



St Joseph's (Wallasey) - 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
History and Geography	Climates of the world (including climate change) Continents and Oceans of the world. Continents and Oceans of the world	The first flight –The Wright brothers The invention of the printing press The invention of the steam engine The invention of radio Toys through time	Weather/extreme weather Seasons Comparing equatorial, desert and tropical climates. Weather	The Great Fire of London The Black Death The Spanish Armada Queen Elizabeth II	The Moon Landing – Neil Armstrong The Beatles Significant individuals who have had an impact on the world today.	United Kingdom Countries of the UK Flags Locality study - Wallasey

Key Skills <i>(used throughout all areas of Computing)</i>	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.
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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

Jam Sandwich

Children give instructions to a teacher robot to make porridge or a sandwich. See [link](#) for ideas from Jam Sandwich project PDFs.

CS1.1, CS1.4, 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

ALEX the Robot app

Develop skills in sequencing and debugging directional instructions. Encourage children to show resilience and work through initial levels. **T** (Teachers will need to manually record each child's progress e.g. on ticklist).

CS1.2, CS1.4

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

Foos app

Use the codeSpark Academy: Kids Coding app to teach the basics of computer programming through a variety of interactive learning activities.

CS1.2, CS1.3, CS1.4

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 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	QR Codes Use a QR code to open the website quickly. Link here for making QR codes (teacher use). DL1.2	Infant Encyclopedia - Bonfire Night Allow children to explore the topic on computers or iPads by using a QR code or web link. Link here DL1.1, DL1.2	BBC Science What are the seasons? Use the videos and activities to learn about seasons. DL1.1, DL1.2	Safari Image Search Search for images of the Great Fire of London. 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	BBC Science The Moon Use the video to introduce the topic or as a stimulus for writing. Children could access through a QR code, find themselves, or just display on the board. DL1.1, DL1.2	Research Countries of the UK 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
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 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	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 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	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 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? 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 DL1.4, DL1.5	Smartie the Penguin Use Y1 resources from Childnet to look at what we share on the internet. Download teacher resources and lesson plans for Year 1. DL1.4, DL1.5	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	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

Modelling and Simulations	Google Earth Look at continents and oceans 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 DL1.6	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	Great Fire of London Simulation Use the link below to find out what the Great Fire of London was really like. Follow the story and explore different artefacts from the time. Link here DL1.6	Google Moon Use the online resource to explore the surface of the Moon in 3D. Select from the options to view images and information from the Apollo missions, visible surface, or elevation views. Zoom into the Apollo mission markers to see additional placemarks at the landing sites. Link here DL1.6	Google Earth Look at the countries of the UK at different scales and use street view. Locate oceans and continents. Explore Wallasey using street view. Use Side-by-Side Georeferencing to view two different Wallasey through time. T Link here 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	Labelling Add labels to traditional tales pictures activity. IT1.3	Primary Writer app Use the primary writer app to allow children to word process their own pieces of writing about Toys Through Time and then selecting an appropriate background for the content of the writing. IT1.1, IT1.2	Typing Skills: Use Keyboard Climber activities to improve keyboard skills. IT2.2	Pic Collage app Present information about the Great Fire of London, combining text and images saved from Safari (see above). Add text and format to caption each image. IT1.1, IT1.2, IT1.3	Digital Book Use Book Creator app to create an eBook of the moon landing, combining text and images. T IT1.1, IT1.2, IT1.3	Tiny Tap app Create an interactive presentation linked to UK countries. Use in-app search to find images, and add these into the Tiny Tap page, along with a title. Use the soundboard activity to allow children to explain each of the images by recording their voices. IT1.1, IT1.3, IT1.5
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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 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	Doodle Buddy app Pupils draw Christmas scenes, by drawing and decorating a tree, adding stickers and selecting brush colour, style and width. IT1.3	Draw & Tell app Use the app to draw pictures of different climates, selecting colours and brush types and backgrounds. Then record a narration to explain the temperature etc. IT1.3, IT1.5	ChatterKids app Save images of the faces of historical figures from Safari or 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 short script. Record 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	Shadow Puppet Edu Search for and save images of the Beatles. Add to the app and write captions. Record a narration of their knowledge to create a film. Once they have saved their work, review and decide how to make improvements. IT1.1, IT1.2, IT1.4, IT1.5	Tap a Tune app Explore different instruments and begin to understand musical notation. 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	Pictogram Show data linked to weather. 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			Bar graphs Make bar graphs e.g. linked to the UK countries. The completed bar charts can be downloaded and saved and/or printed. 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.					