

Computer Science	Year 1 Expectations	Resources
<ul style="list-style-type: none"> <li>• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>• Create and debug simple programs</li> <li>• Use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>• Begin to understand algorithms as a sequence of instructions in everyday contexts.</li> <li>• Able to give and follow instructions physically.</li> <li>• Program floor turtles using sequences of instructions to implement as an algorithm.</li> <li>• Begin to use software to create movement and patterns on a screen.</li> <li>• Begin to identify an algorithm to achieve a specific purpose.</li> <li>• Begin to use the word debug.</li> <li>• Begin to predict what will happen for a short sequence of instructions in a program.</li> </ul>	<p>March -July</p> <p>How to make porridge- template in Purple Mash</p> <p>Playground activity- right, left, forwards and backwards. Elephant and bird activity in Purple Mash.</p> <p>Bee Bots, Bee Bot software and Bee Bot app.</p> <p>Purple Mash units 1.4, 1.5, 1.7 supplement with code.org, Barefoot</p> <p>Purple Mash units 1.5, 1.7 + Bee Bots + Bee Bot app, supplement with code.org, Barefoot</p> <p>Use with all coding activities</p> <p>Bee Bot software and Purple Mash activities including a Bee Bot workshop.</p> <div data-bbox="994 1010 1402 1123" style="border: 1px solid black; background-color: cyan; padding: 5px; margin-top: 20px;"> <p>AG to cover all of computer science.</p> </div>

Multimedia and Data Handling	Year 1 Expectations	Activities
<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p>	<ul style="list-style-type: none"> <li>• Work with others and possibly with support to contribute to a digital class resource which includes text, and graphics.</li> <li>• Record own voices and play back to an audience.</li> <li>• Use an iPad to record an activity.</li> <li>• Create sounds and simple music phrases using ICT tools.</li> <li>• Use index fingers ( left and right hand) on a keyboard to build words. Know how to use the space bar to make spaces between words.</li> <li>• Introduce copy and paste.</li> <li>• Use pictograms and basic spreadsheets to record information in computing.</li> </ul>	<p><b>Unit 1.2 We are TV chefs</b> (filming the steps of a recipe) AG 7 WEEKS Jan 7<sup>th</sup>- 25<sup>th</sup> Feb Making Porridge</p> <p><b>Unit 1.3 We are Painters</b> (Illustrating an e-book) Teachers AG available Tuesday pm to support but need prior notice to book on timetable. Which term?</p> <p><a href="http://www.purplemash.com/#tools/2paint">www.purplemash.com/#tools/2paint</a></p> <ul style="list-style-type: none"> <li>• Draw a picture for your book and write about it <a href="http://www.purplemash.com/#tools/2cas">www.purplemash.com/#tools/2cas</a></li> <li>• Create an animated eBook with sounds <a href="http://www.purplemash.com/#app/tools/2pubextra/storybook">www.purplemash.com/#app/tools/2pubextra/storybook</a></li> <li>• Design and illustrate your own story book</li> <li>• Children can upload saved images or use clipart <a href="http://www.purplemash.com/#tab/themes/fairy_tales">www.purplemash.com/#tab/themes/fairy_tales</a></li> </ul> <p><b>Unit 1.5 We Are Storytellers</b> (Producing A Talking Book) Teachers could combine both 1.5 and 1.3 <a href="http://www.purplemash.com/#tools/2cas">www.purplemash.com/#tools/2cas</a> AG available Tuesday pm to support but need prior notice to book on timetable. Which term?</p> <ul style="list-style-type: none"> <li>• Use the sound options to record your own voice, an instrumental soundscape or use built-in sounds</li> </ul> <p><b>Unit 1.6 We are Celebrating-</b> creating an electronic card Part AG XMAS (2 weeks)</p> <p><a href="http://www.purplemash.com/#app/tools/2paint">www.purplemash.com/#app/tools/2paint</a></p> <ul style="list-style-type: none"> <li>• Design a card and write a simple message <a href="http://www.purplemash.com/#app/tools/2pub/celebrationcard">www.purplemash.com/#app/tools/2pub/celebrationcard</a></li> <li>• Design and create a card using the card template – print, fold and send to your friends or family <a href="http://www.purplemash.com/#app/pup/Blank_greetingcard">www.purplemash.com/#app/pup/Blank_greetingcard</a> <a href="http://www.purplemash.com/#app/pup/Blank_invitation">www.purplemash.com/#app/pup/Blank_invitation</a></li> <li>• Create an invitation to your party or a card <a href="http://www.purplemash.com/#app/pup/christmas_card">www.purplemash.com/#app/pup/christmas_card</a> <a href="http://www.purplemash.com/#app/pup/mothersday_card">www.purplemash.com/#app/pup/mothersday_card</a> <a href="http://www.purplemash.com/#app/pup/Fathersday_card">www.purplemash.com/#app/pup/Fathersday_card</a></li> </ul> <p><b>Unit 1.4 We are Collectors</b> (finding images using the web) AG link with a topic (6 sessions) <a href="http://www.purplemash.com/#pup/imagesearch">www.purplemash.com/#pup/imagesearch</a> 29<sup>th</sup> Oct- 3<sup>rd</sup> Dec</p> <ul style="list-style-type: none"> <li>• Discuss how to find images online and the possible safety concerns <a href="http://www.purplemash.com/#pup/internetresearch">www.purplemash.com/#pup/internetresearch</a></li> <li>• Discuss how the internet can be used to research different topics <a href="http://www.purplemash.com/site#app/tools/2diy/Grouping">www.purplemash.com/site#app/tools/2diy/Grouping</a></li> <li>• Use clipart or upload images to create a grouping game for your pupils <a href="http://www.purplemash.com/#app/tools/2pub/storyboard">www.purplemash.com/#app/tools/2pub/storyboard</a></li> <li>• Create a bespoke clipart selection of images for children to sort into labelled groups</li> <li>• See guide on how to customise clipart:</li> </ul> <p><b>Pictogram- teachers to decide topic</b></p>

