Childwall Valley - 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
Topics	Local		UK		World	
Science	Everyday Materials		Animals including humans		Seasonal Changes	Plants
History / Geography	Local Area : On our doorstep (Look at class then school the local area- simple maps/ photographs etc- physical and human features)	Changes within living memory- Homes	All around the UK: UK study- name and locate 4 countries of UK and surrounding seas. Identify London. Use maps to identify human and physical features	The lives of significant individuals in the past: Compare Florence Nightingale and Mary Seacole to Nurses today	Weather and Seasons- Explore weather patterns in the UK, North/South and Australia. Investigate the seasons and links to the weather. Collect and discuss data.	Events beyond living memory that are significant globally: The Wright Brothers: The First Flight
Art / DT	Artist - Kandinsky DT - Free Standing structures, link to on your doorstep	Painting: Primary & Secondary colours. To mix primary and secondary colours	Focus: cooking End goal: Make a fruit kebab	Drawing; To draw a sunflower picture in the style of Vincent Van Gogh	Art – Weaving – To create a paper weaving pattern - Gunta Stotlz	DT: To build a boat which will float. Focus: evaluating suitable materials

Key Skills *(used throughout all areas of Computing)*	KS1.1 Be able to log onto an account on a computer or program with support. KS1.2 Can enter text using single fingers, beginning to use more than one hand. KS1.3 Can use a mouse/trackpad to move and place items accurately on a screen. Use double click or tap where needed (if appropriate). KS1.4 Be able to use a range of methods of interacting with a program e.g. right click, drag and drop, long tap etc. KS1.5 Be able to save and retrieve work with support.

Computer Science

Tutorial Link

Code Studio

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. We would recommend teaching the whole class a lesson at a time, and using the extension materials to allow more able pupils to progress once they have completed the lesson materials, rather than moving on through the lessons independently. Track and target pupil progress using the built-in pupil tracker. Depending on children's ability, this should start in late Spring-Summer term. **T**
CS1.1, CS1.2, CS1.3, CS1.4, CS1.5

Control and Programming	**Remote Control Cars** Use the cars to develop the link between a control and actions. Set simple specific instructions for the children to follow and model and encourage the use of directional language, **CS1.2. CS1.3, CS1.5**	**Code-a-pillar app** Sequencing directions. Drag on the directional commands and tap the caterpillars head to guide it through increasingly challenging levels. **CS1.2, CS1.3**	**BeeBot robots** Control the robot by sequencing directions. If using Bluebot, begin at 'step-by-step' level, moving towards 'basic programming'. Children or teachers 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 ticklist). **CS1.2, CS1.3**	**Dash robot** Control the robot to navigate a simple maze with teacher instructions to make sounds or change lights at different points. **CS1.2, CS1.3**	**Hello Ruby** Use the link below and follow Episode 6: Computer Hardware: How do computers work? What's inside a computer? Software makes up a significant part of things we like to do with and on computers. But without the hardware, computers wouldn't work. In this video, you'll familiarise yourself with computer

			CS1.2, CS1.3			hardware and get to know how computers work.

Key Skills	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.
	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.

Digital Literacy

Tutorial Link

Research: Internet	**Safari Image Search** Search for images of the local area. Generate a word bank of key words to use in the search. Tap on images, and use a long press to save images onto the camera roll for use in another app. **DL1.1, DL1.2, DL1.3**	**QR Codes** Use a QR code to open the website quickly. Link here for making QR codes (teacher use). **DL1.2**	**Infant Encyclopedia - Human Body** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1, DL1.2**	**Research Florence Nightingale and Mary Seacole** Search for and find basic information using keyword search on KidRex or Google Junior or in-app web search. **T** **DL1.1, DL1.2, DL1.3**	**BBC Science What are the seasons?** Use the videos and activities to learn about seasons. **DL1.1, DL1.2**	**Infant Encyclopedia - Plants** Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here **DL1.1, DL1.2**
Online Communication and eSafety	**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.					
	Digiduck Read a story of friendship and responsibility online. Discuss with the children what things they do online and	**Commonsense Media** Staying Safe Online The internet allows pupils to experience and visit places they might not be able to see in person. But, just	**Discuss being safe with 'images'** Talk about only taking pictures with a tablet of people in class if asked. Also, explain to the children that	**Smartie the Penguin** Use Y1 resources from Childnet to look at what we share on the internet. Download teacher resources and lesson plans for	**Com**QR Code Generator - QR Stuff Free QR Code Generator And Creator.**mon Sense Materials** Media Balance	**Common Sense Materials** Pause for thought Often, pupils find it hard to transition from an online activity to an offline one. Teach

