



Bidston Village - Computing across the Curriculum Long Term Planning Map - Y1

This is your long-term overview for Computing. Please add to or amend this plan throughout the year. Underneath each section are the key skills for that area of computing. These can be assessed using the Assessment tracker spreadsheet. More activities and suggestions can be added as other subject areas are added to the plan.

T = Tutorial Available

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Science	Materials	Materials/ Seasonal change	Plants/ Seasonal change	Plants	Animals including humans	Animals including humans
English	Lost and found	Nibbles the book monster	Toys in Space	The curious case of the missing mammoth	The lion 3inside	Goldilocks and just the one bear
History and Geography	Me/my history Weather Maps/plans Local Area	Guy fawkes Maps/plans UK	Royal family/Queen Elizabeth II Weather Maps / Plans UK, Wirral, Liverpool	Queen Victoria Maps / Plans UK, Wirral, Liverpool	Grace Darling Weather The Continents	RNLI Animals from around the world
Music	Exploring Ourselves - body sounds	Christmas Performance	Weather - exploring sounds	Machines - beat	Animals - pitch	Storytime - exploring sounds
DT		Sliders and Mechanisms		Frames and Structures		Portable Snacks
Art	Portraits		Landscapes		In the jungle	

<p>Functional Skills (used throughout all areas of Computing)</p>	<p>F1.1 Be able to enter text using single fingers, beginning to use more than one hand. F1.2 Be able to log into and out of an account on a computer or program independently, and shut down a device at the end of a session. F1.3 Be able to save and retrieve work with support. F1.4 Be able to use a mouse/trackpad to move and place items accurately on a screen. Use double click or tap where needed.</p>
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Computer Science

Tutorial Link

<p>Control and Programming</p>	<p style="text-align: center;">Code Studio</p> <p>Code Studio. Create user accounts for class on the website. Y1 should be working on Course A, at a pace that is appropriate for the class. It is recommended to teach one lesson at a time rather than allowing the children to move through the lessons independently. Lessons can be shown and hidden in the teacher dashboard. The extension materials can be used in the event that some pupils are finished ahead of others. Track and target pupil progress using the built-in progress tracker. Depending on the children's ability, this should start in late Spring to Summer term. T</p> <p style="text-align: center;">CS1.1, CS1.2, CS1.3, CS1.4, CS1.5</p> <p>Extension materials: the activities below are non-essential, but you may wish to use them to consolidate and extend learning from Code Studio lessons.</p>				
	<p>Code-a-pillar app Pupils use directional commands to create a sequence that will allow the Codeapillar on-screen robot to navigate a path to reach a goal. Commands are introduced gradually, allowing pupils to familiarise themselves with each command in turn. Pupils need to</p>	<p>Jam Sandwich This activity reinforces sequencing and debugging skills by encouraging children to think logically. Teacher poses as a robot, asking children to give instructions to make a jam sandwich, only following the exact instructions that are given to them. The</p>	<p>Box Island app The Box Island app helps to develop sequencing skills and directional language as pupils guide a character to navigate increasingly challenging puzzles. Tap the play icon on the right hand side of the screen in the 'Box Island' section to allow the user to</p>	<p>BeeBot robots (or app) Control the robot by sequencing directions. The app allows the user to work through increasingly challenging levels to move an on-screen robot through a given path to reach a goal. If using the physical robot,</p>	<p>A.L.E.X. the Robot app Develop skills in sequencing and debugging directional instructions. Encourage children to show resilience and work through initial levels. The app does not keep a record of pupils' progress, so it is</p>

	<p>drag the appropriate command to the path to guide the Codeapillar through increasingly challenging levels. CS1.2, CS1.3</p>	<p>original activity asks children to give instructions to make a jam sandwich, but it could be altered to link to other topics or curriculum areas, for example making porridge or a sandwich. See link for ideas from Jam Sandwich project PDFs. These can be used as they are, adapted or an alternative recording method could be used e.g. flashcards or verbal instructions. CS1.1, CS1.4, CS1.5</p>	<p>create their own profile. Alternatively, a class profile can be created and teachers can manually record each child's progress e.g. on a ticklist. There are 10 free levels available before reaching the app paywall, and an additional 20 free levels in the 'Hour of Code' section. This can be accessed via the left hand side of the homescreen, and the appropriate age range can be selected. CS1.2, CS1.3</p>	<p>children or teachers could use a suitable floor mat to tell a story, programming the robot to reach different locations along the way. This can be differentiated accordingly to match children's ability levels. Teach Computing Resources (free login required) CS1.2, CS1.3</p>	<p>advised that teachers will manually track each child's progress to avoid repetition e.g. on a ticklist. T CS1.2, CS1.3, CS1.4</p>	
<p>Computer Science Skills</p>	<p>CS1.1 Be able to say what an 'algorithm' is. CS1.2 Be able to use the appropriate keys or commands to make a virtual or floor robot go forward, backward, left and right. CS1.3 Be able to program a bot or sprite by giving simple sequences of commands with an immediate outcome. CS1.4 Can use basic symbols to record directional instruction and attempt to identify a bug in their code. CS1.5 Be able to use a developing range of language and styles of control e.g. tilt and turn/instructional to direct a robot.</p>					

Digital Literacy

Tutorial Link

Research: Internet

QR Codes

Use a QR code to open the website quickly. Pupils simply need to point an iPad camera at the QR code, then tap the prompt at the top of the screen to open the link. [Link here](#) for making QR codes or, if using Chrome, tap on the web address bar and the icon next to the star will automatically generate one. (teacher use).

