

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	<p>E-Safety How do I Stay safe online? Are things on the internet always what they say they are?</p> <p>Computer Discovery What are the different parts of a computer? How do you control a computer?</p>	<p>Mouse and Keyboard Skills How do I move the mouse or trackpad? How do I left click to select an object? How do I drag and drop with mouse or trackpad to move objects around the screen? How do I find letters or numbers on keyboard? Can I begin to touch type with home row keys?</p>	<p>Early Digital Music Can I make different instrument sounds? Can I make rhythm and patterns? Can I create a phrase of music with shapes and patterns? Can I create a melody? Can I create a melody and rhythm, then change the tempo?</p> <p>Digital Literacy and Numeracy Can I use the computer to help me with my English and maths?</p>	<p>Digital Photos and Video Can I recognise different technology that is used at home and school? Can I select and use technology for a particular purpose?</p>	<p>Digital Art and Design Can I use the computer to colour in the style of Jackson Pollack? Can I use the computer to create an outfit? Can I design a treehouse? Can I design a robot?</p>	<p>Early Programming What things work on their own? How do we write a program to make things work on their own? How do remote control cars, toy microwaves etc. work?</p>
Year 1	<p>E-Safety What is personal information? Why should I keep it private? Why do websites want personal information? When and where do I go for help if I am concerned.?</p> <p>Mouse and Keyboard Skills How do I move the mouse or trackpad? How do I left click to select an object? How do I drag and drop with mouse or trackpad to move objects around the screen? How do I find letters or numbers on a keyboard? Can I begin to touch type with home row keys?</p>	<p>Digital Art How do I change the colour of individual pixels to accurately re-create basic artwork? How do I make changes where required? How do I change the colour of individual pixels to accurately re-create detailed artwork?</p> <p>Design How do I change the colour and pattern of elements? How do I position and rotate objects on a design? How do I position objects in relation to each other? How do I resize, rotate, flip and arrange objects behind/in front of each other?</p>	<p>Text and Images How do I change the background colour of a page? How do I add, resize and position images (pictures) on a page? How do I type and position text on a page, if possible using capital letters and punctuation? How do I label pictures with text? How do I use word-banks for writing sentences about pictures?</p>	<p>Comic Creation How do I add, resize, organise characters/object to different panels? How do I add narration using text and direct speech using speech bubbles?</p>	<p>Music Creation How do I create a rhythm using a pattern of beats? How do I create digital sounds using patterns and shapes? How do I create a simple melody using patterns and adjust tempo?</p>	<p>Introduction to Programming How do I place instructions into the correct order (sequence) to make something work? How do I use direction arrows to move an on-screen object (character/sprite) to achieve an objective? How do I predict a route and sequence direction commands (algorithm) to achieve an objective? Can I correct the errors if necessary (debug)? Can I predict a route and sequence distance commands to program an on-screen object to achieve an objective? Can I predict and sequence movement and pen commands to program the drawing of different 2D shapes? How do I sequence code blocks, including movements and execute (start program) blocks to write a program to achieve an objective?</p>

