



St John's Catholic infant School

COMPUTING LONG TERM PLAN



OUR COMPUTING INTENT

Through our computing curriculum we aim to give our pupils the life-skills that will enable them to embrace and utilise new technology in a socially responsible and safe way in order to flourish in the 21st century. We want the use of technology to support learning across the entire curriculum and to ensure the curriculum is accessible to all. By the time the children leave our school they will have gained key knowledge and skills in the three main areas of the computing curriculum: computer science, information technology and digital literacy.

YEAR ONE	Autumn Term Autumn 1 'Where I Live' (Algorithms / Programs) Autumn 2 'Being Famous' (Digital Images / communicating)	Spring Term Spring 1 'My Amazing Body' (Data retrieving & organising) Spring 2 'The Adventure Of The Green Ship' (Communicating)	Summer Term Summer 1 'Down On The Farm' (Data retrieving / organising) Summer 2 'The History Box' (Communicating)
IMPLEMENTATION	<p><i>As computing scientists, children will:</i></p> <p>Autumn 1 'Where I Live' Create a simple series of instructions Up / down / turn. Begin and test a Bee-bot journey. Record their routes.</p> <p>Autumn 2 'Being Famous' Use a paint program to make images. Able to choose and alter the size of tools. Select simple features to improve their image.</p>	<p><i>As computing scientists, children will:</i></p> <p>Spring 1 'My Amazing Body' Able to capture images with a camera. Able to record small video clip and play it back. Record a sound and play it back.</p> <p>Spring 2 'The Adventure Of The Green Ship' Able to insert image and add text to APP. Use simple edit tools to enhance their work. Use spacebar, enter and shift functions to create text.</p>	<p><i>As computing scientists, children will:</i></p> <p>Summer 1 'Down On The Farm' Able to enter information into a template to make a graph. Able to talk about results shown on a graph.</p> <p>Summer 2 'The History Box' Able to type text and save their work. Able to use features on key pad such as shift, space bar, enter. Able to print work.</p>
END POINTS	<p>Where I Live Children working at the expected standard: I can say why I need adult help when using an i-pad. I can tell you things to spot on line that can be dangerous. I can follow the school rules for keeping safe. I can input instructions to BlueBot going forward and backward. I can input a turn. I can input forward and turn moves I can record program using symbols.</p>	<p>My Amazing Body Children working at the expected standard: I can capture moving images, which are clear to see. I can play back my video and talk about what is good. I can delete images and understand how to keep safe. I can talk about what makes a good quality video clip. I can make a video clip and the images are clear and you can hear the speaker. I can make a video clip and the images are clear and you can hear the speaker.</p>	<p>Down on the Farm Children working at the expected standard: I can create a graph by entering information into a 'block'. I can gather and enter information into a template to make a block graph. I can talk about the data shown on a graph. I can print work independently.</p> <p>Children working at greater depth: I can work with accuracy and correct any mistakes by myself. I can make a simple inference.</p>

