <p>I can recall words that can be acted out</p> <p>I can give directions</p> <p>Forwards and backwards</p> <p>I can compare forwards and backwards movements</p> <p>I can start a sequence from the same place</p> <p>I can predict the outcome of a sequence involving forwards and backwards commands</p> <p>Four directions</p> <p>I can compare left and right turns</p>	<p>Comparing tools</p> <p>I can find which commands to move a sprite</p> <p>I can use commands to move a sprite</p> <p>I can compare different programming tools</p> <p>Joining blocks</p> <p>I can use more than one block by joining them together</p> <p>I can use a Start block in a program</p> <p>I can run my program</p> <p>Make a change</p> <p>I can find blocks that have numbers</p> <p>I can change the value</p> <p>I can say what happens when I change a value</p> <p>Adding sprites</p> <p>I can show that a project can include more than one sprite</p>

	<p>I can type my name on a computer</p> <p>I can save my work to a file</p> <p>Developing keyboard skills</p> <p>I can open my work from a file</p> <p>I can use the arrow keys to move the cursor</p> <p>I can delete letters</p> <p>Using a computer responsibly</p> <p>I can identify rules to keep us safe and healthy when we are using technology in and beyond the home</p> <p>I can give examples of some of these rules</p> <p>I can discuss how we benefit from these rules</p>	<p>I can choose appropriate paint tools and colours to recreate the work of an artist</p> <p>I can say which tools were helpful and why</p> <p>Painting all by myself</p> <p>I can make dots of colour on the page</p> <p>I can change the colour and brush sizes</p> <p>I can use dots of colour to create a picture in the style of an artist on my own</p> <p>Comparing computer art and painting</p> <p>I can explain that pictures can be made in lots of different ways</p> <p>I can spot the differences between painting on a computer and on paper</p> <p>I can say whether I prefer painting using a computer or using paper</p>	<p>I can select a word by double-clicking</p> <p>I can select all of the text by clicking and dragging</p> <p>I can change the font</p> <p>Explaining my choices</p> <p>I can say what tool I used to change the text</p> <p>I can decide if my changes have improved my writing</p> <p>I can use 'undo' to remove changes</p> <p>Pencil or keyboard</p> <p>I can make changes to text on a computer</p> <p>I can explain the differences between typing and writing</p> <p>I can say why I prefer typing or writing</p>	<p>Comparing groups</p> <p>I can choose how to group objects</p> <p>I can describe groups of objects</p> <p>I can record how many objects are in a group</p> <p>Answering questions</p> <p>I can decide how to group objects to answer a question</p> <p>I can compare groups of objects</p> <p>I can record and share what I have found</p>	<p>I can experiment with turn and move commands to move a robot</p> <p>I can predict the outcome of a sequence involving up to four commands</p> <p>Getting there</p> <p>I can explain what my program should do</p> <p>I can choose the order of commands in a sequence</p> <p>I can debug my program</p> <p>Routes</p> <p>I can identify several possible solutions</p> <p>I can plan two programs</p> <p>I can use two different programs to get to the same place</p>	<p>I can delete a sprite</p> <p>I can add blocks to each of my sprites</p> <p>Project design</p> <p>I can choose appropriate artwork for my project</p> <p>I can decide how each sprite will move</p> <p>I can create an algorithm for each sprite</p> <p>Following my design</p> <p>I can use sprites that match my design</p> <p>I can add programming blocks based on my algorithm</p> <p>I can test the programs I have created</p>
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Year 2	Computing systems and networks IT around us 	Creating media Digital photography 	Creating media Making music 	Data and Information Pictograms 	Programming Robot algorithms 	Programming An introduction to quizzes 
	<p>What is IT?</p> <p>I can identify examples of computers</p> <p>I can describe some uses of computers</p> <p>I can identify that a computer is a part of IT</p> <p>IT in school</p> <p>I can identify examples of IT</p> <p>I can sort school IT by what it's used for</p> <p>I can identify that some IT can be used in more than one way</p> <p>IT in the world</p> <p>I can find examples of information technology</p> <p>I can sort IT by where it is found</p> <p>I can talk about uses of information technology</p> <p>The benefits of IT</p> <p>I can recognise common types of technology</p>	<p>Taking photographs</p> <p>I can recognise what devices can be used to take photographs</p> <p>I can talk about how to take a photograph</p> <p>I can explain what I did to capture a digital photo</p> <p>Landscape or portrait?</p> <p>I can explain the process of taking a good photograph</p> <p>I can take photos in both landscape and portrait format</p> <p>I can explain why a photo looks better in portrait or landscape format</p> <p>What makes a good photograph?</p> <p>I can identify what is wrong with a photograph</p> <p>I can discuss how to take a good photograph</p> <p>I can improve a photograph by retaking it</p> <p>Lighting</p> <p>I can explore the effect that light has on a photo</p>	<p>How music makes us feel</p> <p>I can identify simple differences in pieces of music</p> <p>I can describe music using adjectives</p> <p>I can say what I do and don't like about a piece of music</p> <p>Rhythms and patterns</p> <p>I can create a rhythm pattern</p> <p>I can play an instrument following a rhythm pattern</p> <p>I can explain that music is created and played by humans</p> <p>How music can be used</p> <p>I can connect images with sounds</p> <p>I can use a computer to experiment with pitch</p> <p>I can relate an idea to a piece of music</p> <p>Notes and tempo</p>	<p>Counting and comparing</p> <p>I can record data in a tally chart</p> <p>I can represent a tally count as a total</p> <p>I can compare totals in a tally chart</p> <p>Enter the data</p> <p>I can enter data onto a computer</p> <p>I can use a computer to view data in a different format</p> <p>I can use pictograms to answer simple questions about objects</p> <p>Creating pictograms</p> <p>I can organise data in a tally chart</p> <p>I can use a tally chart to create a pictogram</p> <p>I can explain what the pictogram shows</p> <p>What is an attribute?</p> <p>I can tally objects using a common attribute</p> <p>I can create a pictogram to arrange objects by an attribute</p>	<p>Giving Instructions</p> <p>I can follow instructions given by someone else</p> <p>I can choose a series of words that can be enacted as a sequence</p> <p>I can give clear instructions</p> <p>Same but different</p> <p>I can use the same instructions to create different algorithms</p> <p>I can use an algorithm to program a sequence on a floor robot</p> <p>I can show the difference in outcomes between two sequences that consist of the same commands</p> <p>Making predictions</p> <p>I can follow a sequence</p> <p>I can predict the outcome of a sequence</p> <p>I can compare my prediction to the program outcome</p> <p>Mats and routes</p>	<p>Scratch Jr recap</p> <p>I can identify the start of a sequence</p> <p>I can identify that a program needs to be started</p> <p>I can show how to run my program</p> <p>Outcomes</p> <p>I can predict the outcome of a sequence of commands</p> <p>I can match two sequences with the same outcome</p> <p>I can change the outcome of a sequence of commands</p> <p>Using a design</p> <p>I can work out the actions of a sprite in an algorithm</p> <p>I can decide which blocks to use to meet the design</p> <p>I can build the sequences of blocks I need</p> <p>Changing a design</p> <p>I can choose backgrounds for the design</p>

