

Bidston Village - Computing across the Curriculum Long Term Planning Map - EIB1

This is your long-term overview for Computing. Please add to or amend this plan through 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
Topic	Farm animals Festivals		Transport		Food	
Science <i>(Seasonal change will run throughout the year)</i>	Animals including humans	Animals including humans/ lifecycles	Materials	Materials	Plants	Plants
English	Gingerbread Man	Rhymes/Poems	The Naughty Bus	The Journey home	Supertato	
History and Geography	Maps	Guy Fawkes	Different jobs linked with transport	Transport -around the world -then and now.	Different jobs linked with food	Food from around the world
Music	Exploring sounds – our school	Beat - numbers	Performance - travel	Beat - pattern	Pitch - animals	Exploring sounds - weather
DT	Slider mechanisms		Frame structures		Portable snacks	

Core Skills	KSF2.1 Be able to use a mouse/trackpad to move and place items on a screen, with increasing accuracy. KSF2.2 Be able to interact purposefully with icons and buttons in age-appropriate software using mouse clicks or taps.
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- KSF2.3 Shows developing mouse control through simple activities on-screen including click-and-drag, drag-and-drop.
- KSF2.4 Be able to interact with and respond to a range of digital stimuli, including images, video and digital texts.
- KSF2.5 Be able to use a variety of electronic toys in play situations, with the intention of finding out how it works.

Computer Science

Tutorial Link

Control and Programming

Code-a-pillar app
Learn to sequence instructions using Code-a-pillar App. Begin to use directional language e.g. forwards, turn right. Drag on the directional commands and tap the caterpillar's head to guide it through increasingly challenging levels. Pupils may need guidance to use the resource in a structured way.
CSF.1, CSF.2, CSF1.3, CSF1.4

Controllable Toys
Explore toys that simulate control devices in the home and their local environment e.g. scanner, microwave, and cash tills, with the intention of finding out how it works.
CSF.1

Unplugged Activity
Play Dr Techniko 'How to Train Your Robot' Activity. Link to online resources [here](#). Direct a blindfolded child to move around an obstacle course using flashcards.
CSF1.3, CSF1.4

Beebot/Bluebot robot
Control the robot by sequencing directions. If using Bluebot, begin at the 'step-by-step' level to produce an immediate outcome when direction buttons are pressed. Encourage children to talk others through what they are doing, using appropriate directional and counting language. Children or teacher could use a suitable floor mat to tell a story, programming the robot to reach different locations along the way.

Box Island app
Develop sequencing skills and directional language. (Each child can create their own profile or teachers can manually record each child's progress e.g. on a ticklist).
CSF.3, CSF1.4

Beebot/Bluebot robot
Use a Bluebot/Beebot floor robot. Children or teacher could use a suitable floor mat to tell a story, programming the robot to reach different locations along the way. If using the Bluebot app, use the basic programming level to create short steps of instructions.
CSF.2, CSF1.3, CSF1.4

CSF.2, CSF1.3

Key Skills

- CSF2.1 Be able to control a range of 'toys' using remote controls.
- CSF2.2 Be able to explore the commands needed to control a range of electronic toys, to achieve a specific outcome.
- CSF2.3 Be able to use step by step commands to program a floor or virtual robot to move, using directional language including forward, backward, left and right
- CSF2.4 Begin to use basic symbols to represent and record directional instruction.

Digital Literacy

Tutorial Link

<p>Research: Internet</p>	<p>Old MacDonald Had a Farm Book App Children use on screen interactive illustrations based upon the classic nursery rhyme. DLF2.1</p>	<p>EYFS/KS1 Animal music videos Allow the pupils to watch selected videos as a class or individually to learn facts about the chosen topic. Link here DLF2.1, DLF2.2</p>	<p>Wheels on the Bus HD App Children use on screen interactive illustrations based upon the classic nursery rhyme. DLF2.1</p>	<p>BBC Science Materials? Use the videos and activities to learn about materials. DLF2.1, DLF2.2</p>	<p>Infant Encyclopedia - Plants Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here DLF2.1, DLF2.2</p>	<p>Online Image Searching Find information in different forms, e.g. video, pictures and sound, as well as text on the Internet. Use a suitable child-friendly search engine such as Kiddle or Google Junior to find images linked to food. DLF2.1, DLF2.2</p>
<p>Online Communication</p>	<p>Hello Ruby Use the link below to allow children to investigate different computational concepts without a computer. In the PLAY section are multiple activities with printable resources. http://www.helloruby.com/meetruby DLF.3</p> <p>Online Sharing Share number rhymes and phonics songs on the Online Platform (e.g. Seesaw) as part of a home learning resource (with teacher support). Use iPad to record performances and upload. These can be shared with a link (see hi-impact for support). DLF.3</p>	<p>Digiduck Read a story of friendship and responsibility online. Discuss with the children what things they do online and use their information to help plan the e-safety lessons this year. Ask children to write down or draw pictures of the sites they visit, apps or games they play on the PC. Link here DLF.3</p>	<p>Discuss being safe with 'images' Talk about how we should only take pictures with a tablet of people in class if our teacher has asked us to. Also, explain to the children that they should not share their own picture with other people they do not know. Would they give a stranger in the park a picture of themselves? They should not. Do they know of any places on the internet where they could put their picture? Tell the pupils their pictures on a tablet should not be shared with other people you don't know. Also use Jessie and Friends: Sharing Pictures Film DLF.3</p>			