	<p>I can input a program to make ALEX move forwards and turn through right and left.</p> <p>Children working at greater depth: I can explain to others how to keep safe on line in depth with reasons. I can give good reasons why I should follow these rules.</p> <p>I can organise my ideas to make connections with other areas of learning (maths).</p> <p>I can adapt and correct my mistakes, make improvements and work with accuracy with independence.</p> <p>Being Famous Children working at expected standard: I can change the size of the brush and the colour.</p> <p>I can erase part or all of my creation.</p> <p>I can use paint features and change the size.</p> <p>I can choose more colours to improve my work.</p> <p>I can talk about how I have improved my work.</p> <p>Children working at greater depth: I can correct mistakes and make improvements by myself.</p> <p>I can explain to others how I have made corrections</p>	<p>I can work with a friend to correct mistakes and discuss how to improve my work.</p> <p>Children working at greater depth: I can correct mistakes by myself and talk about how I improved my work.</p> <p>I can provide accurate instructions to others.</p> <p>The Adventure of the Green Ship Children working at expected standard: I can type words and sentences using space bar, delete, shift.</p> <p>I can take an image using camera and insert into document.</p> <p>I can create a pic collage by inserting text and images.</p> <p>I can resize these to make a fact sheet.</p> <p>Children working at greater depth: I can work with accuracy and correct mistakes independently.</p> <p>I can explain my understanding to others and be a learning buddy.</p>	<p>Can independently extend my understanding by making my own graph.</p> <p>The History Box Children working at the expected standard: I can use a word program and type text.</p> <p>I can use different features on the keypad</p> <p>I can use different features on the keypad such as shift, space bar, enter.</p> <p>I can save my work.</p> <p>I can correct mistakes and make improvements by myself.</p> <p>Children working at greater depth: I can correct mistakes myself.</p> <p>I can correct mistakes and make improvements by myself.</p> <p>I can explain to others how I have made corrections</p> <p>I can adapt, correct or extend my own understanding with independence.</p>
<p>VOCABULARY</p>	<p>Safe, Acceptable User Policy, Rules, Internet, Danger, On line, Chat, Password, input, Data, Instructions, Forward, turn, Backward, command, program, Program, input, sequence, instructions, forward, backward, left turn, right turn, delete, clear memory</p>	<p>Video, Image, Delete , View, Select, Record Playback, Shake, Video, Film, Record, Shake, Lens, Video, Film, Record, Shake, Steady, Capture, Edit, Re-record, Cast, Smartboard</p> <p>Space bar, Text, Shift, Edit, Delete, Font, Document, Image, Size, Resize, Rotate, Pinch Expand, shrink</p>	<p>Data, input, add, save, read, text, type, shift, space bar, enter, save, print,</p>
<p>KEY APPS</p>	<p>Smartie Penguin on line safety, BeeBot robots, Maps of town / street, ALEX APP Google maps/images</p>	<p>i-pads camera / video Pic Collage APP</p>	<p>Notebook</p>

YEAR TWO	<p style="text-align: center;">Autumn Term Autumn 1 'Lord Lever and Port Sunlight) (Communicating) Autumn 2 'Remembering and Remembrance' (data retrieving / organising)</p>	<p style="text-align: center;">Spring Term Spring 1 'Owl Who Was Afraid Of The Dark' (Digital picture, organising) Spring 2 'China' (Control & programs)</p>	<p style="text-align: center;">Summer Term Summer 1 'Lighthouses' (Data retrieving / organising) Summer 2 'Pirates on Tour' (Control & programs)</p>
<p style="text-align: center;">IMPLEMENTATION</p>	<p><i>As computing scientists, children will:</i> Autumn 1 'Lord Lever' E- safety Know how to take safe images and keep safe when typing personal details. Take effective and clear images using i-pad. Insert text and images into a page. Word process a piece of text using Pic collage. Alter text to add emphasis using bold, underline, colour etc.</p> <p>Autumn 2 'Remembering and Remembrance' Find information from a website. Know and follow procedures for safe searching. Know how to keep safe when on ine.</p>	<p><i>As computing scientists, children will:</i> Spring 1 'Owl Who Was Afraid Of The Dark' Able to use different shape tools to draw. Use features of drawing program to add effects such as tone / tint / texture to digital image.</p> <p>Spring 2 'China' Common and general uses of information technology in school. Common and specific uses of information technology we'd find in our public area Benefits of IT</p>	<p><i>As computing scientists, children will:</i> Summer 1 'Lighthouses' Use a website to find information. Create an ebook to show retrieval of information from websites.</p> <p>Summer 2 'Pirates on Tour' Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p>
<p style="text-align: center;">END POINTS</p>	<p>Lord Lever & Port Sunlight Children working at expected standard: I can explain what personal information is and why it is important to keep it private I can take photos using the Ipad. My photos are clear to see and represent images effectively I can select a background and style I can insert an image and text. I can alter the font and size of text. Children working at greater depth: I can explain my understanding to others and be a learning buddy to others when explaining why some work should be shared and some should not. I can explain my learning and be a learning buddy to others.</p>	<p>Owl who was Afraid of the Dark Children working at expected standard: I can use a paint package to create a digital drawing of an owl. I can use the internet to research and retrieve specific information</p> <p>Children working at greater depth: Correct mistakes and make improvements with understanding using a range of different colours and strokes to add detail. I can explain and describe how to locate, store and retrieve information, using correct vocabulary. I can extend my learning independently.</p> <p>'China'</p>	<p>Lighthouse Keeper Children working at expected level: I can use a website to find information and I can use book creator app to start my ebook. I can highlight useful information on a website. Retrieve information from website to record answers to questions.</p> <p>Children working at greater depth: I can use more advance app choices like sound, picture rotation/size. I can independently extend my understanding by using tools to find key words on websites to help retrieve information.</p>