DL1.1

BBC Science Materials

Use the videos and [activities](#) to learn about materials. Children could access through a QR code for easy access.

DL1.1

Infant Encyclopedia - Autumn and Harvest

Open the website on computers from a weblink or iPads by using a QR code. Use the links to explore different areas. Use the playback to listen to the text being read out loud. Set pupils specific questions to answer, or ask them to draw or write three things they have learned afterwards. Would suit group or whole class teaching

[Link here](#)

DL1.1

BBC Science What are the seasons?

Use the videos and [activities](#) to learn about seasons. Children could access through a QR code for easy access.

DL1.1

Safari Image Search

Type in a keyword to find images of the Royal Family. Provide a wordbank to assist key word searches. Scroll through and tap on the chosen image to enlarge. Use a long press to save images onto the camera roll for use in another app.

DL1.3

BBC Science Plants

Use the videos and [activities](#) to learn about plants. Children could access through a QR code for easy access.

DL1.1

Plant Identifier

Collect a variety of leaves and then use the website below on an iPad, to take images of the leaves and then identify what tree or plant they have come from.

[Link here](#)

DL1.1

Infant Encyclopedia - Human Body

Open the website on computers from a weblink or iPads by using a QR code. Use the links to explore different areas. Use the playback to listen to the text being read out loud. Set pupils specific questions to answer, or ask them to draw or write three things they have learned afterwards. Would suit group or whole class teaching.

[Link here](#)

DL1.1

Research Grace Darling

Use keyword searches on [KidRex](#), [Kiddle](#) or [Google Junior](#). Open the website on computers from a weblink or iPads by using a QR code. Provide a wordbank to assist key word searches and set pupils specific questions to answer,

BBC Science Animals

Use the videos and [activities](#) to learn about animals. Children could access through a QR code for easy access.

DL1.1, DL1.2

					<p>or ask them to draw or write 3 things they have learned afterwards. T DL1.1</p>	
<p>Online Communication and eSafety</p>	<p>Using the VLE Use the school VLE (virtual learning environment) eschools or platforms like Seesaw to show or allow children to partake in uploading content to a digital platform. For example a child could upload a collage made on the iPad to their own area on Seesaw. DL1.2</p>					
	<p>Introduction Ask children to write down or draw pictures of the sites they visit, apps or games they play on. Discuss with the children what things they do online and use their information to help plan the e-safety lessons this year. Digiduck can be used to support this. Link here. DL1.5</p>	<p>Commonsense Media Staying Safe Online The internet allows pupils to experience and visit places they might not be able to see in person. However, just like traveling in the real world, it's important to be safe when traveling online. On this virtual field trip, pupils can practice staying safe on online adventures. DL1.5</p>	<p>Sharing Images Do the children know of any places on the internet where they could post their picture? Tell the pupils their pictures on a tablet should not be shared with other people you don't know. Support using Jessie and Friends: Sharing Pictures Film DL1.5</p>	<p>Smartie the Penguin Use year 1 resources from Childnet to look at what we share on the internet. Download teacher resources and lesson plans for year 1. DL1.5</p>	<p>Common Sense Materials Media Balance Use the Common Sense Media lesson to explore how pupils need to consider the feelings of themselves and others when making decisions about when, where, and how much to use technology. DL1.5</p>	<p>Common Sense Materials Pause for thought Often, pupils find it hard to transition from an online activity to an offline one. Teach pupils a simple routine for how to manage those inevitable digital interruptions that are part of life in the digital age. DL1.5</p>

<p>Modelling and Simulations</p>	<p>Google Earth Teacher demonstrates, locating major continents of the world and adds placemarks on Google Earth. Locate the school, explore using Street View. Use Google Earth to explore the places visited in the summer holiday. T DL1.4</p>	<p>Google Earth Look at London and the UK and begin to understand how to use aerial photography. <i>This could be done as a whole-class activity on the board, as part of a geography lesson.</i> Identify physical features and also look at position on the 3D globe. T Link here DL1.4</p>	<p>Animals in the local habitat Use the RSPCA's school grounds animal activity to explore what kinds of animals they may find around the school grounds, and consider how their school can be animal friendly. DL1.3</p>
<p>Digital Literacy Skills</p>	<p>DL1.1 Be able to access information on the internet and navigate a website using a QR code or links. DL1.2 With support, be able to access and view pictures or work via an online platform. DL1.3 Be able to use a search engine or in-app search to search for and save images, using keywords provided by the teacher. DL1.4 Be able to change options in models/simulations that represent real or fantasy situations and scenarios to create different outcomes and effects. DL1.5 Be aware of some of the dangers of online activity and know to tell an adult if they feel something they see online is inappropriate or hurtful.</p>		

