



Bidston Village - 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
English	Troll Swap (focus on characters fiction)	The Owl Who was afraid of the dark (non Chronological report)	Major Glad major Dizzy (recount)	The Dragon Machine Fiction adventure focus	Grandad's Secret Giant Fiction (moral)	The Lost Wolf Letter (Letter in role)
Science	Materials- features and properties	Materials-changes	Animal inc. Humans	Plants	Living things and habitats	Living things and habitats
PSHE	Being in my world	Celebrating difference	Dreams and goals	Healthy me	Relationships	Changing me
History	Great Fire of London	Remembrance Day/Wilfred Owen	Changes beyond my lifetime technology and games	How has air travel changed over time?	Rosa Parks	Local person of interest Emily Davidson Lord Leverhulme
Geography	Where do I live in the world? What impact do we have on our local area	Atlantic Ocean Fishing pollution and plastics	Australia	Compare Australia with Uk	Weather	Extreme weather
RE	Good news God	Christian community	Kingdom of God	Forgiveness	Discipleship	Holy Spirit creations
Art / DT	Tudor Houses Solid Structures	Making couscous Charcoal drawings	Lever Mechanisms	Aboriginal Art	Couscous dish The beauty of flowers	Rain gauge

	Ancient Art		Dreams and nightmares			
Wow Events / Hooks	Making Tudor houses	Plastics/pollution display	Bearded Dragon hatching out of an egg			

Functional Skills (used throughout all areas of Computing)	<p>F2.1 Be able to enter text using more than one finger, beginning to use both hands.</p> <p>F2.2 Be able to use basic keyboard keys e.g. backspace, space bar, and return.</p> <p>F2.3 Be able to save, retrieve and begin to organise work with support.</p> <p>F2.4 Be able to use a range of methods of interacting with a program e.g. right click, drag and drop, long tap etc. Use double click or tap, pinch to zoom, swipe etc.</p>
--	---

Computer Science

Tutorial Link

Control and Programming	<p>Code Studio</p> <p>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 one 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</p> <p>CS2.1, CS2.2, CS2.3, CS2.4, CS2.5</p> <p>The extension activities below are non-essential, but teachers may wish to vary and consolidate learning from Code Studio using additional tools.</p>					
	<p>Investigate Algorithms Recipes for making sandwiches/pizza. Children use the template provided to sequence a set of instructions, by using a flowchart. Possibly laminate sheets and use whiteboard pens</p>	<p>Alex the Robot app Revise sequencing of directional command and debugging from Year 1. Use logic and reasoning to create and complete their own/each other's levels.T CS2.3, CS2.5</p>	<p>Hello Ruby Use Hello Ruby to allow children to investigate different computational concepts without a computer. In the PLAY section are multiple activities with printable resources.</p>	<p>Box Island app Solve problems by sequencing and debugging directional commands. If used in Year 1 then focus more on repeat and conditional (selection) levels.</p>	<p>Scratch Jr app Introduce Scratch Jr app, using the animals sprites to create a themed habitat. Choose a background (e.g. underwater) and add suitable animals. Use coding blocks to</p>	<p>Scratch Jr app Recreate the moon landing, have a launch scene where a person moves towards the space rocket, triggering it to blast off. Link scenes to make the rocket move through space</p>

	to allow resources to be reused. Link here CS2.2, CS2.3, CS2.5		CS2.3, CS2.5	(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	program them to move appropriately in the habitat. Extend by including multiple backgrounds, and adding speech. T CS2.1, CS2.2, CS2.3, CS2.4, CS2.5	in different ways with additional space themed sprites moving in different ways. Finally, allow the rocket to land on the moon with the astronaut appearing and moving and speaking outside the craft. T CS2.1, CS2.2, CS2.3, CS2.4, CS2.5
Computer Science Skills	<p>CS2.1 Be able to give control devices instructions that contain numerical data (e.g. move 2 steps etc).</p> <p>CS2.2 Can use the repeat command (loops) to program more efficiently.</p> <p>CS2.3 Can use logical reasoning to predict the outcome of a sequence of instructions and test the sequence, amending if necessary.</p> <p>CS2.4 Is able to make use of simple events e.g. mouse clicks/tap on screen.</p> <p>CS2.5 Be able to find a bug in simple code and attempt to debug errors.</p>					

