



Computing Long-Term Overview at Woodstock CE Primary School

Phase	Cycle	Autumn		Spring		Summer	
EYFS		THIS IS ME!		I LIVE HERE		THE GREAT OUTDOORS	
Nursery		<ul style="list-style-type: none"> IWB Electronic toys Sound buttons Digital camera or iPad 		<ul style="list-style-type: none"> Programmable toys e.g., Bee-bots Taking photographs 		<ul style="list-style-type: none"> Magnifying telescope Tablet with magnifying app 	
Reception		OUR COMMUNITY	FOLLOW THE STAR	ONCE UPON A RHYME	SPLISH SPLASH SPLOSH	AT THE BOTTOM OF THE GARDEN	WHEELS, WINGS AND OTHER THINGS
		<ul style="list-style-type: none"> IWB games e.g., Phonics Play, Top Marks. 	<ul style="list-style-type: none"> Mathletics on Computer (introduced and used throughout the year) 	<ul style="list-style-type: none"> Beebot journeys through Fairy-tale Land. 	<ul style="list-style-type: none"> Remote control toys/cars. 	<ul style="list-style-type: none"> Using a camera to take pictures in the garden. Magnifying app on tablet for bug hunt. 	<ul style="list-style-type: none"> Writing buttons for composing Naughty Bus story.

KEY STAGE 1: Years 1 & 2

		INTO THE WOODS	PASSPORT TO BRITAIN	MEMORY BOX
KS1	A	<p><u>Networks – IT Around Us</u></p> <p>To recognise the uses and features of information technology</p> <p>To identify information technology in the home</p> <p>To identify information technology beyond school</p> <p>To explain how information technology benefits us</p> <p>To show how to use information technology safely</p> <p>To recognise that choices are made when using information technology</p>	<p><u>Programming – Robot Algorithms</u></p> <p>To describe a series of instructions as a sequence</p> <p>To explain what happens when we change the order of instructions</p> <p>To use logical reasoning to predict the outcome of a program (series of commands)</p> <p>To explain that programming projects can have code and artwork</p> <p>To design an algorithm</p> <p>To create and debug a program that I have written</p>	<p><u>Creating Media – Making Music</u></p> <p>To say how music can make us feel</p> <p>To identify that there are patterns in music</p> <p>To describe how music can be used in different ways</p> <p>To show how music is made from a series of notes</p> <p>To create music for a purpose</p> <p>To review and refine our computer work</p>
		<p><u>Creating Media – Digital Photography</u></p> <p>To know what devices can be used to take photographs</p> <p>To use a digital device to take a photograph</p> <p>To describe what makes a good photograph</p> <p>To decide how photographs can be improved</p> <p>To use tools to change an image</p> <p>To recognise that images can be changed</p>	<p><u>Data and Information – Pictograms</u></p> <p>To recognise that we can count and compare objects using tally charts</p> <p>To recognise that objects can be represented as pictures</p> <p>To create a pictogram</p> <p>To select objects by attribute and make comparisons</p> <p>To recognise that people can be described by attributes</p> <p>To explain that we can present information using a computer</p>	<p><u>Programming – Introduction to Quizzes</u></p> <p>To explain that a sequence of commands has a start</p> <p>To explain that a sequence of commands has an outcome</p> <p>To create a program using a given design</p> <p>To change a given design</p> <p>To create a program using my own design</p> <p>To decide how my project can be improved</p>
		<p><u>Online Safety</u></p> <p>Learning about using technology safely and safety online.</p> <p>To handle computing equipment with care</p>	<p><u>Online Safety</u></p>	<p><u>Online Safety</u></p> <p>Learning about internet safety.</p> <p>To understand what 'Cyber Bullying' is.</p> <p>To learn the importance of being respectful and kind online</p>

