Bidston Village - Computing across the Curriculum Long Term Planning Map - F2

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
Topics	All about me My class	Gingerbread Man Autumn Minibeasts	Polar Places The Naughty Bus Birds	Spring Growing	Our World- growing/On the Farm	Our World- water and land

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. 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. **CSF.2, CSF1.3**	**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**

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

Research: Internet	**Infant Encyclopedia - Houses and Homes** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DLF.1, DLF.2**	**BBC Science What are the seasons?** Use the videos and activities to learn about seasons. **DLF.1, DLF.2**	**MoatBoat App** Create a polar world on the MoatBoat app. Pupils can use voice commands to add and manipulate the inhabitants or add from the menu. Sentence commands can also be input using the keyboard. **DLF2.4**	**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**	**MarcoPolo Oceans app** Simulate and explore the animal and human interaction with the ocean. **DLF2.4**
Online Communication	**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** **Online Sharing**		**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**	**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	

	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**			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**
Modelling and Simulations	**Toca Boca Apps** Play a range of games for children to simulate different possibilities: Toca Kitchen Monsters Toca Kitchen Toca Hair Salon **DLF.4**	**Quiver** 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). **DLF.4**	**Maths Simulations** Use different simulations and apps to support Mathematics work. Some suitable BBC Bitesize simulations can be found here. These could be used as a class/group activity on the interactive board. Suitable apps include: Moose Math Slate Math **DLF.4**	**Google Earth** As a teacher, locate major continents of the world and add placemarks on Google earth on the whiteboard. Locate school, explore using Street View. Use Google Earth to explore the places visited in the summer holiday. **T** **DLF.1, DLF.4**
Key Skills	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'			

Information Technology

Tutorial Link

Word Processing and Desktop Publishing	**BlobbleWrite app** Learn to write letters and numbers with the Blobbles. Children can copy the Blobbles as they trace out the strokes to write letters and numbers.				
	Mark Making Use an interactive whiteboard /iPad app for mark-making (e.g. Doodle Buddy app, iPastels app or Joy Doodle app). Alternatively, children could use the interactive board with a paint program (e.g. Tux Paint) or online tool (e.g. Kidmons). If the apps are not available on the iPads, ask the technician to add them. **ITF.1** **Digital Book** Use the Book Creator app to create a class eBook linked to All About Me, combining text and images. **T** **ITF.3**	**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) and Phonics with Letter Lilies. **ITF.1, ITF.3**	**Digital Books** Use the iBooks app to explore digital books as a class. Many books are free to download. Children can explore making their own eBooks as a class using Book Creator. For example, the class could create a page based around a key event e.g. World Book Day. Teacher could add images and children could record their voices talking about the images. **ITF.3, ITF.4**	**Pic Collage app** Present information about a farm, combining text and photos. Choose a suitable frame to place the images. Add text to each image, in the form of simple labels. **ITF.2, ITF.3**	**Primary Writer app** Use the primary writer app to allow children to word-process their own pieces of writing and then select an appropriate background for the content of the writing. **ITF.1, ITF.3**

Multimedia	**Taking Photos** With help, children can begin to take photographs of their local and school area. For example, this could be used as part of the children's work on self-portraits or to take photographs of the woodland area. **ITF.2**	**Puppet Pals app** Use fairy tale characters to tell stories set in imaginary worlds (free version). 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. 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 **ITF.4** **Chatterpix app** Animate a still image/photograph and record the children's voices. Find and save a range of pictures of characters (or take photos) to animate. This could be linked to characters from a different book	**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: Keezy Classic, Jellyband, Keezy Drums, Tap a Tune, Smule Magic Piano and Tune Train. If chosen apps are not available, ask your technician to add them. **ITF.4**	**Doodle Buddy app** Pupils create Christmas scenes, selecting relevant backgrounds, adding stickers and selecting brush colour, style and width. **ITF.3**	**Sound recording** Experiment with audio recording in role play using easi-speak microphones or voice recording app. This could be part of role-play activities. **ITF.4** **Draw and Tell** Use the Draw and Tell app to create pictures and record the children speaking about their artwork. 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**	**Draw and Tell** Use the Draw and Tell app to create pictures and record the children speaking about their artwork. 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**

		that the class is reading. **T** **ITF.2, ITF.4**				
Data Handling	**Explore:** Use and have examples of barcodes, metal detectors, simple sound recorders, automatic doors, light sensors, stick-on thermometer strips. **ITF.5, ITF.6**		**Collecting 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. **ITF.6**		**Pictograms** Use 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. Link here **ITF.6, ITF.7**	
Key Skills	ITF2.1 Be able to use an interactive whiteboard or tablet for mark-making and to communicate their ideas. ITF2.2 Use a digital camera to capture still and moving images. ITF2.3 Begin to use a computer keyboard using single fingers, developing a familiarity with letters, numbers, backspace, arrow keys and spacebar. ITF2.4 Be able to record and playback pre-recorded sounds and speech using age-appropriate software or other recording devices. ITF2.5 Be aware of everyday devices that sense data, e.g. bar codes, metal detectors, automatic doors, light sensors. ITF2.6 Be able to sort, sequence or group various objects on a screen or interactive whiteboard. ITF2.7 Be able to produce simple digital pictograms with adult support					