Digital Literacy						
Tutorial Link						
Research: Internet	<p>Search for and save images online Use Google Image Search in Safari (using iPad) for use in Great Fire of London lessons. DL2.3</p> <p>Exploring Websites Use the DKFindOut website to research the Great Fire of London. Navigate using the search function and the links</p>	<p>BBC Science: Which material do we use? Watch videos and take part in activities related to materials on the BBC Bitesize website. Demonstrate how to use the interactive links to search for the information needed to answer a query. Show how information can be presented as text or images.</p>	<p>BBC Science: What do humans need to stay healthy? Watch videos and take part in activities on the BBC Bitesize website. Demonstrate how to use the interactive links to search for the information needed to answer a query. Show how information can be presented as text or images.</p>	<p>Mr Haughton's Infant Encyclopedia Find out about Plants. Use QR codes for the children to launch the app on iPads QR Stuff link , or save as a web link if accessing on a computer. Devise a set of questions to use the different types of information (text, video etc). Create a fact sheet from the information they have</p>	<p>Internet research Begin to use simple keywords (guided by teacher) to locate information about Rosa Parks in a search engine. Use child-friendly search engines: T Kidrex Kiddle DL2.3</p>	<p>Internet research Begin to use simple keywords (guided by teacher) to locate information about extreme weather in a search engine. Use child-friendly search engines: T Kidrex Kiddle DL2.3</p>

	<p>within the pages. DL2.1</p>	<p>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. Set the children a second query which needs one of the links to be selected. DL2.1</p>	<p>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. Set the children a second query which needs one of the links to be selected. DL2.1</p>	<p>found or use it as part of cross-curricular writing. T Link here DL2.1</p>		
<p>Online Communication and eSafety</p>	<p>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. DL2.2</p>					
	<p>Jessie and Friends Episode 1: Watching Videos. In this video, pupils learn that while the internet can be enjoyable and fun, there are sometimes things online that can be upsetting or scary. Link here Video here DL2.5</p>	<p>Jessie and Friends Jessie and Friends Episode 2: Sharing Pictures. In this video, pupils are introduced to the dangers of sharing photographs they take with a phone or tablet. DL2.5</p>	<p>Common Sense Materials How technology makes you 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</p>	<p>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</p>	<p>Jessie and Friends Jessie and Friends Episode 3: Playing Games. 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</p>	<p>Common Sense Materials Internet Traffic Lights. Using a fun traffic light activity, students learn how to identify "just right" content, giving them the green light to learn, play, and explore the internet safely. DL2.5</p>

<p style="text-align: center;">Modelling and Simulations</p>	<p>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 DL2.4</p>	<p>Google Earth Explore Australia on Google Earth. Compare human and physical features at different scales. Use search tools, street view zoom and navigation tools. <i>This could be done in a Geography lesson or as a whole-class starter.</i> T Link here DL2.4</p>	<p>Habitat simulations Use the 'Build A' links below to allow pupils to explore designing different appropriate habitats for specific animals. Build a biome Build a habitat TopMarks DL2.4</p> <p>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 investigate how to create an animal friendly school environment. DL2.4</p>
<p>Digital Literacy Skills</p>	<p>DL2.1 Be able to independently navigate to the right information on a website using links or buttons. DL2.2 With support, be able to share pictures or work to an online platform. DL2.3 Be able to use a search engine to search for given information, if necessary using keywords provided by the teacher. DL2.4 Be able to make changes in a model/simulation and use them to make and test predictions. DL2.5 Be able to explain online danger and begin to be responsible for their actions online including saying what personal information should be kept private and explain why it is important to discuss their use of technology with an adult.</p>		

Information Technology

[Tutorial Link](#)

