

WOODGRANGE INFANT SCHOOL KS1 Computing Curriculum

Knowledge and skills progression

Our computing curriculum lays the foundational skills for future learning. We aim for children to see computers and computing as a sources of information and tools for learning as well as entertainment and to spark their interest in developing deeper knowledge as they go on to KS2

Nursery	Although computing isn't included in the EYFS areas of learning we recognise that there are important pre skills necessary for children to have developed in order to be ready for the KS1 curriculum.
Reception	In EYFS children have experience of programmable toys, keyboards and simple programs for this purpose. We aim for them to understand that technology is entertaining but also a tool for learning and information. We introduce the idea of keeping safe when using technology.

YEAR 1	Algorithms	Create, predict and debug programs	Digital content	Online safety
TERM 1 A Mouse called Julian LAPTOPS	Follow simple oral algorithms Spot simple patterns	Introduce Beebots and directional language	Google maps - Locate my home using googling maps	Introduction to online safety How to login to Purple Mash
ENDPOINT	Sequence simple familiar tasks	Give instructions to beebots using directional language		Children can safely and independently login to Purple Mash and show awareness of how to stay safe online.
TERM 2 The last wolf	Create and complete a maze (Little Red to Grandma's house)			Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies
ENDPOINT	Maze Explorers (Purple Mash) Understand what algorithms are Write simple algorithms Understand the sequence of algorithms is important Debug simple algorithms Understand that algorithms are implemented as programs on digital devices			

<p>TERM 3 Traction man</p> <p>LAPTOPS</p>		<p>Understand that computer programs work by following instructions called code. Use code to make a computer program.</p> <p>Use object and action code blocks. Consider character (Traction Man) and program actions.</p>	<p>Take a digital self portrait and edit using pointillism.</p>	
<p>ENDPOINT</p>		<p>Plan and create a computer program inspired by Traction Man</p>		
<p>TERM 4 Prince Cinders</p> <p>- TABLETS</p>		<p>Maths Links Pictograms and Spreadsheets</p>	<p>Records a film using the camera app Select images and record a voiceover Highlight and zoom into images as they record</p>	
<p>ENDPOINT</p>		<p>To use a pictogram to record the results of an experiment (Absorbant materials)</p>	<p>Children will create a news report on what happened at the ball Write and record a script using a teleprompter tool. Use tools to add effects to a video Beginning to use green screen techniques with support</p>	
<p>TERM 5 Pattan's pumpkin</p> <p>- LAPTOPS</p>			<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	
<p>ENDPOINT</p>			<p>Children will - Record their voice over a picture Create a simple digital collage Move and resize images using their fingers or a mouse</p>	
<p>TERM 6 Leila & the secret of the rain</p>				<p>Explain why work they create using technology belongs to them Say why it belongs to them (e.g. 'it is my idea' or 'I designed it') Save work so that others know it belongs to them (e.g. filename, name on content)</p>
<p>ENDPOINT</p>			<p>Create a story with text, sounds and moving images. rewrite or create their own story.</p>	

YEAR 2	Algorithms	Create, predict and debug programs	Digital content	Online safety
TERM 1 LEAF TABLETS			Explore a range of artists and create digital artwork in their style	
ENDPOINT			<p>NC Ref: Pupils should be taught to: Co2/1.4 Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Choose a favourite artistic style and digitally create a piece of Arctic Art in the</p>	<p>Explain why work they create using technology belongs to them Say why it belongs to them (e.g. 'it is my idea' or 'I designed it') Save work so that others know it belongs to them (e.g. filename, name on content)</p>
TERM 2 Moth LAPTOPS		<p>Questioning</p> <p>Use a database to ask and answer questions</p> <p>Debugging</p>		
ENDPOINT			Collect information within the class (favourite minibeast?) and create a digital pictogramT	

<p>TERM 3 & 4 Lights on Cotton Rock Space</p> <p>3 - BEEBOTS 4 - LAPTOPS</p>	<p>TERM 4 Coding Sequence events in the story To understand what an algorithm is. To create a computer program using an algorithm. To create a program using a given design. To understand the collision detection event. To understand that algorithms follow a sequence. To design an algorithm that follows a timed sequence.</p>	<p>NC Ref: Pupils should be taught to: Co2/1.1 Write algorithms for everyday tasks Use logical reasoning to predict the outcome of algorithms Implement simple algorithms on digital devices (Bee Bots) Debug algorithms</p>		
<p>ENDPOINT</p>	<p>To create and code a space themed computer program</p>	<p>TERM 3 Create a path for the alien to follow using beebots Inspired by the little girl finding her way home.</p>		
<p>TERM 5 & 6 The secret of Black Rock Grace Darling</p> <p>Term 5 - Tablets</p>			<p>(Not Purple Mash, will need new slides)</p> <p>Need to be able to: use the space bar only once between words and use touch to navigate to words letter to edit Copy and paste images and text Use caps locks for capital letters Add images alongside text in a word processed document Dictate longer passages into a digital device with accurate punctuation</p>	<p>Term 5 This term children will be using the internet so online safety should be taught here.</p>
<p>ENDPOINT</p>			<p>Term 5 - Use the laptops to research.</p>	

			<p>Term 6 - Create a word document about the sea/Grace Darling. Include typed sentences, pictures and as a challenge, labelling.</p>	
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