<p>I can demonstrate how IT devices work together</p> <p>I can say why we use IT</p> <p>Using IT safely</p> <p>I can list different uses of information technology</p> <p>I can talk about different rules for using IT</p> <p>I can say how rules can help keep me safe</p> <p>Using IT in different ways</p> <p>I can identify the choices that I make when using IT</p> <p>I can use IT for different types of activities</p> <p>I can explain the need to use IT in different ways</p>	<p>I can experiment with different light sources</p> <p>I can explain why a picture may be unclear</p> <p>Effects</p> <p>I can recognise that images can be changed</p> <p>I can use a tool to achieve a desired effect</p> <p>I can explain my choices</p> <p>Is it real?</p> <p>I can apply a range of photography skills to capture a photo</p> <p>I can recognise which photos have been changed</p> <p>I can identify which photos are real and which have been changed</p>	<p>I can identify that music is a sequence of notes</p> <p>I can explain how my music can be played in different ways</p> <p>I can refine my musical pattern on a computer</p> <p>Creating digital music</p> <p>I can create a rhythm which represents an animal I've chosen</p> <p>I can create my animal's rhythm on a computer</p> <p>I can add a sequence of notes to my rhythm</p> <p>Reviewing and editing music</p> <p>I can review my work</p> <p>I can explain how I changed my work</p> <p>I can listen to music and describe how it makes me feel</p>	<p>I can answer 'more than'/'less than' and 'most/least' questions about an attribute</p> <p>Comparing people</p> <p>I can choose a suitable attribute to compare people</p> <p>I can collect the data I need</p> <p>I can create a pictogram and draw conclusions from it</p> <p>Presenting Information</p> <p>I can use a computer program to present information in different ways</p> <p>I can share what I have found out using a computer</p> <p>I can give simple examples of why information should not be shared</p>	<p>I can explain the choices I made for my mat design</p> <p>I can identify different routes around my mat</p> <p>I can test my mat to make sure that it is usable</p> <p>Algorithm design</p> <p>I can explain what my algorithm should achieve</p> <p>I can create an algorithm to meet my goal</p> <p>I can use my algorithm to create a program</p> <p>Debugging</p> <p>I can test and debug each part of the program</p> <p>I can plan algorithms for different parts of a task</p> <p>I can put together the different parts of my program</p>	<p>I can choose characters for the design</p> <p>I can create a program based on the new design</p> <p>Designing and creating a program</p> <p>I can choose the images for my own design</p> <p>I can create an algorithm</p> <p>I can build sequences of blocks to match my design</p> <p>Evaluating</p> <p>I can compare my project to my design</p> <p>I can improve my project by adding features</p> <p>I can debug my program</p>
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E-Safety