Year 2	<p>E-Safety</p> <p>What are the dangers of sharing photos online? Are people online always who they say they are? Should I always trust information online? How do I use the Internet responsibly? How should I be respectful online?</p> <p>Uses of IT</p> <p>What makes a computer a computer? How do computers store and follow instructions? What digital technology is there in school? How does different technology help us?</p> <p>Digital Art</p> <p>How do I use lines and fill tools to make interesting patterns? How do I add a variety of shapes (outlines and fill) and label them with text? How do I re-create graphics using pixels with different colours?</p>	<p>Animation</p> <p>How do I add a background and objects to a frame, including text? How do I copy/clone a frame and move objects to create an animation? How do I flip an object? How do I create screen-recording animation? How do I create stop-motion animation with photos?</p>	<p>Data Handling</p> <p>What is data? How do I collect it as a tally? How do I use software to label a pictogram and add data to each column? How do I edit a table with correct titles and numbers? How do I use software to create a bar chart/pie chart/line chart suitable for the data? How do I interpret a pictogram/bar chart/line chart?</p>	<p>E-Book Creation</p> <p>How do I add a book cover with title, author, colour and image? How do I add multiple pages based on a theme? How do I add text on different pages? How do I add images on different pages to match the theme/text? How do I add voice recordings to match the text and theme?</p>	<p>Develop Programming</p> <p>How do I create and debug simple programs by selecting code blocks, placing them in the correct sequence and executing a program? How do I use logical reasoning to predict the behaviour of simple programs? How do I simplify a program by using a loop?</p> <p>Programming with Scratch Jnr</p> <p>How do I program movements? How do I program outputs for audio or text? How do I find errors in a program? How do I program inputs? How do I program selection/conditions (if one sprite hits another)?</p>	<p>Internet Research</p> <p>How does a web-page display information? How can I use a web-page to answer questions?</p>
Year 3	<p>E-Safety</p> <p>What do I do if something upsets me online? How and why can people can be nasty online? What does the term 'sharing online' mean and why do we need to get permission to share photos and videos of other people? Why do people pretend to be someone else online? Why do we only talk to people we know in the real world, when online? Why should we not always trust what we read online and how do we check? Why is it important to be kind in the real world and also online? Why is it important to use avatars? How to make them?</p> <p>Comic Creation</p> <p>How do I add, resize and organise colour or picture backgrounds? How do I add, resize, organise characters/objects to different panels? How do I add narration using text and direct speech using speech bubbles? How do I save my comic creation with my name and title? How do I add audio recordings?</p>	<p>Storyboards</p> <p>How do I add and edit backgrounds? How do I add and edit characters, including changing posture, expression and clothing? How do I add narration and speech bubbles, including formatting text? How do I duplicate objects to match scenes? How do I search for objects to use?</p> <p>Digital Art</p> <p>How do I use various lines and fill tools plus how do I copy/paste and rotate to create pattern effects? How do I use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects? How do I use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics?</p>	<p>Programming in Scratch</p> <p>How do I design, write and debug programs that accomplish specific goals (Including outputs)? How do I use repetition in programs? How do I work with various form of inputs; keyboard, mouse and touch screen? How do I write programs to simulate physical systems?</p>	<p>Music Creation</p> <p>How do I Create ascending and descending scales? How do I add chords evenly across the scales? How do I add arpeggios and melodies? How do I add a steady and even rhythm? How do I use sampled sounds to create an effective mix? How do I build beats, melody (tones) and effects?</p> <p>Programming in Kodu</p> <p>How do I create a 3D place using various design tools? How do I write a program to control a character using inputs? How do I write a program with conditions to create an if statement? How do I add a multi-player aspect? How do I write a program with variables (scoring system)? How do I program operators (equals) to achieve a score and win game?</p>	<p>Document Editing and Creation</p> <p>How do I copy and Paste text and images? How do I find and replace words? How do I format text for a purpose? How do I add bullet points to make lists? How do I experiment with keyboard shortcuts?</p> <p>3D Design</p> <p>How do I use 3D space on a grid? How do I re-create or design familiar 3D models using cubes, such as tables and chairs? How do I use chisel tool to improve and adapt models? How do I colour individual blocks or whole models?</p>	<p>Infographics</p> <p>What is an infographic? why we use them? How do I search for and add suitable graphic elements? How do I add and format suitable titles and text? How do I label an image with arrows and text?</p> <p>Branching Database</p> <p>How do I add and label objects within a branching database? What questions can I ask to sort (classify) objects?</p>

<p style="text-align: center;">Year 4</p>	<p style="text-align: center;">E-Safety</p> <p>What do I do if something upsets me online? How and why can people be nasty online? What does the term 'sharing online' mean and why do we need to get permission to share photos and videos of other people? Why do people pretend to be someone else online? Why do we only talk to people we know in the real world, when online? Why should we not always trust what we read online and how do we check? Why is it important to be kind in the real world and also online? Why is it important to use avatars? How to make them?</p> <p style="text-align: center;">Animation</p> <p>How do I create a stop-motion video by duplicating slides that includes backgrounds and shapes? How do I create animation using transition and animation effects (morph, motion paths, pulse etc), including taking and editing a screenshot? How do I animate individual elements of objects? How do I create animated GIF files by animating pixels?</p>	<p style="text-align: center;">Programming in Scratch</p> <p>How do I Program inputs with loops, selection and sensing for interactions? How do I work with variables and various forms of input and output? How do I debug programs that accomplish goals (correcting errors)? How do I use selection, data variables and operators? How do I program a virtual robot using Scratch blocks?</p>	<p style="text-align: center;">Internet Research</p> <p>How do I use search technologies to find specific pieces of information? What are the features of an Internet Browser? How can I reference the correct source of information? How can I be discerning in evaluating digital content? How can I check the internet for fake news by cross-referencing facts?</p> <p style="text-align: center;">Data Handling</p> <p>How do I change appearance of cells in a spreadsheet (fill colour and border) and then add and align text? How do I find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title?</p>	<p style="text-align: center;">3D Design</p> <p>What is 3D spatial awareness? How do I add 3D shapes, resize, adjust height, duplicate and use the different perspective? How do I re-create different types of buildings using 3D shapes? How do I create roads/paths by adjusting the height of 3D shapes? How do I add windows and door shapes?</p>	<p style="text-align: center;">Video Editing</p> <p>How do I add scene images? How do I add scripted voiceover audio, adjust the volume and crop clips (including splitting a clip)? How do I add more clips and use transition effects? How do I add titles? How do I use elements such as shapes? How do I add music background music and adjust the volume? How do I export a project?</p>	<p style="text-align: center;">EBook Creation</p> <p>How do I choose a suitable page shape and add a title and subtitle? How do I change the background colour/texture of a page? How do I add, resize and change the colour of a shape then copy and paste it? How do I search for and add suitable images then resize and position them? How do I create another page with a background, image, shapes and text? How do I add an audio recording of the page text, including hiding it behind an object? How do I use hyperlinks for navigation between the pages?</p> <p style="text-align: center;">Inside A Computer</p> <p>What are the important parts inside a computer or mobile device? How do they help with the performance (CPU, Fan, Hard Drive, RAM, Graphics Card)? How is memory measured? How do I use search filters on websites to find suitable information?</p>
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Progression in Skills & Knowledge: Computing

