

SKILLS PROGRESSION COMPUTING

| Concept | EYFS | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Digital Literacy | <p>Early learning Goal – Understanding the World: technology.</p> <p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p> <p>Interact with activities (phonics games etc)</p> | <p>Use word processing software throughout the year to create digital content (<i>e.g. type up stories</i>)</p> <p>Change font size/colour using word processing software.</p> <p>Add appropriate images to word processing software/strip design/pic collage.</p> <p>Use Strip Design/Pic Collage to create simple posters on the iPads.</p> <p>Use Strip Design/Pic Collage to create simple timelines based around history/literacy etc.</p> | <p>Use PowerPoint to create a meaningful presentation.</p> <p>Change the font, size and colour and add appropriate images to communicate meaning for a given audience (<i>discuss how this changes between audiences</i>).</p> <p>Use technology to create and manipulate digital content (<i>e.g. creating posters/PowerPoints/word documents</i>)</p> <p>Use painting software to create a digital painting for a purpose (<i>e.g. as a background for digital content mentioned above</i>)</p> | <p>Use digital software (database tools) to present data. (<i>opportunities to link with maths/topic/science</i>).</p> <p>App smash by using child-created content from Pic Collage/Strip Design/ Word/ Painting etc. in presentations.</p> <p>Know that PowerPoint is mainly used to present information.</p> <p>Use PowerPoint effectively to present information and know that not all information is required on the slides as some is verbal.</p> <p>Know how to format a Word Document for a variety of purpose (<i>e.g. alignment of text, insert a table/picture/list</i>).</p> | <p>Know how to add a sound clip/video to PowerPoint which has been created through other means.</p> <p>Know how to use slide transitions and animations effectively.</p> <p>Know how to add hyperlinks to create a non-linear presentation in PowerPoint.</p> <p>Use Desktop Publishing software to create a document for purpose (<i>e.g. a leaflet or poster</i>) and format it effectively.</p> <p>Use Explain Everything (iPad app) to create a short presentation about a maths/literacy concept to teach others.</p> <p>Be able to take screenshots to use in other apps/software.</p> | <p>Abide by copyright rules when choosing digital content to use.</p> <p>Create a movie linked to a topic using iMovie.</p> <p>Use green screen software to create videos to use within iMovie.</p> <p>Use digital software to create music to use within iMovie.</p> <p>Create an e-book linked to Literacy or Topic.</p> <p>Choose appropriate software to create a digital poster linked to topic.</p> <p>Evaluate effectiveness of software to create a digital poster.</p> <p>Be able to use a range of devices to create digital content (<i>e.g. voice recording, video recording, animation software</i>)</p> | <p>Be able to choose and justify an appropriate software for the task/audience.</p> <p>Be able to use previously taught skills to format a presentation appropriately for the task/audience.</p> <p>Be able to evaluate software against a given task.</p> <p>Use Excel software to present and analyse data and information.</p> <p>Be able to App Smash using a range of software for effect (<i>such as Explain Everything, Phoster, Strip Design, Dolink, iMovie, Pic Collage</i>)</p> <p>Be able to demonstrate competence across using Word Processing, Desktop Publishing and Presentation software.</p> |

