



Guilden Sutton Church of England Primary School

Love and Justice for All

Computing Whole School Curriculum Progression Map

Our Christian Values: WISDOM, JUSTICE, COMPASSION, LOVE, FORGIVENESS, FRIENDSHIP

Year Group	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	<ul style="list-style-type: none"> The children learn to recognise and discuss common uses of information technology in school and outside of school Children sequence a series of events and explain the importance of sequencing Discuss sensible screen time as part of Health Week Demonstrate the use of a search engine to find further information Children engage in age appropriate IWB games and activities, knowing how to pause, play and exit 		<ul style="list-style-type: none"> The children explore types of technology both in and outside of school. They learn how to use classroom technology safely and responsibly, including the basic use of an iPad camera. Support the children when using a search engine to find relevant information. Children participate in E Safety Week, learning about ways to keep safe when using technology. Children engage in physical algorithms to sequence a series of movements following directional instructions. Children recognise icons and symbols e.g. Google, YouTube and know how to access them. The children learn that there are many different types of media content including; sound, images, books, audiobooks and video via the web. 		<ul style="list-style-type: none"> Children type key words in a search engine to find relevant information. The children learn that an algorithm is a list of instructions that solves a problem and use Daisy, Beebot and BBC apps to apply their coding skills on an iPad. Children use an iPad to video an activity or event and know how to retrieve photographs and video playback. 	
1	E-Safety <ul style="list-style-type: none"> Can I use technology effectively? 		Programming and publishing media <ul style="list-style-type: none"> Can I create a simple program? 		Effectively using technology	

	<ul style="list-style-type: none"> - Parts of a laptop - Parts of a tablet - Safely moving with technology - Turning on - Charging - Saving work - Using the mouse <ul style="list-style-type: none"> • Can I understand what algorithms are? - Hunting for treasure - Develop and record sequences of instructions as an algorithm 	<ul style="list-style-type: none"> - Program the toy to follow instructions and an algorithm - Debug programs - Predict how their programs will work <ul style="list-style-type: none"> • Can I create and publish media? - Use different features of a video camera - Use a video camera to capture moving images - Save and edit images 	<ul style="list-style-type: none"> • Can I use technology to purposefully create, organise, store, manipulate and retrieve digital media? - Use a search engine effectively to find media - Develop skills in saving and storing media on the computer - Telling a story using digital skills
2	<p>E-safety</p> <ul style="list-style-type: none"> • Can I use technology effectively? - Parts of a laptop - Parts of a tablet - Safely moving with technology - Turning on - Charging - Saving work - Using the mouse - Opening documents - Keyboard skills - Opening basic software <p>Algorithms</p> <ul style="list-style-type: none"> • Can I understand that algorithms are implemented as programs on digital devices? - Have a clear understanding of algorithms as sequences of instructions - Convert simple algorithms - Predict what a simple program will do 	<p>Programming</p> <ul style="list-style-type: none"> • Can I create and debug a simple program? - Spot and fix (debug) errors in their programs <ul style="list-style-type: none"> • Can I use logical reasoning to predict the behaviours of simple programs? - Predict what a simple program will do <ul style="list-style-type: none"> • Can I use technology purposefully to create, organise, store, manipulate and retrieve digital content? - How do search engines work? - Develop research skills through searching for information on the internet <p>Safer Internet Day</p>	<p>Using technology effectively</p> <ul style="list-style-type: none"> • Can I use technology purposefully to create, organise, store, manipulate and retrieve digital content? - Develop presentation skills through creating and delivering a short multimedia presentation <ul style="list-style-type: none"> • Can I recognise common uses for information technology beyond school?

