

# The ICT / Computing Curriculum- *by year group.*

## **Year 3**

eSafety

Text and Graphics

Research & Communication

Multi-Media Authoring

Digital Creativity

Data & Programming

### Year 3- ICT Curriculum.

Learning Objectives	Key Skills	Notes
<b>Year 3 - Text and Graphics</b>		
<ul style="list-style-type: none"> <li>• To further develop typing speed and accuracy to develop competency in typing</li>   <li>• To begin to understand the purpose of and use independently a range of different technology.</li>   <li>• To make choices about when to use technology, which piece(s) of technology to use, which software/tools they are going to use on the technology and begin to be able to explain their choices to others.</li>   <li>• To store and retrieve digital content</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to increase their typing speed, and be encouraged to play games at home and school that help with this. Aim to reach the accepted competency rate for children of <b>20WPM</b> by the end of Year 3.</li>   <li>• Continue to become familiar with a range of devices, including tablets, desktop computers, laptops, microphones, cameras etc. and <b>increasingly develop their independence and confidence in using these devices.</b></li>   <li>• Word process work, changing the font, font size, colour and adding images and using text boxes, word art, and cut, copy and paste ensuring they can save and load their work.</li>   <li>• To save with logical file names and re-open content.</li> </ul>	<ul style="list-style-type: none"> <li>• Typing speed refers to copying WPM, composition WPM will be slower.</li>   <li>• Ongoing word processing using BBC Dance Mat Typing  <a href="http://www.bbc.co.uk/schools/typing">www.bbc.co.uk/schools/typing</a>                      assess using Rank My Typing  <a href="http://www.rankmytyping.com">www.rankmytyping.com</a></li>   <li>• Project based work using '2 Publish' (Purple Mash)</li> </ul>

Learning Objectives	Key Skills	Notes
<b>Year 3 - Research and Communication</b>		
<ul style="list-style-type: none"> <li>• To find and use appropriate information</li>   <li>• To use search technologies effectively and appreciate how results are selected and ranked. To follow a simple search to find specific information from a web site.</li>   <li>• To identify how different web pages are organised e.g. graphics, hyperlinks, text. To understand a website has a unique address</li>   <li>• To navigate a web page to locate specific information</li>   <li>• To know that ICT enables access to a wider range of information and tools to help find specific information quickly</li> </ul>	<ul style="list-style-type: none"> <li>• Develop key questions to search for specific information with purpose to answer a problem e.g. to find out about different Roman Gods.</li>   <li>• Understand how a search engine works and begin to create and enter appropriate search strings eg. Bing, K9 (iPads), Paws Explorer, Dorling Kindersley.</li>   <li>• Save and retrieve accessed information through the use of Favourites, History, and Save As.</li>   <li>• Understand that some information found through searching is more relevant than others. Talk about and describe the process of finding specific information</li>   <li>• Use the information purposefully to complete specific tasks e.g. copy, paste and edit relevant information</li>   <li>• Begin to use on-line tools, such as 'Wikis' Google docs or 'Drop Box' and sites to collaborate together- for example by working together to add ideas to a word bank, write a shared story</li> </ul>	<p><b>Higher Order Research Skills</b>  <b>R</b>apid searching and browsing,  <b>A</b>ssessing the quality and synthesizing  <b>P</b>rioritising, ranking  <b>S</b>witching attention between activities (multi-tasking)</p> <ul style="list-style-type: none"> <li>• Web Browsing  Create a document including: <ul style="list-style-type: none"> <li>- Copy, paste relevant information (eg. image), edit</li> <li>- Save into Dropbox</li> <li>- 4 or 5 preselected websites for research purposes.</li> </ul> </li> </ul>