Information Technology

[Tutorial Link](#)

<p>Word Processing and Desktop Publishing</p>	<p>Purple Mash 2Create a Story Combine words, pictures, sounds and animation to create engaging stories in minutes. IT1.1, IT1.2, IT1.3, IT1.4</p>	<p>Purple Mash Writing Frames Support English writing about Seasons IT1.1, IT1.2</p> <p>Purple Mash Writing Frames Support RE lessons on Christianity IT1.1, IT1.2</p>	<p>Purple Mash Typing Skills: Use 2Type typing activities to improve keyboard skills. IT1.1</p> <p>Pic Collage app Present information about the Royal Family, combining text and photos. Add photos from the camera roll, or use</p>	<p>Primary Writer app Use the primary writer app to allow children to word-process their own pieces of writing about The Curious Case of the Missing Mammoth and then selecting an appropriate background for the content of the writing. F1.1, IT1.1</p>	<p>Purple Mash Writing Frames Support English lessons on Grace Darling IT1.1, IT1.2</p>	<p>Book Creator Use the app or website to create an eBook linked to animals on different continents, combining text and images. Ask your technician to generate an email address to create an account for the lesson. Pupils will need to login with this</p>
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			<p>the in app search tool. Organise the photos and add text captions. Format writing style and colour. Teach capitalisation and use of spaces between words. Show how to edit and delete to make improvements. Save work to the camera roll once complete.</p> <p>IT1.1, IT1.2, DL1.3</p>			<p>(potentially do this for them). Add text and once selected use the "i" button to format. Use the add button to import images using the search option. Add voice recordings as well. Extend to additional pages, and use the play button to read back pupils' work. T</p> <p>IT1.1, IT1.2, DL1.3</p>
<p>Multimedia</p>	<p>Puppet Pals app Animate a traditional tale (lite version). Choose two to four characters and up to two backgrounds. Arrange on screen. Use double tap to flip the image and pinch and stretch to make characters bigger and smaller. Practise retelling the story. Use the pause button to manage the recording. Save as video to the app and then export to camera roll. T</p> <p>IT1.2, IT1.3, IT1.4</p>	<p>Purple Mash 2Paint or Doodle Buddy app A range of painting tools to help you create Christmas scenes, selecting relevant backgrounds, adding stickers and selecting brush colour, style and width.</p> <p>IT1.2</p> <p>Purple Mash 2Beat Teach rhythm and pulse by building up various beats.</p> <p>IT1.4</p>	<p>Purple Mash Mash Cam Put yourself into the role of a royal. Show their thoughts and character in the speech bubble.</p> <p>IT1.1, IT1.2</p> <p>Green Screen Film children into scenes from London, explaining facts they have learned. Use the Dolnk app to film and edit scenes. (paid app)</p> <p>IT1.3</p>	<p>Purple Mash 2animate Show the growth of a plant for seed to flower. Each frame shows the growth. Use the copy/duplicate function to begin the next frame at the right place and add more of the plant. Save as a video/animated gif</p> <p>IT1.2, IT1.3</p> <p>Purple Mash 2Explore Record simple musical melodies.</p> <p>IT1.4</p>	<p>ChatterKids app Make different animals speak. Pupils can search for suitable images online, or the teacher could provide them for the pupils. Add to Chatterkids. Ask pupils to prepare and rehearse what they are going to say. They could write this as a script. Create Chatterpix. Save to photo roll and then share.</p> <p>IT1.1, IT1.2, IT1.4</p>	<p>Shadow Puppet Edu Search for images of the RNLI within the app. Add captions to the photos. Record a narration of their knowledge to create a film. Once they have saved their work, review and decide how to make improvements.</p> <p>IT1.1, IT1.2, IT1.3, IT1.4, DL1.3</p> <p>Purple Mash 2Sequence On Purple Mash, look at layering instruments, looping a series of eight beats into a repeating pattern.</p> <p>IT1.4</p>

<p>Data Handling</p>		<p>Purple Mash 2count Create Pictograms using preselected images e.g. transport, eye colour or fruit. Alternatively children could select their own options from within the image gallery. IT1.5</p>	<p>Purple Mash 2Graph Create a range of block, pie and line graphs to show information. IT1.5</p>
<p>Information Technology Skills</p>	<p>IT1.1 Can produce text, adding and making basic edits to text in appropriate software or app. IT1.2 Be able to explore a range of simple tools within a digital art package, to create and alter the appearance of an image. IT1.3 Be able to use simple video or animation software. IT1.4 Can use a sound recorder to store information as sound, and create sounds or music by arranging sound markers. IT1.5 Be able to use suitable on-screen graphing software to represent information using pictographs.</p>		