



St Joseph's (Wallasey) - Computing across the Curriculum Long Term Planning Map - Y3

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	Changes in Britain from the Stone Age to the Iron Age The Stone Age	UK and Europe country and capitals	Changes in Britain from the Stone Age to the Iron Age The Bronze and Iron Ages	Coastal landscapes and erosion	Ancient Greece – a study of Greek life and achievements and their influence on the western world Ancient Greece	Earthquakes and volcanoes

Key Skills (used throughout all areas of Computing)	<div>KS3.1 When using a mouse or trackpad, be able to use left/right/double click and scroll.</div> <div>KS3.2 Able to use more than one hand to enter text, using the keyboard.</div> <div>KS3.3 Can use cut, copy and paste tools by right clicking or using the edit toolbar.</div> <div>KS3.4 Be able to save and retrieve work effectively.</div> <div>KS3.5 With guidance, be able to navigate a folder system to find and open a specific file e.g. Shared Drive, iPad camera roll or Dropbox.</div> <div>KS3.6 Know and use basic keyboard function keys e.g. shift, caps lock, space bar, return.</div>
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Computer Science

Tutorial Link

Code Studio

[Code Studio](#). Create or print off existing user accounts for class on the website. Y3 should be working around Course C 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**

CS3.1, CS3.2, CS3.3, CS3.4, CS3.5, CS3.6

Control and Programming

Switch 'n' Glitch

Sequence and debug directional commands to solve problems.

CS3.1, CS3.3

Lego Mindstorms (Fix the Factory) app

Develop work done in Code Studio by introducing Lego Mindstorms, Fix the Factory App.

Resources here: [Link here](#) **T**

CS3.1, CS3.3, CS3.5

Learn to Code with El Chavo app

Develop sequencing skills (Level 3 - Sequences II).

CS3.1, CS3.2, CS3.3

Tynker app or online (Space Cadet)

Program repeating pattern of movement to solve problems by sequencing commands correctly and then including repeat and repeat until commands, extending to if/else blocks.

CS3.1, CS3.2, CS3.3, CS3.4, CS3.6

Scratch Jr app (moon landing)

Create a multi-scene story by programming sprites. Sequence the movement of a character to a space rocket which then launches. The next scene can be in space where multiple sprites can simultaneously move in a range of ways using repeats. Finally the rocket can land on the moon, where the astronaut leaves to explore and meet an alien. Encourage creativity whilst ensuring that programming skills are being understood and demonstrated.

CS3.1, CS3.2, CS3.3, CS3.4, CS3.5, CS3.6

How does the internet work?

Use [BBC Bitesize](#) for a video, information and glossary. Use this as a basis to create a digital presentation to show learning, and undertake any additional research to follow lines of enquiry.

Key Skills

- CS3.1 To sequence a list of commands/blocks to produce an output e.g. a light comes on or a robot follows a defined route.
- CS3.2 Is able to use 'repeat' and 'repeat until' loops when appropriate.
- CS3.3 Be able to find errors in a simple program and successfully debug to make the program work.
- CS3.4 Can use conditional statements (if and when commands).
- CS3.5 Understands the importance of time within a program (e.g. using wait).
- CS3.6 Can make use of an input 'event' within a simple program e.g. when the start button is clicked.