		To set rules regarding the use of iPads Link to PSHE (Safe Strangers) Discuss the sharing of personal information	Learning about internet safety. To keep personal information private To understand how information can be shared easily online To learn what to do if we come across issues online	
		AROUND OUR WORLD	CASTLES & DRAGONS	FIGHTING FIT
	B	<p><u>Networks -Technology Around Us</u> To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type To use the keyboard to edit text To create rules for using technology responsibly</p> <p><u>Creating Media - Digital Painting</u> To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture To compare painting a picture on a computer and on paper</p> <p><u>Online Safety</u> Learning about using technology safely and safety online. To handle computing equipment with care To set rules regarding the use of iPads Link to PSHE (Safe Strangers)</p>	<p><u>Programming – Moving a Robot</u> To explain what a given command will do To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make sequences To plan a simple program To find more than one solution to a problem</p> <p><u>Data and Information – Grouping Data</u> To label objects To identify that objects can be counted To describe objects in different ways To count objects with the same properties To compare groups of objects To answer questions about groups of objects</p> <p><u>Online Safety</u> Learning about internet safety. To keep personal information private To understand how information can be shared easily online</p>	<p><u>Creating Media – Digital Writing</u> To use a computer to write To add and remove text on a computer To identify that the look of text can be changed on a computer To make careful choices when changing text To explain why I used the tools that I chose To compare writing on a computer with writing on paper</p> <p><u>Programming – Introduction to Animation</u> To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has its own instructions To design the parts of a project To use my algorithm to create a program</p> <p><u>Online Safety</u> Learning about internet safety. To understand what ‘Cyber Bullying’ is. To understand the importance of being respectful online</p>

KEY STAGE 2: Years 3 & 4

		FIELD TO FORK	TOMB RAIDERS	EUROPE EXPLORED
KS2 Y3&4	A	<p><u>Networks – The Internet</u> To describe how networks physically connect to other networks To recognise how networked devices make up the internet To outline how websites can be shared via the World Wide Web To describe how content can be added and accessed on the World Wide Web</p>	<p><u>Programming – Repetition in Shapes</u> To identify that accuracy in programming is important To create a program in a text-based language To explain what ‘repeat’ means To modify a count-controlled loop to produce a given outcome To decompose a program into parts To create a program that uses count-controlled loops to produce a given outcome</p>	<p><u>Creating Media – Photo Editing</u> To explain that digital images can be changed To change the composition of an image To describe how images can be changed for different uses To make good choices when selecting different tools To recognise that not all images are real To evaluate how changes can improve an image</p> <p><u>Programming – Repetition in Games</u></p>

	<p>To recognise how the content of the WWW is created by people To evaluate the consequences of unreliable content</p> <p>Creating Media – Audio Editing To identify that sound can be digitally recorded To use a digital device to record sound To explain that a digital recording is stored as a file To explain that audio can be changed through editing To show that different types of audio can be combined and played together To evaluate editing choices made</p> <p>Online Safety Anti-Bullying Week: Protecting Ourselves & Others Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 4: Rings of Responsibility Private & Personal Information</p>	<p>Data and Information – Data Logging To explain that data gathered over time can be used to answer questions To use a digital device to collect data automatically To explain that a data logger collects ‘data points’ from sensors over time To use data collected over a long duration to find information To identify the data needed to answer questions To use collected data to answer questions</p> <p>Online Safety Online Safety Day: Knowing & Understanding the Rules of Online Safety Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 4: The Power of Words The Key to Keywords</p>	<p>To develop the use of count-controlled loops in a different programming environment To explain that in programming there are infinite loops and count controlled loops To develop a design which includes two or more loops which run at the same time To modify an infinite loop in a given program To design a project that includes repetition To create a project that includes repetition</p> <p>Online Safety Not what it seems: children discuss what might be real or fake online. Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 4: <i>Whose is it anyway?</i></p>
B	EARTH MATTERS	CITY OF SPIRES	INVADERS & RAIDERS
	<p>Networks – Connecting Computers To explain how digital devices function To identify input and output devices To recognise how digital devices can change the way we work To explain how a computer network can be used to share information To explore how digital devices can be connected To recognise the physical components of a network</p> <p>Creating Media - Animation To explain that animation is a sequence of drawings or photographs To relate animated movement with a sequence of images To plan an animation To identify the need to work consistently and carefully To review and improve an animation To evaluate the impact of adding other media to an animation</p> <p>Online Safety Anti-Bullying Week: Cyberbullying Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 3:</p> <ul style="list-style-type: none"> Powerful Passwords <p>My Online Community</p>	<p>Creating Media – Desktop Publishing To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing</p> <p>Data and Information – Branching Databases To create questions with yes/no answers To identify the object attributes needed to collect relevant data To create a branching database To identify objects using a branching database To explain why it is helpful for a database to be well structured To compare the information shown in a pictogram with a branching database</p> <p>Online Safety Online Safety Day: Keeping Personal Information Private Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 3: Things for Sale Show Respect Online</p>	<p>Programming – Sequence in Music To explore a new programming environment I can identify that each sprite is controlled by the commands I choose To explain that a program has a start To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description</p> <p>Programming – Events and Actions To explore a new programming environment I can identify that each sprite is controlled by the commands I choose To explain that a program has a start To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description</p> <p>Online Safety Online Safety Poster to demonstrate online safety learning from the academic year, linked to the SMART rules. Giving advice to others. Links to PSHE & RSE Curriculum SGWL Digital Literacy Scheme Year 3: Writing Good Emails</p>