Nursery	<p>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.</p> <p>I can explain how this could be either in real life or online.</p>
Reception	<p>I can describe ways that some people can be unkind online.</p> <p>I can offer examples of how this can make others feel.</p> <p>I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</p> <p>I can give some simple examples.</p> <p>I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location).</p> <p>I can describe the people I can trust and can share this with; I can explain why I can trust them.</p>
Year 1	<p>I can recognise that there may be people online who could make me feel sad, embarrassed or upset.</p> <p>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.</p> <p>I can recognise that information can stay online and could be copied.</p> <p>I can describe what information I should not put online without asking a trusted adult first</p> <p>I can describe how to behave online in ways that do not upset others and can give examples.</p> <p>I can explain rules to keep us safe when we are using technology both in and beyond the home.</p> <p>I can give examples of some of these rules.</p> <p>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).</p> <p>I can explain why I should always ask a trusted adult before I share any information about myself online.</p> <p>I can explain how passwords can be used to protect information and devices.</p>
Year 2	<p>I can explain how other people's identity online can be different to their identity in real life.</p> <p>I can describe ways in which people might make themselves look different online.</p> <p>I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened; I can give examples of how I might get help.</p> <p>I can explain how information put online about me can last for a long time.</p> <p>I know who to talk to if I think someone has made a mistake about putting something online.</p> <p>I can give examples of bullying behaviour and how it could look online.</p> <p>I understand how bullying can make someone feel.</p> <p>I can talk about how someone can/would get help about being bullied online or offline.</p> <p>I can explain simple guidance for using technology in different environments and settings.</p> <p>I can say how those rules/guides can help me</p> <p>I can describe why other people's work belongs to them.</p> <p>I can recognise that content on the internet may belong to other people.</p>

Vocabulary Progression

	Technology around us	Digital painting	Digital writing	Grouping data	Moving a robot	Introduction to animation
Foundation Stage	lpad, internet, game, app, screen, touch screen, type	Photo, video, paint, brush, colour, drag, click, record, create		Sort, information	Beebot, robot, button, move, backwards, forwards, go, stop, loading, voice, sound	
Year 1	Technology, Computer, mouse, trackpad, keyboard, screen, double-click, typing.	Paint program, tool, paintbrush, erase, fill, undo, primary colours, shape tools, line tool, fill tool, undo tool, tools, feelings, colour, brush style, pointillism, brush size,	Word processor, keyboard, keys, letters, type, Numbers, space, backspace, text cursor, Capital letters, toolbar, bold, italic, underline, Mouse, select, font, Undo, redo,	Object, label, group, search, image, property, colour, size, shape, value, data set, property, size, shape, more, less, most, fewest, more, less, most, least, the same	Forwards, backwards, turn, clear, go, commands, Instructions, directions, Left, right, Plan, algorithm, program, Route	ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area, Block, joining, Start block, run, program, background, delete, reset, algorithm, predict, Effect,

		pictures, painting, computers, like, prefer, dislike	format, Compare, typing, writing			change, value, block, Instructions, appropriate, design, programming blocks
	IT around us	Digital photography	Making music	Pictograms	Robot algorithms	An introduction to quizzes
Year 2	Information technology (IT), computer, barcode, scanner/scan	Device, camera, photograph, capture, image, digital, Landscape, portrait, Framing, subject, compose, Light sources, flash, focus, background, Editing, filter, Format, lighting, focus	Music, quiet, loud, feelings, emotions, Pattern, rhythm, pulse, pitch, tempo, notes, instrument, Create, beat, Open, edit	More than, less than, most, least, organise, data, object, tally chart, votes, total, Pictogram, enter, data, compare, count, Tally chart, explain, more, less, most, least, more common, least common, Attribute, group, same, different, most popular, least popular, conclusion, block diagram, common, sharing	Instruction, sequence, clear, unambiguous, algorithm, program, order, instructions, prediction, Artwork, design, route, mat, Debugging, decomposition	Sequence, command, program, run, start, outcome, predict, blocks, Sprite, algorithm, design, Actions, project, modify, change, build, match, Compare, debug, features, evaluate