



Subject Overview: ICT  
 Intent (Skills/ knowledge)  
 Implementation (How/ When)

Computer Science			
	FS	Year 1	Year 2
INTENT	Knows how to operate simple equipment, e.g. turns on CD player and uses remote control.	<p>The child can understand <b>algorithms</b> as <b>sequences</b> of instructions in everyday contexts.</p> <p>The child can take real-world problems and then plan a <b>sequence</b> of steps to solve these. The problems could be moving a Bee Bot from one point to another, or making some simple food items like a sandwich, smoothie or pizza.</p> <p><i>(E.g. In 1.1, recognise a set of directions as an algorithm. In 1.2, recognise the steps of a recipe as an algorithm. In 1.4, realise that there are algorithms for grouping or sorting things.)</i></p>	<p>The child can understand <b>algorithms</b> as <b>sequences</b> of instructions or sets of rules in everyday contexts.</p> <p>The child can recognise that common <b>sequences</b> of instructions or sets of rules can be thought of as <b>algorithms</b>. Examples could include recipes, but might also be procedures or rules in class, spelling rules, simple arithmetic operations or number patterns.</p> <p><i>(E.g. In 2.1, recognise sets of directions as algorithms. In 2.2, recognise that the rules of a game are an algorithm. In 2.3, think of the steps to taking and editing photographs as an algorithm.)</i></p>
IMPLEMENTATION	Beebots Continuous provision	<ul style="list-style-type: none"> <li>Following instructions to make a monster</li> <li>Following instructions to complete an obstacle course (possibly with BeeBots)</li> </ul>	<p><u>Summer 1</u></p> <p>Algorithm unit of work - children to go outside to practice algorithm before understanding how knowledge can be transferred to computing.</p>
Vocabulary	<p>Identify some simple examples of personal information (name, address, birthday and age for example) Identify rules that help keep people safe and healthy in and beyond the home when using technology. Say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks them to do something that makes them feel sad, embarrassed or upset. Describe ways that some people can be unkind online. Recognise some ways in which the internet can be used to communicate. Give examples of how they (might) use technology to communicate with people they know. Identify ways that they can put information on the internet. I can talk about how I can use the internet to find things out. I can identify devices I could use to access information on the internet.</p>		



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Information Technology			
	FS	Year 1	Year 2
INTENT	<p>Shows an interest in technological toys with knobs or pulleys, or real objects. Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. Knows that information can be retrieved from computers</p>	<p>The child can use digital technology to store and retrieve content.</p> <p>The child can use a range of digital technologies to store and access digital content. These might include laptop computers, tablets, smartphones, digital cameras, video cameras and audio recorders. Projects might include videoing one another cooking, developing an e-book or an audio book, creating a greetings card.</p> <p>(E.g. In 1.2, film and upload a child cooking.            In 1.3, open the e-book, import illustrations, add them to the e-book and save their work.            In 1.4, retrieve previous work, import further illustrations and save their work.            In 1.5, open the template, record audio, import it to the computer and save their work.            In 1.6, open the card template, find images online and save their work.)</p>	<p>The child can store, organise and retrieve content on <b>digital devices</b> for a given purpose.</p> <p>With a given purpose, the child can use a range of digital technologies to retrieve, organise and store digital content. Technologies will typically include laptop computers, tablets and smartphones with access to the internet, but the child might also be expected to use digital cameras, video cameras and audio recorders (or the equivalent apps on a tablet or smartphone). Projects might include digital photography, searching for images online and creating image-based presentation slides.</p> <p><i>(E.g. In 2.3, review, reject and rate the photographs they have taken.            In 2.4, find useful information on websites.            In 2.5, save and retrieve their presentations; add images or other media as appropriate.            In 2.6, use questions to sort and classify objects; take, upload and organise photographs; add information to a map.)</i></p>

IMPLEMENTATION	<p>In Provision children have access to different technology toys and shown how to use them appropriately.</p>	<ul style="list-style-type: none"> <li>• Use of iPads for research across the curriculum</li> </ul> <p>Recording videos for floor books, using iPads, across the curriculum</p>	<p><u>Autumn 1</u> Children produced posters linked to Topic work on Purple mash system.</p> <p><u>Spring 1</u> Using technology safely to search online using search engines and laptops.</p> <p><u>Summer 2</u> Digital photography unit - linked to Art. Children to use iPads and a range of software.</p>
Vocabulary	<p>Online Safety Log in, Username, password, Log out, Save, E-Book, Font, File, Sound Effect, Display Boar Coding, Action, Button, Character, Coding, Command, Debug/ Debugging, Input, Object</p>		



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Digital Literacy			
	FS	Year 1	Year 2
INTENT	<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>Completes a simple program on a computer.</p> <p>Interacts with age-appropriate computer software.</p>	<p>The child can keep themselves safe while using digital technology.</p> <p>The child can understand that they need to keep safe when using digital technology. E.g. They should know to use filtered Safe Search when looking for images on the <b>web</b> and that they should close the lid of a laptop (or similar action) if they find inappropriate images.</p> <p><i>(E.g. In 1.3, 1.4 and 1.6, close the laptop lid (or similar) and tell a teacher if they find inappropriate images.)</i></p>	<p>The child can keep safe and show respect to others while using digital technology.</p> <p>The child should know that they need to keep themselves safe when using digital technology. E.g. They should know to use filtered Safe Search when looking for images on the <b>web</b> and that they should close the lid of a laptop (or similar action) if they find inappropriate images. They should know to respect others' rights, including privacy and intellectual property when using computers, so should not look at someone else's work or copy it without permission and acknowledgement. They should observe age restrictions on computer games.</p> <p><i>(E.g. In 2.2, observe age restrictions when playing games out of school.            In 2.3, ask before taking photos of others.            In 2.4, know what to do if they encounter inappropriate content; acknowledge the source of information they use.            In 2.5, check that it is safe to open files attached to emails and to respond to emails.            In 2.6, know not to post images with metadata to the open web.)</i></p>

IMPLEMENTATION	<p>Children are shown how to access simple computing programs and are able to use these independently during provision.</p>	<ul style="list-style-type: none"> <li>• E-safety unit of work (Autumn 2) <ul style="list-style-type: none"> <li>- how to use the internet safely</li> <li>- the dangers of the internet</li> </ul> </li> </ul> <p>not giving out information</p>	<p><u>Autumn 1</u>  <u>E-Safety unit of work</u>  Looked at digital footprints and the trail you can leave online.  Importance of keeping information safe and private online.  Importance of E-safety and what to do if you are uncomfortable with content you are viewing online.  Importance of age restrictions online - games and videos etc.</p> <p><u>Spring 1</u>  <u>Using the internet</u>  Using one word searches online.  Filtering searches to stay safe.  Using online links.  Using laptops safely and purposefully, respecting equipment.</p>
Vocabulary	<p>Online Safety: Search, Internet, Sharing, Digital footprint, Email Effective Searching: Internet, Search, Search engine Coding: Action, Algorithm, Bug, Character, Code block, Debug/Debugging, Input, Object Presenting Ideas: Concept map, Presentation, Audience, Node</p>		