



# St Joseph's (Wallasey) - Computing across the Curriculum Long Term Planning Map - Y2

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	Countries of the UK	Florence Nightingale Mary Seacole Marie Curie NHS	The Great Barrier Reef Aboriginal Australia Sydney	First World War Wilfred Owen William Hesketh Leverhume		Coastal geography Mountain geography Grace Darling
Geography	Locality study- Wallasey	Significant individuals	Australia- Comparison of country outside UK	People 100 years ago	SATs	Seaside

<b>Key Skills</b> (used throughout all areas of Computing)	<ul> <li>KS2.1 Be able to log into and out of an account on a computer or program independently.</li> <li>KS2.2 Be able to enter text using more than one finger, beginning to use both hands.</li> <li>KS2.3 Be able to shut down a program or device at the end of a session.</li> <li>KS2.4 Can use a mouse/trackpad to move and place items accurately on a screen. Use double click or tap, pinch to zoom, swipe etc.</li> <li>KS2.5 Be able to save and retrieve work effectively.</li> <li>KS2.6 With clear guidance, be able to navigate a folder system e.g. Shared Drive, iPad camera roll or Dropbox.</li> <li>KS2.7 Can use basic keyboard keys e.g. backspace, space bar, return.</li> </ul>
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## **Computer Science**



#### Code Studio

Code Studio. Create user accounts for class on the website if not created in Y1. Y2 should be working around Course B level, 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. T

CS2.1, CS2.2, CS2.3, CS2.4, CS2.5

## Control and **Programming**

#### Box Island app Solve problems by seauencina and debugging directional commands. If used in Year 1 then focus more on repeat and conditional (selection) levels. (Each child can create their own profile or teachers can manually record each child's progress e.g. on ticklist). CS2.2, CS2.3, CS2.5

### Learn Code with El Chavo app

Develop sequencina skills in Level 1: Sequences I. CS2.2, CS2.5

Develop problem solving skills, by seauencina directions, debugging and employing conditionals. CS2.1, CS2.2, CS2.3,

Save the Animals app

CS2.5

#### Switch n Glitch app

Develop problem solvina skills, by seauencina directions, debugging and employing conditionals.

CS2.1, CS2.2, CS2.3, CS2.5

underwater) and add suitable animals. Use coding blocks to program them to move appropriately

Choose a

Scratch Jr app

Introduce Scratch Jr

sprites to create a

themed habitat.

background (e.g.

app, using the animal

backgrounds, and adding speech. T CS2.1, CS2.2, CS2.3,

in the habitat. Extend

by including multiple

CS2.4. CS2.5

## Hello Ruby

Use the link below and follow Episode 8: How do computers talk to each other? And what is the Internet made of? In this video, we'll learn more about the hardware, the software and the societal impact of the Internet.

#### Be able to give control devices instructions that contain numerical data.(e.g. move 2 steps etc). CS2.1

- CS2.2 Can use logical reasoning to predict the outcome of a sequence of instructions and test the sequence, amending if necessary.
- CS2.3 Can use the repeat command (loops) to program more efficiently.
- CS2.4 Is able to make use of simple events e.g. mouse clicks/tap on screen.
- CS2.5 Be able to find a bug in a simple program.

## **Key Skills**

## **Digital Literacy**

## Tutorial Link

Research: Internet

#### Search for and save images online

Use Gooale Image Search in Safari (usina iPad) for use in Pic Collage on UK countries.

DL2.1. DL2.2

## Mr Haughton's Infant

Encyclopedia Find out about remembrance day. Use QR codes to launch the app on iPads QR Stuff. Devise a set of auestions for children to use the different types of information (text. video etc). Children can create a fact **DL2.1** sheet from the information they have found or use it as part of cross-curricular writina. T

#### **BBC Science:**

Watch videos and take part in activities related to materials on the BBC KS1 Science. Demonstrate how to use the interactive links to search for the information needed to answer a auery. Show how information can be presented as text or images. Sometimes they can listen to a narration of the text using a 'sound' button. Draw the children's attention to the help button in the form of a question mark. Discuss how to find out more about this topic or related topics using the links at the bottom of the page.

#### Internet research

Begin to use simple keywords (guided by teacher) to locate information about coastal geography in a search engine. Use a child-friendly search engines: T

**Kidrex** Kiddle

**DL2.8** 

#### 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.

# Online Communication and eSafety

# Jessie and Friends

Episode 1. In this video, pupils are introduced to watchina videos online. It will help develop childrens' safety on the web as well as on social media/game websites.

Link here DL2.5

video, pupils are introduced to the dangers of sharing photographs they take with a phone or tablet.

Jessie and Friends

Jessie and Friends

Episode 2. In this

DL2.5, DL2.3

Link here DL2.1. DL2.2

#### Common Sense **Materials**

How technology

makes vou feel? This lesson helps pupils pay attention to their feelings while using tech. With an engaging emoji game, students learn practical strategies for managing their feelings -- good, bad, and everything in between.

DL2.5, DL2.3

#### Common Sense Materials Pause and Think

Online Students understand that they should stay safe online and use the' Digital Citizens' to teach them how to be safe, responsible, and respectful online. DL2.5

#### Jessie and Friends Jessie and Friends

Episode 3. Jessie, Tia and Mo learn that when playing online games they should keep their personal information private. only talk to people they know in real life and that they can tell an adult they trust if anything happens that makes them worried.