	<p>I can adapt, correct or extend my own understanding with independence when using different features of an App.</p> <p>Autumn 2 'Remembering and Remembrance' Children working at expected standard: I can talk about and show how to keep safe when using the internet to research information. I can navigate a website to find information. I know how to keep safe when using the internet and search engines. I can search a website to find information. I can use different use videos and podcasts to find out about a subject</p> <p>Children working at greater depth: I can explain my understanding to others and be a learning buddy to others for why keeping safe is so important I can use oracy effectively compare with an additional web site I can work with consistency and purpose to evaluate which icon gave suggestions how to make the website better.</p>	<p>Children working at expected standard: I can name uses of technology in my school. I can name public IT. I can explain the benefits of IT.</p> <p>Children working at greater depth: I can name uses of technology in school and give reasons for their uses. I can give reasons for IT in public places. I can give reasons why IT is beneficial to people.</p>	<p>I can extend my learning independently by thinking carefully about the content/presentation of information on each page ...video, text, sound and photos (resize,rotate).</p> <p>Pirates on Tour Children working at expected standard: I can debug simple programs. I can predict problems that may occur in my program and discuss why they may happen. I understand the importance of testing, prediction and improvement of programs through precise instructions.</p> <p>Children working at greater depth: I can give reasons for my decisions in the program. I can identify mistakes and correct them to improve my program. I can give reasons and discuss why improvements have enabled the program to work effectively. Compare program to before corrections and improvements.</p>
<p>VOCABULARY</p>	<p>E-safety, Internet, Google, Password personal details, YouTube, Image, clear image, digital, size, alter emphasis, Focus blurred, Landscape portrait, Action shot, posed shot, in frame PicCollage app, copy, paste font, text colour, line, insert size, alter, emphasis, bold underline, colour</p>	<p>App, shape, tools, draw, drawing program, effects, tone, tint, texture, smudge, digital image doodle buddy thickness, Information Technology, camera, iPad, images, retrieval store, information, locate, Book creator app</p> <p>Information technology, communication, cash machines, pay machines, laptops, speed cameras, pedestrian crossings, cameras, shop scanners, time, benefits.</p>	<p>Website, Search engine, url, icons, tools, Highlight, Copy, Paste, Find, Search Present, Organise, Text, Edit Create, Save, Multiple Pages Information, debug, simple programs, reasoning, predict , algorithms, digital devices</p>
<p>KEY APPS</p>	<p>CEPO Think You Know Hi Impact Website Twinkl PPTs</p>	<p>Use of an interactive paint application to create a graphic.</p>	

	<p>https://www.saferinternet.org.uk/advice-centre/young-people/resources-3-11s (Variety of useful resources) Use of camera/video on i-pad Pic collage app PPT Twinkl – Internet Safety http://infant.parkfieldprimary.com/ BBC schools website https://www.bbc.co.uk/teach/primary/zd7p47h</p>	<p>Doodle Buddy app Use of iPad to search the internet. Use of iPad to retrieve content.</p> <p>Book Creator app</p>	
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