

Whole school overview for Computing with impact (end points)

Cycle 1

Autumn			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Autumn 1- introducing technology around us e.g. IWB, iPads, BeeBots, etc.</p> <p>Autumn 2- use a camera or sound recorder to collect photos or sound during autumn walk</p>	<p>Autumn 1- Creating Media Digital photography - capturing and changing digital photographs for different purposes.</p> <p>Weather Reports (filmed) Seasonal photography (cross-curricular)</p> <p>Autumn 2- Computing systems and networks Information technology around us - identifying IT and how its responsible use improves our world in school and beyond.</p> <p>Internet research about weather systems.</p>	<p>Autumn 1- Computing Systems and Networks The Internet - recognising the internet as a network of networks including the WWW, and why we should evaluate online content.</p> <p>Google Maps, Street view Research about rivers – using search engines</p> <p>Autumn 2- Creating Media Audio editing – capturing and editing audio to produce a podcast, ensuring that copyright is considered.</p> <p>Christmas Podcast linked to RE or current affairs.</p>
Spring			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Spring 1 - press buttons on a floor robot (BeeBots) and talk about the movements.</p> <p>Spring 2 – online safety – how do we use technology around us safely?</p>	<p>Spring 1 – Programming Robot algorithms - creating and debugging programs and using logical reasoning to make predictions.</p> <p>Cross-curricular links to Maths and positional language.</p> <p>Spring 2 – Data and Information Pictograms – collecting data in tally charts and using attributes to organise and present data on an iPad.</p> <p>Cross-curricular links to Science and microhabitats. (Data and Information)</p> <p>Cross-curricular research about Christopher Columbus. (Computing systems and networks)</p>	<p>Spring 1 – Programming Repetition in shapes – using a text-based programming language to explore count-controlled loops when drawing shapes.</p> <p>Crazy Talk – Queen Victoria</p> <p>Turtle Playground</p> <p>Spring 2 - Data and Information Data logging – recognising how and why data is collected over time, before using data loggers to carry out an investigation.</p>

Summer			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Summer 1 – using paint to create a picture of a fairy tale</p> <p>Summer 2 - press buttons on a floor robot (BeeBots) and talk about the movements Creating a journey for the BeeBots to go on.</p>	<p>Summer 1 – Creating Media Making music – using an iPad as a tool to explore rhythms and melodies, before creating a musical composition.</p> <p>Cross Curricular links to Geography (using maps, Google Earth, Street view)</p> <p>Summer 2 – Programming Programming quizzes – designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.</p>	<p>Summer 1- Creating Media Stop-frame animation – capturing and editing digital still images to produce a stop-frame animation that tells a story.</p> <p>Cross-curricular links – History (Leisure and entertainment across the decades). Cross-curricular links – Art (Moving pictures)</p> <p>Summer 2 – Programming Repetition in games – using block-based programming language to explore count-controlled and infinite loops when creating a game.</p> <p>SCRATCH</p>

Cycle 2

Autumn			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Autumn 1- introducing technology around us e.g. IWB, iPads, BeeBots, etc.</p> <p>Autumn 2- use a camera or sound recorder to collect photos or sound during autumn walk</p>	<p>Autumn 1- Computing systems and networks Technology around us – recognising technology in school and using it responsibly. Recording weather reports on ipads Watch weather reports on YouTube (using technology responsibly)</p> <p>Autumn 2- Creating Media Digital painting – choosing appropriate tools in a program to create art and making comparisons with working non-digitally. Designing a toy using paint Art – link to current artist to research.</p>	<p>Autumn 1- Computing systems and networks Connecting computers – identifying that digital devices have inputs, processes and outputs and how devices can be connected to make networks.</p> <p>Autumn 2 – Creating Media Photo editing – manipulating digital images and reflecting on the impact of changes and whether the required purpose is fulfilled.</p> <p>Put yourself around the world/Mount Everest</p>

Spring			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Spring 1 - press buttons on a floor robot (BeeBots) and talk about the movements.</p> <p>Spring 2 – online safety – how do we use technology around us safely?</p>	<p>Spring 1 – Programming Moving a robot – writing short algorithms and programs for floor robots and predicting program outcomes. Programming a robot to go somewhere specific. Researching maps using the ipads (cross-curricular)</p> <p>Spring 2 – Data and Information Grouping data – exploring object labels, then using them to sort and group objects by properties. Sorting between old and new, properties etc.</p>	<p>Spring 1 – Programming Sequencing sounds – creating sequences in a block-based programming language to make music.</p> <p>Creating sound effects for stories (cross-curricular – English Myths and Legends)</p> <p>Spring 2 – Creating Media Desktop publishing – creating documents by modifying text, images, and page layouts for a specified purpose.</p> <p>Word processing/PowerPoint presentation</p> <p>Cross-curricular links to Geography (Europe)</p>
Summer			
	EYFS Intent	Computing KS1 Intent	Computing KS2 Intent
	<p>Summer 1 – using paint to create a picture of a fairy tale</p> <p>Summer 2 - press buttons on a floor robot (BeeBots) and talk about the movements Creating a journey for the BeeBots to go on</p>	<p>Summer 1 – Creating Media Digital writing – using an iPad to create and format text, before comparing to writing non-digitally. English (cross-curricular)</p> <p>Summer 2 – Programming Programming animations – designing and programming the movement of a character on screen to tell stories. Story writing – create own character and story using scratch</p>	<p>Summer 1 – Data and Information Branching databases – building and using branching databases to group objects using yes/no questions.</p> <p>Cross-curricular links to Science (Flowering plants)</p> <p>Summer 2 – Programming Events and actions in programs – writing algorithms and programs that use a range of events to trigger sequences of actions.</p> <p>SCRATCH</p>

IMPACT (end points)

	EYFS	Key Stage 1		Key Stage 2	
	YR	Y1	Y2	Y3	Y4
	<p>Children will be able to:</p> <ul style="list-style-type: none"> • talk about technology in their home and school. • use simple programming toys. • use the camera on an ipad. • record sounds and playback. • make pictures using programs. • using technology safely. • log on and log off. 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • create a series of instructions and plan a journey for a programmable toy. • create, store and retrieve digital content. • use a website and a camera. • record sounds and playback. • talk about some of the IT in their home. • use technology safely. • keep personal information private. 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • understand that algorithms are used on digital devices. • write a simple programme and test it. • predict what the outcome of a simple program will be (logical reasoning) • understand that programs require precise instructions. • organise, retrieve, and manipulate digital content. • know how technology is used inside and outside of school. • know where to go for help. 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • write programs that accomplish specific goals. • design a sequence of instructions, including directional instructions. • know when it is best to use technology and where it adds little or no value. • navigate the web to complete simple searches. • use a range of software for similar purposes. • collect and present information. • understand what computer networks do and how they provide multiple services. • use technology respectfully and responsibly. • know different ways to get help if concerned. 	<p>Children will be able to:</p> <ul style="list-style-type: none"> • give an 'on-screen' robot specific instructions which takes them from A to B. • experiment with variables to control models. • make an accurate prediction and explain why they believe something is happening (programming) • know how to search for specific information and know which is useful and which is not. • select and use software to accomplish given goals. • produce and upload a podcast. • recognise acceptable and unacceptable behaviour using technology. • know different ways to get help if concerned.