<p>3</p>	<p>E-safety</p> <ul style="list-style-type: none"> • Can I use technology effectively? - Develop basic keyboard skills - Develop basic mouse skills - Use the web to find and select images - Skills in combining text and images - Keyboard shortcuts 	<p>Programming</p> <ul style="list-style-type: none"> • Can I design, write and debug programs that accomplish specific goals and solve problems? - Write a program in scratch to create an animation - Create animations using sticknodes app - Spot patterns and correct mistakes in animation programs - Increase knowledge and understanding of Scratch 	<p>Presenting information using software</p> <ul style="list-style-type: none"> • Can I select, use and combine a variety of software and digital devices to collect, analyse, evaluate and present data and information? - Gain skills in shooting video - Edit video, including adding narration and editing clips - Understand the qualities of effective media
<p>4</p>	<p>E-Safety</p> <ul style="list-style-type: none"> - Sharing images/videos, online gaming, keeping information safe, cyber bullying • Can I use technology effectively? - Develop keyboard skills through typing and formatting text - Editing images • Can I use previous learned knowledge in another programme (Publisher, PowerPoint)? <p>All previous year groups</p>	<p>Programming</p> <ul style="list-style-type: none"> • Can I design, write and debug programs that accomplish specific goals? - Develop an educational computer game using selection and repetition - Understand and use variables - Create a maze-based game • Can I produce and record sounds developing collaboration skills? - Record M4L performance - Use one or more programs to edit music <p>Safer Internet Day</p> <p>Techniquet</p> <p>All previous year groups</p>	<p>Digital Media</p> <ul style="list-style-type: none"> • Can I use technology purposefully to create, organise, store, manipulate and retrieve digital content? - How do search engines work? - Develop research skills through searching for information on the internet - Understand some technical aspects of how the internet makes the web possible - Understand some of the risks of using the web • Can I use a variety of different devices and software to present the weather? - Use a variety of software to create content, including presenting information - Understand different measurement techniques for the weather <p>All previous year groups</p>
<p>5</p>	<p>Online Safety</p> <p>PowerPoint</p>	<p>Scratch Programme</p> <ul style="list-style-type: none"> • Can I design, write and debug programs that accomplish specific goals? - Develop and interactive game (Kodu) 	<p>Design and develop an interactive game</p> <ul style="list-style-type: none"> • Can I design, write and debug programs that accomplish specific goals and solve problems by splitting them into smaller parts?

	<p>Word</p> <p>Publisher</p> <ul style="list-style-type: none"> • Can I use technology effectively? - Develop keyboard skills through typing and formatting text - Presenting data on Microsoft Excel - Presenting and interpreting data using different graphs and charts 	<ul style="list-style-type: none"> - Develop an interactive quiz on a topic covered in class (Kahoot) - Use sequence, repetition and variables in the computer game - Create artwork for the game and quiz, using internet search engines to select and edit images • Can I create a website about cyber safety? - Develop research skills to decide what information is appropriate - Develop understanding of e-safety and responsible use of technology - Develop and refine their ideas and text collaboratively <p>Safer Internet Day TechniQuest</p>	<ul style="list-style-type: none"> - Write a program in scratch to create an animation - Create an animation using sticknodes app • Can I use sequence in programs? - Spot patterns and correct mistakes in animation programs
6	<p>E-Safety</p> <ul style="list-style-type: none"> • Sharing images/videos, online gaming, keeping information safe, cyber bullying • Can I use technology effectively? - Develop keyboard skills through typing and formatting text - Presenting data on Microsoft Excel - Presenting and interpreting data using different graphs and charts - Adding features - Creating and publishing on class blog 	<p>Programming</p> <ul style="list-style-type: none"> • Can I design, write and debug programs that accomplish specific goals? - Develop and interactive game on Scratch - Develop design techniques, through testing and evaluating game, to make improvements to the code - Detect and correct errors in their computer game • Can I use logic and reason to crack codes, explaining how simple algorithms work? - Be familiar with semaphore, binary and Morse code - Understand the need for private information to be encrypted - Highlight where encryption is needed in technology 	<p>Programming of Music</p> <ul style="list-style-type: none"> • Can I use Sonic Pi and programming knowledge to create different sounds? - Understanding the features of Sonic Pi, exploring the features and learning about debugging - Highlighting the coding similarities that they have seen in past programs - Introduce live loops and create repeating beats and rhythms - Adapting code to change performance

		<ul style="list-style-type: none">- Appreciate the need to use complex passwords and to keep them secure <p>Safer Internet Day</p>	
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