	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. **DL1.4, DL1.5**	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. **DL1.4, DL1.5**	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? Do they know of any places on the internet where they could put their picture?. Also use Jessie and Friends: Sharing Pictures Film **DL1.4, DL1.5**	Year 1. **DL1.4, DL1.5**	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**	pupils a simple routine for how to manage those inevitable digital interruptions that are part of life in the digital age. **DL1.5**
Modelling and Simulations	**Googldde Earth** Look at the school and local area and begin to understand how to use aerial photography. *This could be done as a whole-class activity on the board, as part of a geography lesson.* Identify physical and human features and also look at position on the 3D globe. **T** Link here **DL1.6**	**Recycling** Sort the rubbish into the correct bins, discuss with children which items were recyclable/not and why. Recycle roundup, Clean and green. **DL1.6**	**Google Earth** Explore the UK's countries, seas and capitals **T** Link here **DL1.6** **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. **DL1.6**		**MarcoPolo Weather app** Simulate and represent the effects of different weather. **DL1.6** **Weather forecast** Create a model of a weather forecast for different locations. Build your weather forecast **DL1.6**	**Tree Growth** Look at the changes to the tree over different seasons and over the year. Help the tree to flourish over 1, 3 and 10 years.. Woodland trust tree growth simulator **DL1.6**

Key Skills	DL1.1 Be able to navigate a website using links. DL1.2 Can access information on the internet through QR codes or links on a device. DL1.3 Be able to use a search engine to search for given information or images by using keywords provided by the teacher. DL1.4 Be able to say what information is personal and should not be shared online with support. DL1.5 Be able to tell an adult if they feel something they see online is inappropriate or hurtful. DL1.6 Can change options in models/simulations that represent real or fantasy situations and scenarios to create different outcomes and effects.

Information Technology

Tutorial Link

Word Processing and Desktop Publishing	**Pic Collage app** Present information about the local area, combining text and images saved from Safari (see above). Add text and format to caption each image. **IT1.1, IT1.2, IT1.3**	**Labelling** Add labels to traditional tales pictures activity. **IT1.3**	**Typing Skills:** Use Keyboard Climber activities to improve keyboard skills. **IT2.2**	**Digital Book** Use Book Creator app to create an eBook as a biography of Mary Seacole or Florence Nightingale, combining text and images. **T** **IT1.1, IT1.2, IT1.3**	**Primary Writer app** Use the primary writer app to allow children to word process their own pieces of writing about a weather report and then selecting an appropriate background for the content of the writing. **IT1.1, IT1.2**	**Pic Collage app** Present information about the Wright Brothers, combining text and photos. Choose a suitable frame to place the images. Add text to each image. **IT1.1, IT1.2, IT1.3**
Multimedia	**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	**Tap a Tune app** Explore different instruments and begin to understand musical notation. **IT1.5**	**Shadow Puppet Edu** Search for images representing the different UK countries 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	**Doodle Buddy app** Pupils create Sunflower pictures, selecting relevant backgrounds, adding stickers and selecting brush colour, style and width. **IT1.3**	**Green Screen** Film children into scenes representing different weathers, explaining facts they have learned. Use the DoInk app to film and edit scenes. (paid app) **IT1.4**	**ChatterKids app** Save images of plants from Safari or provide them for the pupils. Add to Chatterkids. Ask pupils to prepare and rehearse what they are going to say relating to growing conditions, seed dispersal etc. They could write this as a short script. Record

	the pause button to manage the recording. Save as video to the app and then export to camera roll. **T** **IT1.3, IT1.4, IT1.5**		improvements. **IT1.1, IT1.2, IT1.4, IT1.5**		their voices to create a video to bring their pictures to life. Add some text. Save to photo roll and then share. **IT1.4, IT1.5**
	Lit Film Fest Use the Lit Film Fest website to access free English projects. Each project has a set of structured lessons based around writing genres and show how technology can be incorporated to produce a performance video by the end of the project. (Users will have to create a free account to access the free resources, while other projects are under a paid subscription. **IT1.4**				
Data Handling			**Bar graphs** Make bar graphs e.g. linked to animals. The completed bar charts can be downloaded and saved and/or printed. **IT1.6**		**Pictogram** Show data linked to weather in Australia and the UK. Demonstrate on board, then create a shortcut on the desktop for the children to easily access the site. This could also be completed as a whole class activity led by the teacher on the interactive whiteboard. Link here **IT1.6**

Key Skills	IT1.1	Can produce text, adding and making basic edits to text in appropriate word processing software.
	IT1.2	When entering text, can use their knowledge of where most letters are located on the keyboard, using appropriate punctuation.
	IT1.3	Can use a range of simple tools purposefully, to create and alter the appearance of an image.
	IT1.4	Can use simple video or animation software.
	IT1.5	Can use a sound recorder or on screen recorder to collect and store information as sound.
	IT1.6	Be able to use suitable on-screen graphing software to represent information.