<p style="text-align: center;">Word Processing and Desktop Publishing</p>	<p>Pic Collage app Design a poster about materials, combining text and photos. Add photos from the camera roll, or use the in app search tool. Organise the photos and add text captions. Format writing style and</p>	<p>Pic Collage app Write a story arc about the Atlantic Ocean. Focus on word processing and formatting skills. They could also take an image of themselves and import into the app, cutting themselves out of the</p>	<p>Book Creator Use the app or website to create an eBook linked to Australia, combining text and images. Ask your technician to generate an email address to create an account for the lesson. Pupils will need</p>	<p>Primary Writer app Word Process their own pieces of writing and select an appropriate background for the content of the writing. Focus on capitalisation, punctuation and spacing.</p>	<p>Microsoft Word/Google Doc Begin to use a word processor to present a poem from previous lessons. Begin with capitalisation and one space between words. Show automatic wrap around at the end of</p>	<p>Book Creator Use the app or website to create an eBook linked to extreme weather, combining text and images. Ask your technician to generate an email address to create an account for the</p>
--	---	--	---	--	--	--

	<p>colour. Revise capitalisation and use of spaces between words. Edit and delete to make improvements. Change the background. Review periodically with respect to an audience. Save work to the camera roll once complete. IT2.1, IT2.2, IT2.3</p> <p>Purple Mash Use writing projects for the Great Fire of London. IT2.1, IT2.2</p>	<p>classroom and inserting into an ocean image. IT2.1, IT2.2, IT2.3</p>	<p>to login with this (potentially do this for them). Add text and once selected use the “i” button to format. Use the add button to import images using the search option. Add voice recordings as well. Extend to additional pages, and use the play button to read back pupils’ work. T IT2.1, IT2.2, IT2.3, IT2.4</p>	<p>IT2.1</p>	<p>a line, but how to use return to force a new line if required. Highlight individual words and format: bold, italic, underline, colour and size. IT2.1</p>	<p>lesson. Pupils will need to login with this (potentially do this for them). Add text and once selected use the “i” button to format. Use the add button to import images using the search option. Add voice recordings as well. Extend to additional pages, and use the play button to read back pupils’ work. T IT2.1, IT2.2, IT2.3, IT2.4</p>
<p>Multimedia</p>	<p>Shadow Puppet Edu Add pictures saved from Safari about the Great Fire of London 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, IT2.2, IT2.3, IT 2.4</p>	<p>Morfo or Chatterpix Kids Apps Animate still images of different materials ‘speak’ to explain their different properties and origins. Save images from Safari, import into the app and morph, and then record a voiceover. T IT2.2, IT2.4</p>	<p>Doodle Buddy app Design and create Australian digital art. Add a background. Focus on colour choice, line width and style. Encourage pupils to mix colours for effect. Introduce the undo button. Add stamps to embellish. Save work onto the camera roll. IT2.2</p>	<p>Koma Koma app Create a stop animation movie to show plants growing. Use the app to take a series of images with slight movements between frames. Use plasticine, craft material or drawings. IT2.2, IT2.3, IT2.4</p> <p>Green Screen Film children into scenes from Australia, explaining facts that they have learned. Use the Dolnk app to film and edit scenes. (Paid app) IT2.4</p>	<p>Purple Mash 2Explore Record simple musical melodies. The activity allows the user to play and record simple melodies by clicking on the instruments. IT2.4</p> <p>Voice Record app Record poetry readings. Listen back and redo to improve. IT2.4</p>	<p>Purple Mash 2Sequence Look at layering instruments, looping a series of 8 beats into a repeating pattern. IT2.4</p>

<p style="text-align: center;">Data Handling</p>	<p>Purple Mash Branching Database Use 2Question to create a branching database to identify materials for different purposes. Questions being answered by pupils eg do you need waterproof material? Do you need a stretchy material? Etc IT2.5</p>	<p>Graphs Make graphs linked to maths using 2Count and 2Graph or the Math is Fun online tool. IT2.5</p>	<p>Database Animal database website Use the database to search for different animals that have been selected by the teacher. Search by name, location, group or whether they are endangered. Children can find information and answer specific questions about the found animals. IT2.5 BBC Maths game to organise animal data. IT2.5</p>
<p style="text-align: center;">Information Technology Skills</p>	<p>IT2.1 When producing text, can add and edit text, considering style, colour, layout and font. IT2.2 Be able to use simple tools within age-appropriate software to create digital art or alter an image, using tools such as crop, resize, and flip, and exploring effects such as symmetry. IT2.3 Be able to sequence and arrange images and text for a purpose. IT2.4 Be able to select and record musical phrases, sound-effects or voice-overs to enhance multimedia work. IT2.5 Can make use of different types of graphs (pictographs and bar charts) to represent data collected.</p>		