Digital Literacy

Tutorial Link

<p>Research: Internet</p>	<p>Navigating a website Use the link to allow children to navigate around BBC Prehistoric web pages. Children could be set a number of questions with the answers found within the website. DL3.1, DL3.2, DL3.3, DL3.4</p>	<p>BBC Bitesize: Science Use the videos and activities on the BBC Website to enhance end embed pupil learning about the relevant science topic. DL3.5</p>	<p>Key Search Questions Develop key search questions to find information about the Bronze Age. Teach strategies to increase the accuracy of keyword searches and make inferences about the effectiveness of the strategies. Use Common sense Materials to support: The Key to Keywords T DL3.4</p>	<p>BBC Bitesize: Science Use the videos and activities on the BBC Website to enhance end embed pupil learning about the relevant science topic. DL3.5</p>	<p>Compare a number of websites Look at the way pages are formatted, use of images, helpfulness etc. Practice keyword searching and scanning and skimming for information. Teachers could provide children with 2 or 3 websites on Ancient Greece and ask them to compare. DL3.1, DL3.2, DL3.3, DL3.4</p>	<p>BBC Bitesize: Science Use the videos and activities on the BBC Website to enhance end embed pupil learning about the relevant science topic. DL3.5</p>
<p>Online Communication and eSafety</p>	<p>School VLE (virtual learning environment) Use eschools or Seesaw to show or allow children to partake in uploading content to a digital platform and responding to teacher comments after they have submitted work DL3.3</p> <p>Quizizz and/or Kahoot (ongoing) Use the quiz based website for pupils to participate in online quizzes and continue throughout the year. Quizizz link Kahoot link DL3.2, DL3.3</p>					

Modelling and Simulations	<p>Common Sense Materials Device-Free Moments Why is it important that we have device-free moments in our lives? Technology use isn't always a distraction, but there are definitely times when it's best to keep devices away. Help students learn when it's appropriate to use technology and when it's not -- and practice making family rules for device-free time at home. DL3.2</p>	<p>Common Sense Materials That's Private! What kinds of information should I keep to myself when I use the internet? Staying safe online is a lot like staying safe in the real world. By helping a Digital Citizen sign up for a new app, students learn about the kinds of information they should keep to themselves when they use the internet -- just as they would with a stranger in person. DL3.2</p>	<p>Common Sense Materials Digital Trails What information is OK to have in your digital footprint? Does what you do online always stay online? Learn that the information they share online leaves a digital footprint or "trail." Depending on how they manage it, this trail can be big or small, and harmful or helpful. Compare different trails and think critically about what kinds of information they want to leave behind. DL3.2</p>	<p>Common Sense Materials Who Is in Your Online Community? How are we all part of an online community? We are all connected on the internet! By learning the Rings of Responsibility, students explore how the internet connects us to people in our community and throughout the world. Help your students think critically about the different ways they connect with others, both in person and online. DL3.2</p>	<p>Common Sense Materials Putting a STOP to Online Meanness What should you do if someone is mean to you online? The internet is filled with all kinds of interesting people, but sometimes, some of them can be mean to each other. With this role play, help your students understand why it's often easier to be mean online than in person, and how to deal with online meanness when they see it. DL3.2</p>	<p>Common Sense Materials Let's Give Credit! How can you give credit for other people's work? With so much information at our fingertips, students learn what it means to "give credit" when using content they find online. Taking on the role of a detective, students learn why it's important to give credit and the right ways to do it when they use words, images, or ideas that belong to others. DL3.2</p>
	<p>Sketch Nation app Create a Stone Age up-jumping game in advanced mode. Design a character, and themed platforms. Create power ups as items that would help the character e.g. tools and fire and include relevant enemies e.g. sabre toothed tigers. Control the game by selecting different options. Focus on improving the game using the various design options while also ensuring that it is playable, challenging and enjoyable. DL3.6</p>	<p>Google Earth Explore the UK and European country capitals on Google Earth. Use search tool, street view zoom and navigation tools. Screen shot could be taken once they've found different cities and these images then used in Shadow Puppet Edu with added narration. Link here DL3.6</p>	<p>Stonehenge Simulation Explore a 360 degree virtual Stonehenge - looking at the different features. CS3.6</p>	<p>Google Earth Explore coastal landscapes on Google Earth. Compare human and physical features and locate places at different scales. Use search tool, street view zoom and navigation tools. <i>This could be done in a Geography lesson or as a whole-class starter.</i> Link here DL3.6</p>	<p>Forces Simulations Use the links below to experiment with the key concepts of each topic: Magnet simulation Friction simulation DL3.6</p>	<p>Google Earth (Volcanoes and Earthquakes) Search for specific volcanoes and explore in detail. Look at global patterns. Identify key features and landmarks using street view and 360° images. Link here. T DL3.6</p> <p>Quiver app (Volcanoes) Use the augmented reality app to model an erupting volcano and then label the different parts of a volcano. (The trigger sheet will need to be downloaded and printed out.) DL3.6</p>

Key Skills

- DL3.1 Can use information found online to answer specific questions, and evaluate how appropriate a site is.
- DL3.2 Works within the internet safety rules, understand why they are in place and abide by them.
- DL3.3 With support, is able to share suitable pictures and work to an online platform.
- DL3.4 Can identify and use keywords for effective Internet searches.
- DL3.5 Able to select relevant information (pictures and text) to use in other software.
- DL3.6 Can enter data into a computer simulation, change data and observe changes in results.

