

Computing Overview

		Autumn Term		Spring Term			Summer Term		
EYFS	Wk 1	Weeks 2-5	Weeks 6-12/13	Weeks 1-4	Weeks 5-6	Weeks 7-10/11	Week 1	Weeks 2-9	Weeks 10-13
Year 1	FAMILIARISATION	<i>How do you use a computer to create text?</i> Unit 1 – computing systems and networks	<i>How do you use a computer to paint a picture?</i> Unit 2 – creating media	<i>What criteria have you used to group the objects?</i> Unit 4 – data and information		<i>How do you make a simple program to move a robot in four directions?</i> Unit 3 – Prog A – moving a robot		<i>What algorithm have you used in your program?</i> Unit 6 – Prog B – programming animations	<i>How have you written and edited your text?</i> Unit 5 – creating media – digital writing
		Identify and name main parts of a computer. Write and delete simple text.	Explore a paint program and produce a piece of work in the style of an artist.	Explore different ways to classify objects.	SAFER INTERNET DAY	Understand how to program (and debug a program) for a floor robot.	ASSESSMENT	Explore moving a sprite on-screen and learn some of the terminology associated with that process.	Explore a text program and be able to make some simple alterations to the text.
Year 2	FAMILIARISATION	<i>What purposes does IT have in the world today?</i> Unit 1 – computing systems and networks – IT around us	<i>What are the elements of a good photograph?</i> Unit 2 Creating media – digital photography	<i>How do I move from robot from A to B?</i> Unit 3 prog A – robot algorithms		<i>What information is shown in your pictogram?</i> Unit 4 data and information – pictograms		<i>How does your rhythm and sounds represent your chosen animal?</i> Unit 5 creating media – digital music	<i>How do your blocks affect your program?</i> Unit 6 prog B – programming quizzes
		Understand that IT devices have different purposes.	Understand how to take a good digital photograph.	Explore creating a sequence and predicting the outcome of it. Explain what an algorithm will achieve.		Explore using a computer program to present information in different ways.		Explore using a computer to create a music for a purpose.	Understand how to build a sequence of blocks for a specific design project.

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Year 3		Weeks 2-9 week 10:assessment	Weeks 11-13 and weeks 1-5 week 6:assessment	Weeks 7-10 and weeks 1-4 week 5: assessment	Weeks 6-9 and weeks 10-12 week 13:assessment
	FAMILIARISATION	<i>What does our school network look like?</i> Unit 1 – Computing systems and networks – Connecting computers	<i>What attributes have you used in your branching database?</i> Unit 4 – data and Information – Branching databases	<i>How does a sprite move?</i> Unit 6 – programming B – Events and actions in programs	<i>Why is desktop publishing used?</i> Unit 5 – Creating Media – Desktop publishing
		Know the roles of routers and switches in a network	Understand how a branching database can sort objects by attributes and know how to make one.	Explore the links between events and actions within programming. Explore movement blocks. Apply skills to create simple maze game	Understand the terms text and image and how they are used to communicate messages
Year 4	FAMILIARISATION	<i>How can you improve a photograph?</i> Unit 5 – Creating media – photo editing	<i>Why is repetition a key feature in programming games?</i> Unit 6 – programming B – Repetition in games	<i>How can sensors help us monitor the environment?</i> Unit 4 – data and information – data logging	<i>What is the internet and can you trust everything you read on it?</i> Unit 1 – Computing systems and networks – The Internet
		Pupils will learn how to edit, change and resave an image. They will consider the impact that editing changes can have.	Understand the differences between count-controlled and infinite loops. Similarities between Logo and Scratch programming languages and modify existing animations and games using repetition	Pupils will use sensors to collect data over a period of time. They will then look at, review and analyse the data collected.	Explore the WWW to find out who owns the content and what they can access, add & create

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Year 5	FAMILIARISATION	<i>How can you organise data?</i> Unit 4 – data and information – flat-file databases	<i>Can you make a video?</i> Unit 2 – creating media – video production	<i>How do search engines select and rank results?</i> Unit 1 – computing systems and networks – systems and searching	<i>Which computing concepts do you need to make an interactive quiz?</i> Unit 6 – Programming B – selection in quizzes
		Explore and interrogate a database to answer questions, create visual graphs with the data and present conclusions	develop the skills of capturing, editing, and manipulating video	Explore how search engines work and what influences searching	Use their understanding of algorithms, selection and conditions to design, program and evaluate a quiz.
Year 6	FAMILIARISATION	<i>What can we program the micro: bit to do?</i> Unit 6 – Programming B – sensing movement	<i>How is data transferred over the internet?</i> Unit 1 – computing systems and networks – communication and collaboration	<i>What makes a good website?</i> Unit 2 – creating media - web page creation	<i>How can a spreadsheet help you plan an event?</i> Unit 4 – data and information - spreadsheets
		This unit brings together elements of all the four programming constructs: sequence from Year 3, repetition from Year 4, selection from Year 5, and variables (introduced in Year 6 – ‘Programming A’) though the use of the BBC micro-bit	Explore the makeup and structure of data packets. Look at how the internet facilitates online communication & collaboration.	Pupils explore the process of designing a website, from copyright, fair use of media, the aesthetics of the site, and navigation paths, as they consider ‘what makes a good website?’	Explore the capabilities of spreadsheets, including using formulas. Begin to understand how they can be used to produce calculated data