Aspect	EYFS	Year 1	Year 2	Year 3	Year 4
Computer Science	Children are introduced to things that 'work by themselves' and need programming. They experiment with different toys; remote control cars, toy microwaves etc. and explain how they work.	The children are introduced to programming and begin to understand sequence and algorithms. They learn how to Sequence instructions (commands) to achieve an objective. They begin to use distances in commands and learn how to execute and debug a simple program.	The children develop their programming skills. They learn how to create and debug simple programs; how to use logical reasoning to predict a simple program's behaviour and how to add a loop to a program. Children become familiar with the term 'algorithm'. They use Scratch Jr to program simple inputs and outputs.	The children use Scratch to design, write and debug programs that accomplish specific goals. They learn how to use repetition in programs, using various inputs (keyboard, mouse and touch screen); They learn how to write programs to simulate physical systems. They learn how to use Kodu to write a program with variables.	The children develop their use of Scratch, using logical reasoning to explain how some simple algorithms work. They learn how to detect and fix errors in programs and algorithms. They use sequence, selection and repetition in programs and work with variables and various forms of input and output.
Information Technology	Children begin to learn how to use computers and digital devices. They begin to understand how computers help us and the differences between different types of digital technology. They begin to recognise basic components and begin to learn important	The children begin to develop their mouse and keyboard skills. They learn to add and resize texts and add, move and resize images. They use technology purposefully to create comics; design and create digital art and experiment with digital music.	The children start to develop their typing skills, learning to touch type. They use technology purposefully to create digital art, making patterns and using pixels and colour to recreate graphics. They begin to experiment with animation, learning how to move objects and clone slides. They begin	The children continue to develop their typing skills, developing the correct hand and finger position for touch typing. They select, use and combine a variety of software. They create their own comics; begin to understand and use the features of word to create their own documents; use pixel art to create their own GIF images; they develop their 3D	The children develop correct hand and finger position for touch typing. They select, use and combine a variety of software. They learn how to use the internet efficiently for research; They use animation to create a stop motion video by duplicating slides; they use 3D design to recreate different types of

	mouse/trackpad and keyboard skills.		to create e-books, adding texts on multiple pages. Children are introduced to data handling, learning how to create their own tables and charts.	design skills; develop their own games and use music lab song maker to compose their own music.	buildings; they begin to use video editing, learning how to add voiceovers and music. They develop their e-book skills and use data handling to present a suitable chart for different types of information.	layer and edit tracks and how to create loops in order to build a song. They develop their data handling skills by using formulae to find a range of calculations and learn how to present data in different ways.	concept of virtual reality and how it can be used to help people. They develop their skills in web design learning to add hyperlinks, buttons and files. They learn to evaluate other websites and provide constructive feedback.
Digital Literacy	The children begin to learn how to stay safe online and that not everything on the internet is what it says it is. They learn how to use computers to make music and how computers can be used to help us create art and design things.	The children begin to learn the importance of E-safety. They learn how to keep personal information private; why websites want personal information and when and where to go for help when they are worried.	The children learn how to recognise uses of information technology beyond school. They understand how computers store and follow instructions and they learn how different technology helps us. They develop their understanding of E-safety, learning the dangers of sharing photos online and how to use the internet responsibly.	The children learn how to Use technology safely, respectfully and responsibly. They Identify a range of ways to report concerns about content and contact.	The children continue to develop their understanding of E-safety, learning how to use technology safely, respectfully and responsibly. They become more proficient in Identifying a range of ways to report concerns about content and contact.	The children further develop their understanding of e-safety learning how to keep personal information private and how to protect themselves against online bullying. They also understand the term 'digital footprint'. They also learn how the internet can be used to create computer networks and how cloud computing is used.	The children further develop their understanding of e-safety learning how to keep personal information private and how to protect themselves against online bullying. They understand the consequences of sharing photos and videos online. The children learn how to check that online content is trustworthy and how, where and who they can report concerns to.