Learning Objectives	Key Skills	Notes
<b>Year 3 - Multi-Media Authoring</b>		
<ul style="list-style-type: none"> <li>• To continue to produce work using a computer, using more advanced features of programs and tools.</li>   <li>• To work collaboratively together to create documents, including presentations.</li>   <li>• To use desk top publishing tools effectively and understand the differences between a word processor and desktop publisher.</li>   <li>• To be discerning in evaluating digital content.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to word process a range of work in other curriculum areas, using more advanced word processing features such as columns and borders.</li>   <li>• Work together to collaboratively produce a presentation (perhaps using Wikis or Cloud based tools.)</li>   <li>• Understand the differences between a word processor and desktop publishing tools and use desktop publishing tools to create posters, leaflets and other documents which require specific formatting.</li>   <li>• Understand the importance of evaluation and adaptation to enhance the overall product.</li> </ul>	<ul style="list-style-type: none"> <li>• Use Microsoft Office (Publisher/ Word)</li>   <li>• Dropbox</li>   <li>- Pull down a working document, edit other's learning, add next part to activity/story, save back to Dropbox.</li> <li>- Could be achieved as a carousel of 5 activities set up by CT/5 groups of children over 5 sessions. Each group pulls down a document from Dropbox, completes task shown, sets a new task for the next group and then uploads back to Dropbox. After 5 weeks all groups would have contributed to each of the 5 documents. <ul style="list-style-type: none"> <li>• Create internet research books using '2 Create a Story'</li> </ul> </li> </ul>

Learning Objectives	Key Skills	Notes
<b>Year 3 - Digital Creativity</b>		
<ul style="list-style-type: none"> <li>• To understand ICT allows easy creation, manipulation and change. To understand they can compose music using icons to represent musical phrases.</li> <li>• To know they can record sound using ICT that can be stored and played back and independently using a <b>range of tools</b> to record sound.</li> <li>• To independently record video using a range of devices and for a range of purposes.</li> <li>• To independently take photographs taking into account the audience or purpose for the image.</li> <li>• To edit photographs using a range of basic tools.</li> </ul>	<ul style="list-style-type: none"> <li>• Use a computer to sequence short pieces of music using a small selection of pre-record sounds.</li> <li>• Independently record video for a range of purpose, paying attention to the quality of the video capture.</li> <li>• Take photographs for a specific reason or project and/or find appropriate images on-line.</li> <li>• Create a video out of still images. Create digital artefacts using photographs which they have taken or found.</li> <li>• Use the computer to preform photo edits and create a range of digital creations using photos.</li> </ul>	<ul style="list-style-type: none"> <li>• Audio- use 2simple 2sequence (Purple Mash)</li> <li>• Use: <ul style="list-style-type: none"> <li>- Tough Cams</li> <li>- Movie Maker</li> <li>- Image Blender</li> </ul> </li> </ul>

Learning Objectives	Key Skills	Notes
<b>Year 3 – Data and Programing</b>		
<ul style="list-style-type: none"> <li>• To understand the basic structure of a database.</li> <li>• To be able to add data to a pre-made or new database.</li> <li>• To use the data in a pre-made database to generate graphs and charts.</li> <li>• To continue to develop their understanding of how computer and technology works and how computers process instructions and commands.</li> <li>• To create, edit and refine more complex sequences of instructions for a variety of programmable devices.</li> <li>• To use a computer to create basic applications, investigating how different variables can be changed and the effect this has.</li> <li>• To use more sophisticated simulations to represent real life situations.</li> <li>• Use simulations to make and test predictions.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to use technology to create graphs and charts.</li> <li>• Understand what a database is, and the basic structure of a database.</li> <li>• Create graphs from pre-made databases, and enter their own data into a database and generate graphs using these. Use other software to present these findings as appropriate.</li> <li>• Continue to develop understanding of how a computer and technology works, focusing on computational thinking.</li> <li>• Begin to plan more complex sequences of instructions for on-screen and floor turtles. Predict, test and amend these instructions.</li> <li>• Use software to make basic puzzles and quizzes, changing parameters (e.g. time allowed, points, number of pieces etc.) to customise the puzzle or quiz (e.g. 2DIY)</li> <li>• Continue to explore simulations as appropriate and as link with other curriculum areas and discuss the benefits of using these simulations</li> <li>• Use simulations to make and test predictions.</li> </ul>	<p><b>Link to Science and Maths</b></p> <ul style="list-style-type: none"> <li>• Use 2 Investigate (Purple Mash)</li>   <li>• Use 2 Graph (Purple Mash)</li>   <li>• Laptops: 2 Code (Purple Mash) Expresso Coding Logo (Links on Simon Haughton website) 2 DIY (Purple Mash)</li> <li>IPads: Hopscotch app. 2 DIY app.</li>   <li>• Simon Haughton <a href="http://www.simonhaughton.co.uk/simulation-software/">www.simonhaughton.co.uk/simulation-software/</a></li> <li>- Pilot a hot air balloon</li> <li>- Give commands to a virtual dog</li> </ul>