Information Technology

Tutorial Link

Word Processing and Desktop Publishing

Typing Skills

Use [BBC dancemate typing](#) activities to improve keyboard skills.

IT3.1

Pic Collage app

Combine images and text to present an information poster on a European Nation. Independently save and add images and text and format it with consideration to the audience.

IT3.1, IT3.4

Microsoft Word/Google Docs

Layout a formal document linked to the Bronze Age Practice typing with two hands, consider layout and add images. A piece of pre-written work from English could be used for this task.

IT3.1, IT3.4

Adobe Spark Page app

Create a webpage by combining images and text. Use previously researched information about coastal landscapes. (A class login will be required).

IT3.1, IT3.4

Timeline app

Sequence key events from Ancient Greece. Images can be added to the timeline and the events can be re-sequenced and moved around to make it as clear as possible. *This could be done in a history lesson to present information.*

IT3.1, IT3.4

Tiny Tap app

Make an interactive presentation combining text and graphics and create sound recordings/puzzles about earthquakes and volcanoes. Use a variety of different activities (Sound Board, Ask a Question, Talk or Type, Shape Puzzle) to create a multimedia presentation.

IT3.1, IT3.4

Multimedia

Lit Film Fest

Use the [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).

IT3.1, IT3.4, IT3.5

	<p>Koma Koma app Create a stop frame animation film. This could be of cave paintings throwing arrows to hunt a mammoth. Paper cutouts of characters could be used. Clips saved to the camera roll could be imported into the Shadow Puppet Edu app with background music added. IT3.2, IT3.3, IT3.4</p>	<p>Shadow Puppet Edu app Use images saved from Safari of a chosen European country. Caption these once added to the app. Perform a voiceover scripted during an English, to create a video fact file. Save, listen back and re-record with improvements. T IT3.3, IT3.4, IT3.5</p>	<p>Quik app Sequence images from the camera roll and add text to create a slideshow to show human development within the Bronze Age. Control formatting with consideration for the audience. IT3.3, IT3.4, IT3.5</p>	<p>Photo editing apps Use a variety of filters and effects to edit photographs taken from a trip to the beach, to create artwork and exemplify erosional features. Use Photoshop Express app, Pixlr app or Pixlr online website. T IT3.3</p>	<p>Morfo or Chatterpix Kids Apps Use the app to animate still images of Greek Gods 'speak' to explain their different roles and responsibilities. Save images from Safari, import into the app and morph, and then record a voiceover. T IT3.3, IT3.4, IT3.5</p>	<p>Brushes Redux app Draw volcanic eruptions. Build up layers of different colours and textures for the mountain slopes. And finish off with ash and lava. Zoom in for detail. Explore, and fine tune the different brushes and experiment with colours. Playback the sketch as a short film. Save as images to the camera roll on the iPads. <i>This could be done as part of an art lesson.</i> IT3.2, IT3.3</p>																				
Data Handling	<p>Online Graph Maker Use an online graph maker to represent data collected about European countries. Investigate the key features of a graph including title, axes, labels etc. Save as an image for use in another app or software or print their graph. IT3.7</p>		<p>Lux Camera app Use the app to explore how light levels change within the classroom. Take screenshots of readings around school and plot these on a school plan in Pic Collage. Add suitable colours as indicators to identify patterns. IT3.6</p>		<p>Microsoft Excel/Google Sheets Begin to use spreadsheets to enter information in the cells with simple formatting, to list information on volcanoes. Search and sort the database once populated. IT3.7, IT3.9, IT3.10</p>																					
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