Understanding the World – Technology - Computing overview

Playing & Exploring - Engagement	Active Learning - Motivation	Creating & Thinking Critically - Thinking
• Finding out & exploring • Playing with what they know • Being willing to 'have a go'	• Being involved & concentrating • Keep on trying • Enjoying achieving what they set out to do	• Having their own ideas (creative thinking) • Making links (building theories) • Working with ideas (critical thinking

ELG
None

Focus	Algorithms	Creating programs	Using technology	Use of IT beyond school	Safe use
Reception	• Develops digital literacy skills by being able to access, understand and interact with a range of technologies	• Completes a simple program on electronic devices	• Can create content such as a video recording, stories, and/or draw a picture on screen	• Begin to list different IT in their home	• Begin to give reasons why we need to stay safe online • Can use the internet with adult supervision to find and retrieve information of interest to them

Key Stage 1 National Curriculum Expectations	Key Stage 2 National Curriculum Expectations
Pupils should be taught to: • understand what algorithms are; how they are implemented as programs on digitaldevices; and that programs execute by following precise and unambiguous instructions; • create and debug simple programs; • use logical reasoning to predict the behaviour of simple programs; • use technology purposefully to create, organise, store, manipulate and retrieve digitalcontent; • recognise common uses of information technology beyond school; • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact onthe internet or other online technologies.	Pupils should be taught to: • design, write and debug programs that accomplish specific goals, including controllingor simulating physical systems; solve problems by decomposing them into smaller parts; • use sequence, selection, and repetition in programs; work with variables and variousforms of input and output; • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs; • 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; • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; • select, use and combine a variety of software (including internet services) on a rangeof digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information; • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

As a school, we have chosen the Kapow Computing Scheme of Work from Year 1 to Year 6. The scheme of work supports our teachers in delivering fun and engaging mixed age lessons, which help to raise standards and allow all pupils to achieve to their full potential. Option 1 – from long term plan for mixed age planning some subjects have been flexed to meet foundation subject links. Please refer to these document for further progression and planning information:

Mixed age long term plans
Mixed age progression of skills
Mixed age key skills and knowledge per unit
EYFS computing overview

Sheet Primary School Computing Overview

		Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Robins	All	Using a Computer	All About Instructions	Programming Bee-Bots		Exploring Hardware	Introduction to Data
	Key Area	COMPUTING SYSTEMS & NETWORKS	PROGRAMMING 1	PROGRAMMING 2		COMPUTING SYSTEMS & NETWORKS	DATA HANDLING
Kingfishers	Even	Algorithms unplugged	Digital Imagery	Introduction to Data	What is a computer?	Stop Motion	International Space Station
	Key Area	PROGRAMMING	CREATING MEDIA	DATA HANDLING	COMPUTING SYSTEMS & NETWORKS	CREATING MEDIA	DATA HANDLING
	Odd	Improving mouse skills	Bee-bots	Rocket to the moon	Scratch Jr	Algorithms and debugging	Word Processing
	Key Area	COMPUTING SYSTEMS & NETWORKS	COMPUTING SYSTEMS & NETWORKS	SKILLS SHOWCASE	PROGRAMMING	PROGRAMMING	COMPUTING SYSTEMS & NETWORKS
Herons	Even	Comparison cards	Emailing	Journey inside a computer	Collaborative Learning	Investigating weather	Computational Thinking
	Key Area	DATA HANDLING	COMPUTING SYSTEMS & NETWORKS	COMPUTING SYSTEMS & NETWORKS	COMPUTING SYSTEMS & NETWORKS	DATA HANDLING	PROGRAMMING
	Odd	Networks and the internet	Programming: Scratch	Video Trailers	Website Design	Further coding with Scratch	HTML
	Key Area	COMPUTING SYSTEMS & NETWORKS	PROGRAMMING	CREATING MEDIA	CREATING MEDIA	PROGRAMMING	SKILLS SHOWCASE
Kestrels	Even	Micro bit	Introduction to Python	Bletchley Park 1	History of Computers	Big Data 1	Big Data 2
	Key Area	PROGRAMMING	PROGRAMMING	COMPUTING SYSTEMS & NETWORKS	CREATING MEDIA	DATA HANDLING	DATA HANDLING
	Odd	Mars Rover 1	Mars Rover 2	Programming: Music	Stop Motion Animation	Search Engines	Invent a product

	Key Area	DATA HANDLING	SKILLS SHOWCASE	PROGRAMMING	CREATING MEDIA	COMPUTING SYSTEMS & NETWORKS	SKILLS SHOWCASE
ON-LINE SAFETY	Even	Even year teaching EG; Feb 24 – Y1/2 will do Y2	During February each year we take a non-timetabled day and spend the time looking closely at on-line safety as a whole school. However this is backed up by regular assemblies throughout the year, weekly newsletter articles to parents, annual online safety meeting presentation and a monthly online safety newsletter (produced by Knowsley City Learning Centres) and distributed to all parents.				
	Odd	Odd year teaching EG: Feb 25 – Y1/2 will do Y1					