



Progression of Skills - Computing

Information Technology	Reception	Year 1	Year 2
<u>Word Processing/Typing</u> Objectives: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Play a touch screen game and use computers/keyboards/mouse in role play Type letters with increasing confidence using a keyboard or tablet Dictate short, clear sentences into a digital device.	Type words on a digital device, confidently Use the space bar to make space and delete or back space to delete letters or words Make a new line using enter/return Dictate into a digital device more accurately and with punctuation. Save and retrieve work from 'My Work' folder	Use space bar only once between words and use touch to navigate to words and letters to edit Copy and paste images and text Use caps lock or the shift key for capital letters Add images alongside text in a word-processed document Dictate longer passages in to a digital device with accurate punctuation Save and retrieve work from 'My Work' folder Retrieve images from a folder
<u>Data Handling</u> Objectives: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Identify a chart Sort physical objects, take a picture and discuss what I have done Present simple data on a digital device	Sort images or text into two or more categories on a digital device Collect data on a topic and create a tally chart and pictogram Explain what I have done and what it shows me Use a physical branching database to answer questions	Sort digital objects into a range of charts such as Venn diagrams, Carroll diagrams and bar charts using different apps and software Orally record myself explaining what the data shows me Use a digital branching database to answer questions

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<u>Presentation and eBook creation</u>	Record my voice over a picture Create a simple digital collage Move and resize images with my fingers or mouse	Add labels to an image Order images to create a simple storyboard Sequence a series of pictures to explain my understanding of a topic	Add text to a simple storyboard Add voice labels to an image Add a voice recording to a storyboard Add speech/thought bubbles to an image to enhance a character Import images to a project from online or the camera roll
<u>Animation</u>	Create a simple animation to tell a story including more than one character	Create an animation to tell a story with more than one scene Add my own pictures to my story animation	Create multiple animations of an image and edit these together Create a simple stop motion animation Explain how an animation/flip book works
<u>Video Creation</u>	Know the difference between a photograph and video Record a short film using the camera and play it back to view it	Record a film using the camera app Select images and record a voice over Highlight and zoom into images as I record	Write and record a script using a teleprompter (autocue) tool Use tools to add effects to a video Begin to use green screen techniques with support

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<u>Photography and Digital Art</u>	Take a photograph Use a painting app and explore the paint and brush tools	Edit a photo with simple tools Use a paint/drawing app to create a digital image	Edit a photo [crop, filters, mark up etc.] Select and use tools to create digital imagery - controlling the pen and using the fill tool
<u>Sound</u>	Find ways to change my voice (tube, tin can, shouting to create an echo) Record sounds/voices in storytelling and explanation	Create a sequence of sounds (instruments, apps/software) Explore short and long sounds Record my voice and add different effects	Record my own sound effects to use in a digital story book
<u>Computational Thinking</u> Objectives: Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs	Follow simple oral instructions Spot simple patterns, such as similarities and differences Sequence simple familiar tasks	Understand what algorithms are Begin to write simple algorithms Understand the sequence of algorithms is important Debug simple algorithms	Write algorithms for everyday tasks Use logical reasoning to predict the outcome of algorithms Understand decomposition is breaking objects/processes down Debug algorithms

<u>Computer Science</u>	Reception	Year 1	Year 2
<u>Coding and Programming</u>	Use a mouse, touch screen or appropriate access device to target and select options on screen Input a simple sequence of commands to control a digital device with support	Create a simple program on a digital device e.g., Beebot Use sequence in programs Locate and fix bugs in a program	Understand programmes follow precise instructions Create programmes using different digital devices e.g., Beebot or coding on Purple Mash Debug programmes of increasing complexity Use logical reasoning to predict the outcome of simple programmes
<u>Digital Literacy</u>	Reception	Year 1	Year 2
<u>Self Image and Identity</u> Objectives: Recognise common uses of information technology beyond school 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	Recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asked me to do something that makes me feel sad, embarrassed or upset Explain how this could be in real life or online	Recognise that there may be people online who could make me feel sad, embarrassed or upset Give examples of when and how to speak to an adult I can trust if something happens that makes me feel sad, worried, uncomfortable or frightened	Explain how other people's identity online can be different to their identity in real life Describe ways in which people might make themselves look different online Give examples of issues online that might make me feel sad, worried, uncomfortable or frightened and give examples of how I might get help

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<u>Online Relationships</u>	Recognise some ways in which the Internet can be used to communicate including how I might communicate with people I know.	Use the Internet with adult support to communicate with people I know Explain why it is important to be considerate and kind to people online	Use the Internet to communicate with people I don't know well (e.g. email a pen pal in another school/country) Give examples of how I might use technology to communicate with others I don't know well
<u>Online Reputation</u>	Identify ways I can put information on the internet	Recognise that information can stay online and could be copied Describe what information I should not put on line without asking a trusted adult first	Explain how information put online about me can last for a long time Know who to talk to if I think someone has made a mistake about putting something online
<u>Online Bullying</u>	Describe ways that some people can be unkind online and how this can make people feel	Describe how to behave online in ways that do not upset others and can give examples	Give examples of bullying behaviour and how it could look online Understand how bullying can make someone feel Talk about how someone can/ would get help about being bullied online or offline
<u>Managing Online Information</u>	Talk about how I can use the Internet to find things out and the devices I could use	Use the Internet to find things out (e.g. search engine, voice activated searching) Use simple keywords in search engines	Use keywords in search engines Demonstrate how to navigate a simple web page to get information I need (e.g. home, forward, back buttons; links, tabs and sections) Explain what voice activated searching is and how it might be used (e.g. Alexa, Google Now, Siri) Understand the difference between things that are imaginary or made up and things that are true or real Explain why some information I find online may not be true

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<u>Health, Well-being and Lifestyle</u>	Know the 'Smartie the Penguin' rules: "Before you tap and click, you need to stop and think and tell someone!"	Explain rules to keep us safe when we are using technology both in and beyond the home	Explain simple guidance for using technology in different environments and settings Say how those rules/ guides can help me
<u>Privacy and Security</u>	Identify some simple examples of my personal information (e.g. name, address, birthday, age, location) Describe the people I can trust and can share this with	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) Explain why I should always ask a trusted adult before I share any information about myself online Know that passwords should not be shared so that information and devices are kept safe.	Explain the types of personal information that shouldn't be shared without checking with a trusted adult first. Explain how passwords can be used to protect information and devices