

Key Stage 2 Computing - The Aims of Our Curriculum

1. Enable children to retain and apply this essential knowledge. 2. Inspire children to become life-long learners. 3. Create a culture of high aspiration through challenging content and therefore pride in achievement. 4. Promote the spiritual, moral, social and cultural development of children, including fundamental British values of democracy, the rule of law, individual liberty, mutual respect and tolerance for those with different faiths and beliefs and for those without faith. 5. Provide opportunities for developing self-confidence, self-awareness, independence, creativity, respect and resilience in children. 6. Promote knowledge and understanding of how children can keep themselves safe and healthy. 7. Develop children's numeracy, literacy and oracy, including the sustained expansion of their vocabulary. 8. Promote reading as a life skill and enable our children to become life-long readers.

Year 5	Areas	Term 1	Term 2	Term 3
	Content	<p>Y5 – Introduction to network/frog/office 365</p> <p>KPI 6 Use a variety of software on a range of devices to accomplish goals</p> <ul style="list-style-type: none"> • Logging in and password security • Network drives • Saving work – naming conventions and folder structure • Logging in to frog and navigating the platform • Dashboards • Frogplay • Assignments • Logging in to office • Online applications <p>Sharing documents</p> <p>e-safety animation</p> <p>KPI 6 Use a variety of software on a range of devices to accomplish goals</p>	<p>Using Excel</p> <p>KPI 6 Use a variety of software on a range of devices to accomplish goals</p> <ul style="list-style-type: none"> • Formulas • Charts • Goal seek <p>Modelling</p> <p>NXT</p> <p>KPI 1 Design and write programs</p> <p>KPI 2 understand what variables are</p> <p>KPI 3 Work with various forms of input and output</p> <p>KPI 4 Begin to use logical reasoning to debug programs</p> <p>KPI 6 Use a variety of software on a range of devices to accomplish goals</p> <ul style="list-style-type: none"> • Using the NXT blocks to build programs – move, sound, display etc • Sequencing – The importance of placing blocks in the correct order, so the program runs how we want it 	<p>Introducing Ohbot</p> <p>KPI 1 Design and Write programs</p> <p>KPI 2 Understand what variables are</p> <p>KPI 4 Begin to use logical reasoning to debug programs</p> <ul style="list-style-type: none"> • Using the ohbot software – motors, values, toplip bottomlip variables etc • Sequence – how the order of blocks affect the order in which the commands are executed • Selection – if, then, else • Loops – repetition and iteration • Variables • Boolean operators • Broadcasts • Operators (=) <p>User input using the ask and wait block</p> <p>Further Ohbot – Sensors</p>

			<p>to.</p> <ul style="list-style-type: none"> • Variables – speed, rotations, time etc • Loops to make programs more efficient – drive in a square • Operators > and < • Sensors – light sensor, ultrasonic sensor. Follow a line – inputs and outputs <p>Selection – switches</p>	<p>KPI 1 Design and write programs that accomplish specific goals KPI 2 Work with variables KPI 3 Work with an increasing range of inputs and outputs KPI 4 Develop use of logical reasoning to debug algorithms and programs KPI 6 Use and combine a variety of software on a range of devices to accomplish goals</p> <ul style="list-style-type: none"> • If, then, else • Loops repetition, • Operators <,>= • Variables • Set x to Y
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	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <ul style="list-style-type: none"> • Researching safety – finding key information • How to create an animation by taking a series of still images • The importance of small movements • Add a drawing layer to create a mouth • Recording sound as an audio track • Importing media into movie plus • Editing in movie plus – text screens, music, scrolling text etc <p>Exporting final project as mp4</p>		
Literacy link	Writing scripts for animation	Vocabulary – sequence, selection, variable	
Assessment	Final video project	Practical tasks, final program project	Individual tasks. Final program project

	Cross curricular links	Art/Literacy	Maths, Science	Maths. Science.
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Year 6	Areas	Term 1	Term 2	Term 3
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<p>Content</p>	<p>PowerPoint skills and online safety</p> <ul style="list-style-type: none"> • There are rules of good design that apply in all contexts. These are consistent use of layout, fonts, colours etc. • Images should be used for a specific purpose. • Fake news is news or stories on the internet deliberately spread via news media or social media. • Clickbait is a sensationalized headline or piece of text on the Internet designed to entice people to follow a link to an article on another web page. Clickbait is primarily used to drive page views on websites, • Images should be used for a specific purpose on a presentation. <p>Hyperlinks are active areas on a page that when clicked take us to a different page, document or place in the document</p> <p>Networks including the internet KPI 7 - 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</p> <ul style="list-style-type: none"> • Web searches • Search Engines • Forms of communication • Communicating responsibly • When to share 	<p>Researching on the internet – reliability of information Green screen documentary</p> <p>KPI 5 – Use search engines effectively and be discerning in evaluating digital content</p> <p>KPI 6 – Use and combine a variety of software on a range of devices to accomplish goals</p> <ul style="list-style-type: none"> • That information on the internet is not always true • That we need to check the validity of information • That there are a number of ways we can check the information online <p>How to use the icanpresent software How to use the movieplus software</p>	<p>Scratch – Virtual Pet</p> <p>KPI 1 Design and write programs that accomplish specific goals KPI 2 Work with variables KPI 3 Work with an increasing range of inputs and outputs KPI 4 Develop use of logical reasoning to debug algorithms and programs</p> <ul style="list-style-type: none"> • Show and hide • When clicked • If, then, else • Take user input • Operators >, <, = • Variables • Costumes <p>If backgroundname = X etc</p> <p>Inputs and Outputs – Sensors KPI 3 – Work with an increasing range of inputs and outputs</p> <ul style="list-style-type: none"> • Sensors become useful when we use the data they provide in a program. • Different types of sensors can be used for different purposes. • Sensors can be used to make on screen objects respond to events in the real world.
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	Literacy link	Questions	Writing scripts. Speaking and Listening. Oracy.	
	Assessment	PowerPoint projects, online assessment	Final video project Online Assessment	Virtual pet project online assessment
	Cross curricular links	PHSE	Geography	Maths.