

YEAR 4

CURRICULUM OVERVIEW

	Autumn		Spring		Summer	
	Digital Literacy		Computer Science		Information technology	
Years 1-6	Creativity	Communication and collaboration	Computer science	Coding	Networks and the internet	Productivity
	Creating and publishing	Communication and collaboration online	Modelling and simulations	Programming and control	Using technology	Digital media
					Using the internet	Using data

Topic/Unit	National Curriculum Objective	Learning Objectives	Resources for NC objectives and Skills	Skills	
AUTUMN Digital Literacy	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	<ul style="list-style-type: none"> - To understand the main risks associated with the internet. - To understand that they should not share certain types of personal information online. - To understand the school's acceptable use policy - To know how to report a worry or concern about inappropriate online behaviour 	Google - Adwords tool Google inside DB Primary Microsoft Powerpoint	1 st half Creativity Creating and publishing - Work together to create a website based on a topic, area of interest or event (for example using goggle sites) which incorporates hyperlinks, images and embedded media/documents. - Use ICT to create a finished product or set of linked products, making revisions to their work.	2 nd half Communication and collaboration Communication and collaboration online - Understand how e-mails work, and send e-mails between people within the woodlands-primary domain, including using the 'cc' and 'bcc' fields. - Use e-mail to e-mail work completed in school to their teachers and peers. - Collaborate with peers on a project to produce a finished piece to support topic work- using google documents within the woodlands-primary domain.

					- Contribute/edit/refine contributions to a shared document and understand that all changes are visible
SPRING Computer Science	<ul style="list-style-type: none"> - use sequence, selection, and repetition in programs; work with variables and various forms of input and output - understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration 	<ul style="list-style-type: none"> - To create a series of commands called procedures - To understand and explore different genres for controls -To understand that animations are made of a specific code - Transfer existing coding skills to a new program - To be able to name some of the hardware that connects computers and describe the functions - To take part in a simulation of how data is transmitted and describe the process - To be able to use and explain the use of ping, ipconfig and tracert commands - To consider ways in which their safety and privacy can be compromised by using the internet 	Scratch (website) Beebots Beebot programme Lego robotics (?)	1 st half Computer Science Modelling and simulations <ul style="list-style-type: none"> - Begin to use software to represent 3D objects or items. - Continue to explore simulations as appropriate and as link with other curriculum areas. 	2 nd half Coding Programming and control <ul style="list-style-type: none"> - <i>Begin to plan more complex sequences of instructions for on-screen and floor turtles, test and amend these instructions. (e.g. using RoboMind)</i> - Use computer game design software to plan, design and make their own, multi-level game, controllable by external inputs, changing parameters and responses. (e.gf using 2DIY)

<p>SUMMER</p> <p>Information Technology</p>	<p>- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p>	<p>- To carry out relevant searches developing keywords from a question</p> <p>-To be able to skim read and sift information to check its relevance and modify the search if necessary</p> <p>-To be able to use appropriate information to produce a report for a particular audience</p> <p>-To evaluate different search engines and explain their choices</p> <p>-To understand that many search engines have specific searches for specific media</p>	<p>- DB Primary - communicating between others using messages</p> <p>- Vocabulary cards in ICT room</p> <p>2Investigate Microsoft Excel Purple Mash (?) Paint.net Data loggers</p>	<p>1st half</p> <p>Networks and the internet</p> <p>Using technology</p> <p>Throughout KS2 children should:-</p> <p>- Continue to become familiar with a range of devices, for example tablets, desktop computers, laptops, microphones, cameras etc and increasingly develop their independence and confidence in using these devices.</p> <p>- Continue to increase their typing speed, and be encouraged to play games at home and school which help with this. Aim to reach the accepted competency rate for children of 20WPM by the end of Year 4.</p> <p>Be encouraged to increasingly make sensible choices about the technology they use to help them work, and to justify their choices- for example, why they have chosen to use a <i>tablet</i> rather than a laptop, or why they have chosen to use an <i>easi-speak</i> microphone rather than the computer to record sound.</p> <p>Using the internet</p> <p>- Know that they can use search engine tools for different types of media e.g. Google Image Search, video,</p>	<p>2nd half</p> <p>Productivity</p> <p>Digital media</p> <p>- Create simple stop motion animations.</p> <p>- Use a range of devices to create extended pieces of music using a wide range of pre-recorded samples.</p> <p>- Independently choose to record video for a range of purposes, paying attention to the quality of video capture.</p> <p>- Use a range of tools to create more complex images using a computer (no layering)</p> <p>- Edit video using a range of basic video editing applications.</p> <p>Continue to take photographs for a specific reason or project and/or find appropriate images on-line.</p> <p>Using data</p> <p>- Plan and create their own database, creating fields and applying simple data validation.</p> <p>- Use pre-made databases and those which they have created themselves to answer questions by constructing basic queries. Understand how to translate questions into queries to find information e..g to find the most common etc. -- Use</p>
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				<p>sound but understand that the results are not always what you expect</p> <ul style="list-style-type: none">- Be aware that web sites are not always accurate and that information should be checked before it is used.- Develop keywords and enter them into a chosen search engine, using more advanced search engine features.- Present their findings using a word processing or multimedia/publishing package for a specific audience	<p>other software to present these findings as appropriate</p> <p><i>Begin to use a spread sheet to enter data and create graphs.</i></p>
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