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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Computer Science</p> | <p>Use and explore codepillar and beebots</p> | <p>Begin to recognise that an algorithm is a set of instructions. <i>(could be taught with an 'unplugged' session – show a picture of a Lego tower and in pairs they build it – one has instructions [introduce as an 'algorithm'] and the other has blocks. Can also be done with instructions to put socks on/make tea/Simon Says/mazes etc.)</i></p> <p>Be able to write a simple algorithm (unplugged) (e.g. to move a partner/Beebot around a maze. Can use Beebot app or robot).</p> <p>Predict what a program will do.</p> | <p>Know that an algorithm is a set of instructions for a purpose.</p> <p>Know that programs execute by following precise and unambiguous instructions. <i>(Could pre-programme a beebot and have chn try to write down the sequence of instructions. Or look at Scratch Junior))</i></p> <p>Understand how algorithms are implemented as programs on digital devices and create and debug them. <i>(Use beebots/Scratch junior to encourage chn to think logically.)</i></p> <p>Predicting the behaviour of a program and creating simple programs. <i>(Download a simple scratch project for chn to explore. For example, can they change the text a character says?)</i></p> | <p>Use sequence, repetition and variables in programs.</p> <p>Design programs that accomplish specific goals.</p> <p>Debug programs using logical reasoning to ensure they accomplish specific goals.</p> <p>Begin to understand how decomposing is important to the programming process</p> <p>Use Crumble Kits – sparkle</p> | <p>Solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection and repetition in programs.</p> <p>Logical reasoning to detect and correct errors in algorithms.</p> <p>Design, write and debug programs that accomplish specific goals.</p> <p>Use crumble kits – sparkles and buttons</p> | <p>Be able to explain what a variable is and be able to use variables within a program.</p> <p>Be able to explain what an input device is and use various input devices in programming.</p> <p>Be able to explain what an output device is and use various outputs in programming.</p> <p>Use logical reasoning to detect and correct errors in programs.</p> <p>Use sequence, selection and repetition to create programs that accomplish specific goals.</p> <p>Use crumble kits – begin with sparkles/button, move onto motors.</p> | <p>Use logical reasoning to explain how simple algorithms work.</p> <p>Be able to use input and output devices together within a program.</p> <p>Be able to design, write and debug programs that control physical systems.</p> <p>Be able to design, write and debug programs that simulate physical systems.</p> <p>Use sequence, selection and repetition to create programs that accomplish specific goals. <i>(For example, using a crumble kit with a light sensor and a sparkle. Encourage chn to think about where this applies in real life. Controlling traffic lights using crumble kits and buttons)</i></p> |
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| Information Technology | <p>Identify IT around the home and school and understand it's purpose.</p> | <p>Develop an awareness of appropriate language for email/<u>blogging</u>. Begin to use the internet to research a simple subject. Recognise how technology is used in the real world and begin to recognise its impact. Understand how to save/retrieve data. Know how to open and close programs. Know how to control a computer/laptop/iPad. Be able to log onto laptop/iPad. Be developing in typing skill. Know how to navigate the internet.</p> | <p>Be able to log onto an email OR a <u>class blog</u> using own username and password. Be able to use appropriate language for an email or <u>blog</u> post and discuss the importance of appropriate language in the real world. Contribute to a class blog. Use technology to organise, store and retrieve digital content. <i>(Using the shared network to save files, organise them into folders and retrieving them through software).</i> Know how to navigate the internet using key words. Be able to type with increasing accuracy.</p> | <p>Use different font sizes, colours and images purposefully when creating digital content. <i>(e.g. to make text stand out or to follow a specified colour scheme)</i> Know how to choose a recipient, forward and add attachments to a blog and understand this language. Know how to save a blog to draft and retrieve it before sending. Open received blog messages and save attachments to appropriate place. Know how the internet can offer opportunities for communication and collaboration. Continue to use key words when navigating the internet. Know that search results are gathered based on key words and ranked in order of relevance. Know how to use Qrafter app to scan QR codes. Know how QR codes are useful tools to present data and information. Be able to type with increasing accuracy and efficiency.</p> | <p>Contribute to a class blog. Create a purposeful database to present data. <i>(edublogs websites are good for this)</i> Be able to sort information within a database. Use 'advanced search' on a search engine to use search engines effectively. Create a QR code for a purpose <i>(using Qrafter)</i> Know how search results are selected. Be able to type most words quickly and without hesitation.</p> | <p>Know the names of devices on a network. Be able to explain the purpose of devices on a network. How computer networks can provide multiple services Appreciate how search results are ranked Contribute to a class blog consistently. Be able to type efficiently and accurately.</p> | <p>Be discerning in evaluating digital content. Contribute to a class blog. Be able to use a variety of passwords and usernames to log onto devices and websites. Be able to type accurately and efficiently. Use and create QR codes. Be able to explain what the internet is. Be able to explain how the internet provides access to the World Wide Web.</p> |
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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">E-Safety</p> | <p>Use ICT equipment safely Address E-safety with parents</p> | <p>Know what to do and who to go to if they see something inappropriate online Know how to stay safe on the internet. Know that they should not share their name/address/school etc. on the internet.</p> | <p>Know what classifies as "personal information" and know how and why to keep it private. Know how to use technology respectfully to not offend others. Know how to get help when they have seen something inappropriate/upsetting.</p> | <p>Recognise unacceptable behaviour online and identify a range of ways to deal with inappropriate content. Continue to use technology safely and respectfully. Know that any information made available online may be visible to others – even those who we may not intend. Know what cyber bullying is and how to report an incident. Know how to stay safe whilst communicating and who it is safe to communicate with online.</p> | <p>Use technology safely, respectfully and responsibly. Know what it means to be a responsible digital citizen. Be able to recognise forms of cyberbullying and suggest what to do in an incident of cyber bullying. Know that cyberbullying is intolerable both within and outside of school and know the consequences. Recognise that not all data on the internet is trustworthy. Know how to respond if asked for personal information online. Know how to cross-check information. Know that copyright applies to some content available on the internet. Know how to use a variety of digital tools responsibly to communicate with others. Know that search engines should be used with caution and know what to do if they come across inappropriate content.</p> | <p>Use a range of technology securely. Know how to create a strong, secure password for online accounts and devices. Know the different types of password for devices and be able to evaluate their effectiveness. (<i>voice recognition, face recognition, passcode, pattern, pin, fingerprint</i>) Know how to stay safe across a variety of social media. (<i>link to what you know the chn are using.</i>) Know that any information/pictures we put online may be used by other people without our knowledge. Know how to set privacy preferences as high and why this is important. Know what to do in the event of cyberbullying. Know how to use a mobile phone safely and responsibly. Know about your "digital footprint" and how to keep this clean.</p> | <p>Know the impact of your "digital footprint" on current and future life. Know that excessive use of the internet is inappropriate use. Understand that they are responsible for information that is shared online and recognise how this may impact others. Know that to use social media appropriately an adult must be informed of their use. Know how to avoid causing harm to others online. Know how to protect themselves from cyber bullying. Know that they need to respect the rights of others online. Know the risks of meeting people online and how to keep themselves safe. Understand that cyberbullying is intolerable inside and outside of school. Know that cyberbullying can be sanctioned both inside and outside of school.</p> |
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