

# IT Knowledge skills and Capability Year 1

<b>POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (DL)</b>	<b>POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (DS)</b>	<b>POS / Skill / Capability / Concepts / Knowledge Key skills / Objectives (SRU)</b>
<ul style="list-style-type: none"> <li>• Understand the purpose of, and <a href="#">begin to use a range of different technology</a> in and beyond school.</li> <li>• To become skilful in using different tools to control technology (including how to log on and shut down) developing their familiarity with a computer/ laptop/tablet, keyboards, mouse, trackpad, camera, recording devices etc.</li> <li>• Begin to develop typing speed and accuracy, use a range of games and programs to enable independent access to a computer. Children should also be encouraged to continue this work at home.</li> <li>• Be able to use the spacebar, back space, enter, shift and arrow keys.</li> <li>• Use technology to combine text with photographs, graphics and drawings.</li> <li>• Create their own text based content, including adding basic effects to sections of text. changing the font size and colour, brush, fill, line, spray and stamp tools.</li> <li>• Show ideas through mind mapping and storyboarding with support and use of templates.</li> <li>• Be able to collaborate on projects/ideas with others – at and away from the computer.</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise uses of technology in their homes and in their community.</li> <li>• Understand that there are online tools that can help them create and communicate.</li> <li>• Be able to use key words search a specific resource for information, under adult supervision.</li> <li>• Understand there are a variety of sources of information and begin to recognise the differences.</li> <li>• Understand the different types of content on websites and that some things may not be true or accurate.</li> <li>• Know what to do with adverts and pop-ups.</li> </ul>	<ul style="list-style-type: none"> <li>• Know and follow the school's safer internet rules.</li> <li>• Make decisions about whether or not statements or images found on the internet are likely to be true.</li> <li>• Identify different devices that can go on the internet, and separate those that do not.</li> <li>• Identify what things count as personal information.</li> <li>• Identify when inappropriate content is accessed and know how to act appropriately</li> <li>• Use a password to access the secure network and know that it is important to keep this 'safe'.</li> </ul>

<b>POS / Skill / Capability / Concepts / Knowledge</b> <b>Key skills / Objectives (MM)</b>	<b>POS / Skill / Capability / Concepts / Knowledge</b> <b>Key skills / Objectives (P/C/I)</b>	<b>POS / Skill / Capability / Concepts / Knowledge</b> <b>Key skills / Objectives (UD)</b>
<p><b>Multimedia</b></p> <ul style="list-style-type: none"> <li>• Know that multimedia includes sound, text and graphics.</li> <li>• Know that ICT can be used to communicate ideas in different ways. (Eg. text, images, tables, sound).</li> <li>• Recognise that changes can be made to documents to add new ideas or delete unwanted ideas.</li> <li>• Begin to explain reasons why choices have been made to teacher or talk partner.</li> <li>• Talk about their use of text and graphics including how the mood of a piece is changed.</li> </ul> <p><b>Digital Imagery</b></p> <ul style="list-style-type: none"> <li>• Understand the differences between a graphics package and paper based art activities (undo, changes quickly and easily made).</li> <li>• Understand there are a variety of tools in a graphics package and they each have a different purpose. Use a selection.</li> <li>• Understand digital still or video cameras can capture an image.</li> <li>• Understand the need to keep the camera still, discuss the quality of their image</li> <li>• Understand that some packages will enable images to be animated.</li> <li>• Talk and describe to others about their use of a paint package and their choice of tools.</li> </ul> <p><b>Sound</b></p> <ul style="list-style-type: none"> <li>• Understand that devices have stop, record and playback functions</li> <li>• Know that sound can be recorded on the computer using specific soft/freeware.</li> <li>• Discuss the mood that music or sound creates.</li> </ul>	<ul style="list-style-type: none"> <li>• Name different objects that can be controlled – washing machine, microwave, T.V. etc</li> <li>• Know that some devices use a sensor/need a signal to activate them e.g. automatic doors and some devices need instructions to operate and control them (cause and effect)</li> <li>• Know I.T. devices are powered by mains or battery and observe basic safety rules</li> <li>• Be aware that the computer keyboard can be used to control objects on screen (arrow keys etc) – Play and create simple on screen games.</li> <li>• Give and follow commands (one at a time) to navigate other children (pretending to be a robot, Simon Says game) and programmable toys around a course or a familiar journey, including straight and turning movements.</li> <li>• Order and record each step/route referring to the term ‘algorithm’ (use card icons and templates)</li> <li>• Plan, generate and follow a sequence of commands (actual and on-screen) to complete a given task or problem.</li> <li>• Explore and create a sequence of commands to reproduce a simple geometric shape or pattern on screen.</li> <li>• Read and predict what will happen from a set of instructions when controlling devices and describe the effects. Test. Make changes to improve Use the word ‘<b>debug</b>’ to correct any mistakes</li> <li>• Compare real life and virtual situations and make informed choices when exploring what will happen, e.g., colour in a shape, dress teddy. Talk about the rules found in simulations.</li> <li>• Explore and investigate imaginary and virtual worlds (simple simulations) and find out ‘what happens if and be aware that different choices can produce different</li> </ul>	<ul style="list-style-type: none"> <li>• Use ICT to sort / organise objects into groups according to a given criteria; or criteria identified by the child themselves. (This will build on practical class based demonstrations).</li> <li>• Begin to use technology to create graphs and pictograms (Put data into a program)</li> <li>• Be able to interpret a pictogram.</li> <li>• Look at how data is representing digitally, recognising there is a link between data collected and the information presented on screen.</li> <li>• Be aware through a whole class demonstration (IWB) that data logging is a way of monitoring live data. Discuss how and when this could be useful.</li> <li>• With support save work.</li> </ul>

<ul style="list-style-type: none"><li>• Discuss their work.</li><li>• Recognise that an electronic keyboard can be used to select sounds.</li></ul>	<p>outcomes.</p> <ul style="list-style-type: none"><li>• Begin to understand that computers can represent real or imaginary situations and these may not happen in everyday life.</li></ul>	
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