

Computing Knowledge and Skills Progression Map

Together we Develop, Inspire, Succeed



Strand	EYFS	Year 1	Year 2
Programming	Explore cause and effect through investigation, enquiry, exploration Explain what they can see is happening Use the language of direction and instruction Make a floor robot move Use simple software to make something happen; <i>Beebot</i> and mats - play and explore, send the beebot to visit e.g. different dinosaurs Explore 2 Go and <i>Beebot app</i> as on screen programming Make choices about the buttons and icons Follow instructions; <i>How to plant a seed</i>	Give instructions to a friend and follow their instructions to move around Describe what happens when they press buttons on a robot Press the buttons in the correct order to make my robot do what they want. Describe what actions they will need to do to make something happen and begin to use the word algorithm; 2Code Begin to predict what will happen for a short sequence of instructions; <i>Link with Maths - Geometry position & direction – beebot//2Go</i> Begin to use software/apps to create movement and patterns on a screen; 2DIY creating a game Identify the block or place where it is wrong Use the word debug when correcting mistakes	Understand that commands can be repeated. Give instructions (using forward, backward and turn) and physically follow their instructions Talk about the order in which to do things to make something happen and talk about this as an algorithm. Program a robot or software to do a particular task; 2code (coding unit 2.1) Look at a different program and tell you what will happen. Use programming software to make objects move Watch a program execute and spot where it goes wrong and debug it; 2code Create and debug simple programs Independently spot that there is something wrong with the code

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E Safety	Select and use technology [safely] for particular purposes Understand that their password belongs to them; <i>During everyday classroom life - Discuss keeping passwords private when modelling logging in</i> Recognise the impact of good choices and consequences of wrong ones <i>link to PSED curriculum</i> Understand the need to have an adult nearby when using the Internet; Various <i>picture books from ICT suite</i> Recognise who they can ask for help and know when they need help; <i>Safer Internet Day – Digiduck</i>	Know what personal information is; <i>Digiduck stories and resources</i> Knowing to tell an adult when they see something unexpected or worrying online Talk about why it's important to be kind and polite <i>link to PSED curriculum</i> Recognise an age appropriate website Agree and follow sensible e-Safety rules; <i>signing Acceptable Use Policy in September Discuss and define classroom rules / expectations about safe use of the Internet</i> Understand why it is important to have a balance in screen time Know the importance of Keeping passwords private; <i>Introducing Purplemash Login</i>	Know why we need to keep passwords and personal information private; <i>Digduck stories</i> Describe things that can happen online that you must tell an adult about Talk about why it is healthy to limit screen time; link to PSED and sleep/wellbeing <i>Model making good choices about the websites you use, and how long to spend online.</i> Talk about the importance important to be kind and polite online and in real life; <i>Talk about the need for kind and polite communication in real life and online</i> Knowing that not everyone is who they say they are on the Internet; <i>Story - Chicken Clicking. By Jeanne Willis</i>
Creative use of ICT	Move objects on a screen Create shapes and text on a screen Use technology to record or express learning Create a simple picture; <i>2paint - Clicking and dragging</i> Use different functions of a paint program; Firework pictures (Fill and spray tool) Begin to use a capital letter for name; <i>Typing names learning shift key hold for capitals 2publish</i>	Use technology to create and present ideas; <i>Filming weather reports, designing a catching game 2DIY, 2Design and Make – creating a 3D house, Monster pictures 2Paint</i> Use the keyboard or a word bank to enter text; <i>Fairy tale book 2Create a story Typing program 2 Type</i> Save information in a special place and retrieve it again. Be creative with different technology tools; <i>Recreating a fairy tale adding voices and sound</i>	Use the keyboard on devices to add, delete and space text for others to read; 2type – exploring the keyboard Learning about online tools that will help to share ideas with other people; <i>Castle Story – 2Create a Story</i> Save and open files. Use technology to organise and present ideas in different ways; <i>Creating pictures 2paintapicture</i> impressionist Mr Grinling,

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Technology in Our Lives	Talk about technology that is used at home and in school. Operate simple equipment. Use a safe part of the Internet to play and learn. Talk about why you choose to use the Internet for different purposes Know what the world was like before technology – how has technology made things easier in the home and everyday life? Alexa etc... Explore old phones etc.	Recognise the ways we use technology in our classroom; <i>Model the use of technology for different purposes in the classroom, including resources such as email and video messaging (Skype, FaceTime) and talk about similarities with uses of technology at home and in the local community.</i> Recognise ways that technology is used in the home and community Use websites to find information Begin to identify some of the benefits of using <i>technology</i>; <i>Locate house on Google Earth</i>, opportunities to talk about the use of technology linked to different topics weather or local environment in Geography – link to multimedia – create a weather report Use technology to support other subjects e.g. how do architects use technology; Create nets2Design	Talk about why technology is used in the classroom Talk about why I use technology in my home and community. Understand that other people have created information read online; <i>Model the use of the Internet and provide links to appropriate websites to retrieve information, talking about who it belongs to.</i> Identify benefits of using technology including finding information, creating and communicating; Email and search engines link to E-safety (2respond email) <i>Emailing – how did people communicate from far away before emailing? What are the benefits/potential pitfalls?</i> Talk about the differences between the Internet and things in the physical world.
Data	Talk about different kinds of information such as pictures, video, text and sound. Collate opinions e.g. which food they enjoyed most in food tasting; <i>Creating physical graphs e.g. voting for a story by dropping counters in.</i>	Talk about the different ways in which information can be shown Use technology to collect information, including photos, video and sound Sort different kinds of information and present it to others Add information to a pictograph and talk to you about what I have found out; 2 count- pictograms – traffic survey	Talk about the different ways to use technology to collect information, including a camera, microscope or sound recorder Make and save a chart or graph using data collected; 2 count- pictograms Talk about the data that is shown in a chart or graph Understand a branching database; 2 question- create branching databases with words and pictures- link to algorithms