<p>Modelling and Simulations</p>	<p>Google Earth As a teacher, locate major continents of the world and add placemarks on Google earth. Locate school, explore using Street View. Use Google Earth to explore the places visited in the summer holiday. T DLF2.1, DLF2.4</p>	<p>A Year on Your Farm CBeebies app simulating a year on a farm. Choose crops to grow and animals to raise, look after them and see the changes and jobs required in each season. Make links to seasonal change. A Year on Your Farm. DLF2.4</p>	<p>Quiver app Use the Quiver app alongside the colouring pages to bring children's artworks to life. Once children have coloured the images, scan them with the app to view them using AR technology. The colouring pages can be downloaded and printed from the website here. Ensure the content to be used is marked as 'free', (if not using the paid version of the app). DLF2.4</p>	<p>My World Kitchen Simulate kitchen activities including chopping,mixing and measuring . Discuss how we prepare food and the meals children enjoy eating. Links could be made to foods from different cultures and hygiene when working with food. My World Kitchen DLF2.1, DLF2.4</p>
<p>Key Skills</p>	<p>DLF2.1 Be able to use a shortcut such as an icon on the desktop to navigate to a specific website, or an icon on a tablet to open a specific app. DLF2.2 Be able to purposefully navigate a website or app using buttons or icons. DLF2.3 Be able to tell an adult if they feel something they see online is inappropriate or hurtful. DLF2.4 Can explore simple digital simulations and games and find out 'what happens if'</p>			

Information Technology

Tutorial Link

Word Processing and Desktop Publishing

Mark Making

Use an interactive whiteboard /iPad app for mark-making (e.g. [Doodle Buddy](#) app (iPad2+), [iPastels](#) app (iOS12+) or [Joy Doodle](#) app (iOS10+)). Alternatively, children could use the interactive board with a paint program (e.g. [Tux Paint](#)) or online tool (e.g. [Kidmons](#)). [Doorwayonline](#) could be used on a IWB to show children how to form each letter and trace over it on the board, this uses one font so may not match the school's handwriting scheme. If the apps are not available on the iPads, ask the technician to add.

ITF2.1

Phonics apps

Use the Little Writer app (paid) to develop fine motor control and awareness of letter shapes. Other useful apps include Hairy Letters (paid)

ITF2.1, ITF2.3

Pic Collage app

Present information about transport, combining text and photos. Form a class display. Choose a suitable frame to place the images. Add text to each image, in the form of simple labels.

ITF2.2, ITF2.3

Digital Books

Using the Apple Books app, access a range of eBooks and explore the differences between printed and digital. If not installed, ask a technician to add it to iPads - [link here](#). Many can be downloaded for free or a small charge.

ITF2.4

Primary Writer app

Use the Primary Writer app to allow children to word-process their own pieces of writing about food and then selecting an appropriate background for the content of the writing.

ITF2.1, ITF2.3

Multimedia

Puppet Pals app

Use Puppet Pals app and fairy tale characters to tell stories set in imaginary worlds (free version). Can extend by retelling a story that they have read in class (paid 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.

Sound recording

Experiment with audio recording in role play using easi-speak microphones or **Voice Recording app**. This could be to perform simple poems.

ITF2.4

Animated Images

Use the Chatterpix Kids app to animate a still image/photograph and record the children's voices. Teachers could find and save a range of pictures of characters (or children could take photos) to animate. This could be linked to make vehicles speak. **T**

ITF2.2, ITF2.4

Music-Making

Explore ways of making and listening to sounds using simple programs and devices, e.g. karaoke machines, music mats and piano keyboards. Apps include: Singing Fingers, Jellyband, Tap a Tune, Musical Me and Tune Train. If chosen apps are not available, ask a technician to add these to school devices.

ITF2.4

Draw and Tell

Use the Draw and Tell app to create pictures and record the children speaking about their drawing of a meal. Videos can be saved to the iPad camera roll. Link to the app is [here](#), ask a technician to add it to the iPads if needed.

ITF2.1, ITF2.4

Pic Collage app

Present information about plants, combining text and photos. Take photographs around the school ground to form a class display. Choose a suitable frame to place the images. Add text to each image, in the form of simple labels.

ITF2.2, ITF2.3

	<p>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>ITF2.4</p>					
<p>Data Handling</p>	<p>Explore: Use and have examples of barcodes, metal detectors, simple sound recorders, automatic doors, light sensors, stick-on thermometer strips.</p> <p>ITF2.5, ITF2.6</p>	<p>Collecting and representing data Collect and analyse class-based data about themselves e.g. eye colour/favourite fruit. Use simple tally chart software to present data. Link is here. As a whole class activity, count the different types of food in the onscreen lunchboxes and show the data in different ways e.g. as a tally or pictogram. Link is here.</p> <p>ITF2.6</p>		<p>Pictograms Use an online pictogram maker to record data. Sort the children practically, then transfer the information to the graph. This could be linked to a wide variety of areas e.g. how children have travelled to school, favourite fairy tales, etc. This could also be completed as a whole class activity led by the teacher on the interactive whiteboard.</p> <p>Link here</p> <p>ITF2.6, ITF2.7</p>		
<p>Key Skills</p>	<p>ITF2.1 Be able to use an interactive whiteboard or tablet for mark-making and to communicate their ideas.</p> <p>ITF2.2 Use a digital camera to capture still and moving images.</p> <p>ITF2.3 Begin to use a computer keyboard using single fingers, developing a familiarity with letters, numbers, backspace, arrow keys and spacebar.</p> <p>ITF2.4 Be able to record and playback pre-recorded sounds and speech using age-appropriate software or other recording devices.</p> <p>ITF2.5 Be aware of everyday devices that sense data, e.g. bar codes, metal detectors, automatic doors, light sensors.</p> <p>ITF2.6 Be able to sort, sequence or group various objects on a screen or interactive whiteboard.</p> <p>ITF2.7 Be able to produce simple digital pictograms with adult support</p>					