Wootton Bassett Infants' School

Progression of skills in Computing

	Computational Thinking	EYFS	Year 1	Year 2	Resources	Vocabulary
Computer Science	Abstraction/Decomposition /Algorithms	2D/3D shapes- naming and labelling Story sequencing – Gingerbread Man, Were Going on a Bear Hunt, The Snowman and the Snowdog Labelling different parts of a dinosaur Labelling what's in your bucket (Billy's Bucket) Sorting nocturnal and non-nocturnal animals Sorting living/non-living animals geo boards/Peg boards patterns Following instructions to create artwork Construction toys Writing lists (Gruffalo's Child) Making gingerbread, Christmas cakes, Gruffalo crumble Weaving wall poring (jugs, syringes) Absorbency with sponges	• Understand what algorithms are; how they are implemented as programs on digital devices; 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.	• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. • Use sequence, selection and repetition in programs; work with variables and various forms 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.	Beebots, floor mice, mats Purple Mash (Y1 and Y2) Remote control cars Chromebooks Desktop computers - **J2e (online)** - Purple Mash - 2Simple	*algorithm, animation, code, computer, debugging, instructions, machine, program, sequence, command, delete, direction, left and right, route, undo, background, click, code blocks, coding, debug, object, output, run, scene, sound*
	Logical Reasoning	Floating and sinking Mixing colours Comparing weights/capacity Making dark boxes Penguin bottles (filled with ice)- melting ice Volcano making/erupting Retelling stories/rhymes				
	Pattern	Story sequencing Counting objects, comparing groups of objects Geo boards/Peg boards Threading Position of numbers Recognising and making repeating patterns Handwriting patterns Odds and evens patterns				
	Tinkering	Fine motor activities Continuous provisions- Role play area, construction toys, sand/water trays, small world, outdoor learning e.g. trucks, loose part play, mud kitchen				
	Collaboration	Continuous provisions (as above) Making dark boxes Creating class volcano Whole class art projects				
	Persevering	Continuous provisions (as above) Floating and sinking Making dark boxes Melting ice Erupting volcano ==Playing a range of interactive learning games using the desktop computers, Chromebooks and tablets==				
Information Technology	Creating	Expressive Arts and Design- Art projects e.g. paper plate crabs, leaf man, Christmas cards etc. Geo boards/peg boards Continuous provisions (as above)	• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	• 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 range of 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.	Purple Mash (Y1 and Y2) Chromebooks Desktop computers - Purple Mash - 2Simple - Nessy - Doodle Maths - Book Creator - Education City - Professor Assessor - Online educational websites iPad Walkie talkies LCD writing tablets Talking tins/recording devices Action Cam (Go Pro) CD player	*Button, device, file name, filter, home screen, icon, menu, search, tool bar, sort, data, compare, pictogram, totals, title, clip art, copy, e-book, edit, eraser, font, paint tools, redo, undo, voice recording, cell, column, image, lock cell, move cell, row, select, spreadsheet, value*
	Persevering	Continuous provisions (as above) Floating and sinking Making dark boxes Melting ice Erupting volcano ==Using 2Simple software to create pictures, patterns, music==				

| Digital Literacy | | E-Safety
- <mark>Taking part in Online Safety Day</mark> | • 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 on the internet or other online technologies. | • Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact. | | *alert, avatar, button, device, login, log out, notification, password, private, search, saving, digital footprint, personal information, protection, safety, reply, sharing, kind, unkind, polite, cyberbullying,* |