Digital Literacy	Year 1 Expectations	Resources
<ul style="list-style-type: none"> <li>•Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</li> <li>•Recognise common uses of information technology beyond school.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand the importance of keeping passwords private.</li> <li>• Understand what personal information is.</li> <li>• Know to tell a trusted adult when they see something unexpected or worrying online.</li> <li>• Able to talk about why it's important to be kind and polite online.</li> <li>• To login and out safely.</li> <li>• Understand that information on the internet can be seen by others.</li>   <li>• Children to understand what is meant by 'technology'.</li> <li>• Children have considered types of technology used in school and out of school.</li> <li>• Children can record 4 examples of where technology is used away from school.</li> <li>• Able to show awareness of how IT is used for communication beyond school. (social media, email, online greetings cards).</li> </ul>	<p>AG – ONGOING Teachers</p> <p>AG – 10/24<sup>TH</sup> Sept (2- 3 weeks) Teachers Safer Internet day Feb 11<sup>th</sup>, 2020 + cover summer term</p> <p>AG – 10/24<sup>TH</sup> Sept (2-3 weeks) Teachers Safer Internet day Feb 11<sup>th</sup>, 2020 + cover summer term</p> <p>AG 10/24<sup>TH</sup> Sept (2 -3weeks) Teachers Safer Internet day Feb 11<sup>th</sup>, 2020 + cover summer term AG - Ongoing</p> <p>AG- ongoing Teachers</p> <p><a href="https://www.thinkuknow.co.uk/5_7/leeandkim/">https://www.thinkuknow.co.uk/5_7/leeandkim/</a> (cover in PSHE sessions- class assembly)</p> <p>AG (2/3 Sessions) 1<sup>st</sup>- 15<sup>th</sup> Oct Purple Mash 1.9 Additional Robots <a href="https://www.tes.com/teaching-resource/robots-6350872">https://www.tes.com/teaching-resource/robots-6350872</a> Introduce students to robots and machines, how they function and how they are used in society. Mars Rover <a href="https://www.tes.com/teaching-resource/the-mars-rover-all-terrain-vehicle-6172774">https://www.tes.com/teaching-resource/the-mars-rover-all-terrain-vehicle-6172774</a> This video from BBC Class Clips shows how the Mars Rover uses information technology, remote control and wireless communication. Computers in agriculture <a href="https://www.tes.com/teaching-resource/computers-in-agriculture-6177080">https://www.tes.com/teaching-resource/computers-in-agriculture-6177080</a> Explore how computers are used to help farmers and how machines are used in agricultural processes.</p>