DL2.5

#### Common Sense **Materials**

Internet Traffic Lights. Usina a fun traffic liaht activity, students learn how to identify "just right" content, giving them the green light to learn, play and explore the internet safely.

DL2.5

Modelling and Simulations	Google Earth Locate UK countries and capitals with Google Earth, using street view where available. Use Side-by-Side Georeferencing to view Wallasey using different maps through time. T Link here DL2.6	Habitat simulations Use the 'Build A' links below to allow pupils to explore designing different appropriate habitats for specific animals. Build a habitat Build a biome TopMarks DL2.6	Google Earth Explore Australia on Google Earth, using street view where available and then compare this with the Wirral. T Link here DL2.6	Materials resources From the link, select appropriate digital resources for children to use to explore the different characteristics of materials.  DL2.6	Growing Simulation Science link Use the link below to simulate different growing conditions for a plant: link here DL2.6T	Google Earth Explore coastal geography on Google Earth. Compare human and physical features. Use search tools, street view zoom and navigation tools. T Link here D12.6
Key Skills	DL2.1 Be able to navigate a website using links or buttons.  DL2.2 Be able to use a search engine to search for given information to answer questions, sorting by text, pictures, sound and video.  DL2.3 With support, be able to say what information is personal and should not be shared online.  DL2.4 With support, be able to share pictures or work to an online platform.  DL2.5 To be able to follow and understand school rules for staying safe online.  DL2.6 Be able to make changes in a model/simulation and use them to make and test predictions.					

# Information Technology

3,									
Tutorial Link									
Word Processing and Desktop Publishing	Pic Collage app Create a poster about UK countries. Use images found online and photos taken, to enhance their work. Include simple captions and labels. IT2.1, IT2.2	Timeline app Sequence historical figures being studied. Images can be added along with dates and additional information IT2.1, IT2.2	Digital Book Use Book Creator app to create anon-fiction eBook about the Great Barrier Reef combining text and images. This could be extended by including sound recordings. T IT2.1, IT2.2, IT2.4, IT2.6	Microsoft Word/Google Doc In small groups. Begin to use a word processor to write a paragraph about people 100 years ago, linked to their English work and teach formatting of text. IT2.1, IT2.2	Typing Skills Use BBC dancemat typing activities to improve keyboard skills. IT2.2	Tiny Tap app Make an interactive guide to coastal or mountain geography. Create 'Soundboards' and 'Ask a Question' activities. Combine text and images from Tiny Tap image search. IT2.1, IT2.2, IT2.4, IT2.6			
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. At the end of the project, children can use their work to create a video presentation. IT2.1, IT2.5, IT2.6									

Multimedia	Taking Photos Take photos around Wallasey and use the tools within the Photos app to edit them with filters and cropping tools etc, to enhance them. Use Shadows Puppet Edu App to create a presentation of these photos. Add and sequence images with text over the top of the images. Add a voice over and background music.T IT 2.4	Keezy Classic app Explore sound boards, layering loops to create different effects. Pupils can even record their own sounds to link to a topic, poetry performance or phonics work. IT2.6	Shadow Puppet Edu Add pictures saved from Safari about Australia to 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. IT2.1, IT2.5, IT2.6	Chatter Kids app Make images of the faces of historical figures speak. Take a picture from a book or download an image from the internet to the iPad. Encourage children to plan what they are going to say, scripting if necessary. Add to the app, mark the mouth and record 30 seconds of speech. Playback, evaluate, re-record if necessary and save as a video. IT2.5, IT2.6	Brushes Redux app Use the painting app to draw still life. Build up depths and mixes of colour to create digital art. IT2.3	Koma Koma app Create a stop animation movie to show a seaside scene. Children draw and cut out images of crabs or seagulls etc. Rest the iPad over the edge of a table or chair and move the characters very slightly between frames. Use A3 coloured paper as a background and maybe use sand or shells etc. to decorate and blue paper moving around to represent the sea. IT2.3, IT2.5	
Data Handling	Plant identifier Collect a variety of leaves and then use the website, on an iPad, to take images of the leaves and then identify what tree or plant they have come from.  IT2.8		Pictogram Use J2 data or Pictogram creator to make simple pictograms e.g. linked to science or maths.  IT2.7  Bar Graph Select from links here to create an online graph maker, linked to e.g. mountain heights. Screen shots could then be taken of the finished graphs as evidence.  www.mathsisfun.com www.j2e.com IT2.7				
Key Skills	IT2.1 When producing text, can add and edit text, considering style, colour. layout and font.  IT2.2 Be able to say where letters are located on the keyboard, increasingly using appropriate punctuation.  IT2.3 Can use simple tools within suitable software to create digital art.  IT2.4 Be able to purposefully use different image editing tools, including crop, resize, and flip, exploring effects such of filters.  IT2.5 Be able to sequence and arrange pictures or video clips for a purpose.  IT2.6 Be able to select and record musical phrases, sound-effects or voice-overs to enhance multimedia work.  IT2.7 Can make use of different types of graphs to represent data collected. Be able to enter data accurately to proto questions.  IT2.8 With help be able to search a pre-prepared database as part of a group, constructing questions and suggesting answers.					to provide the answers	