KEY STAGE 2: Years 5 & 6

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KS2 Y5&6	A	MEET THE GREEKS	AMAZON ADVENTURE	WAR & PEACE
				<p><u>Networks – Communication</u> To identify how to use a search engine To describe how search engines select results To describe how search engines select results To explain how search results are ranked To recognise why the order of results is important, and to whom To recognise how we communicate using technology To evaluate different methods of online communication</p> <p><u>Creating Media – Web Page Creation</u> To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people</p> <p><u>Online Safety</u> Giving advice to others & role play Building on from the Spring Term E-safety training, the children will role play different situations that may occur online.</p>
	B	RULE BRITANNIA	IN THE BEGINNING	GOING GLOBAL
		<p><u>Networks – Systems and searching</u> To explain that computers can be connected together to form systems To recognise the role of computer systems in our lives To recognise how information is transferred over the internet To explain how sharing information online lets people in different places work together To contribute to a shared project online To evaluate different ways of working together online</p> <p><u>Creating Media – Video Editing</u></p>	<p><u>Programming – Selection in Physical Computing</u> To control a simple circuit connected to a computer To write a program that includes count-controlled loops To explain that a loop can stop when a condition is met, eg number of times To conclude that a loop can be used to repeatedly check whether a condition has been met To design a physical project that includes selection To create a controllable system that includes selection</p> <p><u>Data and Information – Flat-file Databases</u> To use a form to record information To compare paper and computer-based databases</p>	<p><u>Creating Media - Vector Drawing</u> To identify that drawing tools can be used to produce different outcomes To create a vector drawing by combining shapes To use tools to achieve a desired effect To recognise that vector drawings consist of layers To group objects to make them easier to work with To evaluate my vector drawing</p> <p><u>Programming – Selection in Quizzes</u> To explain how selection is used in computer programs To relate that a conditional statement connects a condition to an outcome</p>

		<p>To recognise video as moving pictures, which can include audio</p> <p>To identify digital devices that can record video</p> <p>To capture video using a digital device</p> <p>To recognise the features of an effective video</p> <p>To identify that video can be improved through reshooting and editing</p> <p>To consider the impact of the choices made when making and sharing a video</p> <p>Online Safety Sharing Personal Information The dangers of sharing personal information online. (CEOP)</p>	<p>To outline how grouping and then sorting data allows us to answer questions</p> <p>To explain that tools can be used to select specific data</p> <p>To explain that computer programs can be used to compare data visually</p> <p>To apply my knowledge of a database to ask and answer real-world questions</p> <p>Online Safety The world of Gaming online Children are taught about the benefits of using the internet as well as the dangers of online gaming</p>	<p>To explain how selection directs the flow of a program</p> <p>To design a program which uses selection</p> <p>To create a program which uses selection</p> <p>To evaluate my program</p> <p>Online Safety Social Networking As part of PSHE the children will discuss the risks of using social networking, including the sending of inappropriate images and messages and the security/privacy settings used on an account.</p>
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