

EYFS				
	EYFS	Key area	Software	Equipment/Additional hardware
Autumn 1	All about Instructions (5 Lessons)	Programming		With the exception of the unit: Using a computer, all lessons can be carried out in the classroom or outdoor area, with no need for access to a computing suite or a class set of laptops. The play-based lessons focus on un-plugged skills (those learnt away from a computer) and build a strong foundation of knowledge needed for computing lessons in Key stage 1.
Autumn 2				
Spring 1	Introduction to data (5 lessons)	Data handling		
Spring 2	Exploring hardware (5 Lessons)	Computer systems and networks		
Summer 1	Programming Bee-Bots (5 Lessons)	Programming	Bee-bots (ideally 6) We have 7 in school – can be loaned from teach computing	
Summer 2	Using a Computer (5 Lessons)	Computer systems and networks	LAPTOPS Needed	

Cycle A

	Year 1/2	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Digital Imagery	Year 1	Creating Media	Microsoft photos Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• A selection of small people toys and animals/dinosaurs.</li> <li>• Picture book (optional).</li> <li>• Small world play characters – one person and one animal per group.</li> <li>• Digital cameras/tablets – maximum of one, per groups of four pupils.</li> </ul>
Autumn 2	Bee-Bots	Year 1	Programming	Bee-bots (ideally 6) We have 7 in school – can be loaned from teach computing	<ul style="list-style-type: none"> <li>• Building blocks.</li> <li>• Charged Bee-Bots or Blue-Bots (ideally six) – if you only have one then the pupils can take turns.</li> <li>• Fully charged digital recording devices, to record visuals and sound (digital cameras, tablets, laptops with webcams).</li> <li>• A large space, the school hall or playground.</li> <li>• Several coloured cones, depending on the size of the space.</li> </ul>
Spring 1	Introduction to data + Online safety Lesson 1	Year 1	Data Handling	Jit5 – pictograms Sketchpad	<ul style="list-style-type: none"> <li>• Counting apparatus e.g. cubes, lolly sticks etc.</li> <li>• Tablet or digital camera (more if you want children to take photos of their own work).</li> <li>• Clipboards – one per group of three or four pupils.</li> </ul>
Spring 2	Introduction to Block coding + Online safety Lesson 2	Year 2	Programming	Scratch JR (free just need to download it to laptops) Makecode - Microbits	<ul style="list-style-type: none"> <li>• Camera/recording device to record children's progress (optional).</li> <li>• Suitable age-appropriate joke books or jokes printed from online (optional).</li> <li>• Whiteboards and pens.</li> <li>• Scissors and glue sticks.</li> <li>• Strips of paper.</li> <li>• A4 paper.</li> </ul>
Summer 1	Stop Motion + Online safety Lesson 3	Year 2	Creating Media	Microsoft photos	<ul style="list-style-type: none"> <li>• Digital cameras.</li> <li>• Devices with 'Microsoft Photos' installed.</li> <li>• Sticky notes – nine/ten per pupil (optional).</li> <li>• Digital cameras or tablets (children can work in small groups or pairs depending on how many devices you have available).</li> </ul>
Summer 2	International space station + Online safety Lesson 4	Year 2	Data handling	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Put a thermometer in at least five different places around the school – preferably areas that will have different temperatures.</li> </ul>

Cycle B					
	Year 1/2	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Improving mouse skills + Online safety Lesson 1	Year 1	Computing systems and networks	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Mirrors or photography software.</li> </ul>
Autumn 2	Algorithms unplugged + Online safety Lesson 2	Year 1	Programming		<ul style="list-style-type: none"> <li>• Dressing up clothes and accessories, for example, scarves and hats.</li> <li>• Dice (one per pair of children).</li> <li>• Selection of reading books for sorting.</li> <li>• 2D shapes for drawing around.</li> </ul>
Spring 1	Rocket to the moon + Online safety Lesson 3	Year 1	Skills showcase	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Sturdy paper or firm card – two sheets per group.</li> <li>• A copy of the book Moonshot: The Flight of Apollo 11 by Brian Floca – copies can be found at bookstores and/or online.</li> <li>• Card.</li> <li>• Tape.</li> <li>• Cardboard boxes.</li> <li>• Plastic bottles – one per group.</li> <li>• Other materials such as foil, plastic packaging, felt tips, coloured paper, sequins, tissue paper etc.</li> <li>• Trundle wheels or metre sticks.</li> <li>• Foam javelin or your own bottle rocket to model launching a rocket.</li> </ul>
Spring 2	What is a computer? + Online safety Lesson 4	Year 2	Computing systems and networks	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Sticky notes for each table group – approximately 10 per group.</li> <li>• Clipboards – one per group of four pupils.</li> <li>• Tablets or digital cameras – one per group of four pupils.</li> <li>• 5 cameras or tablets for filming.</li> <li>• 10 whiteboards.</li> </ul>
Summer 1	Algorithms and debugging	Year 2	Programming	Scratch	<ul style="list-style-type: none"> <li>• Lego or building blocks.</li> <li>• Digital camera (optional).</li> <li>• Mini figures.</li> <li>• A3 paper to draw plan views.</li> <li>• Coloured pencils for any colour.</li> <li>• Partition wall, such as a piece of cardboard.</li> <li>• Flat surface, such as a desk.</li> </ul>
Summer 2	Word processing	Year 2	Computer systems and networks	Microsoft word	<ul style="list-style-type: none"> <li>• Pupils to select a book they like from the library or classroom.</li> <li>• A copy of 'The Gingerbread Man' or another well-known tale.</li> </ul>

Cycle A					
	Year 3/4	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Emailing	Year 3	Computing systems and networks	Microsoft Outlook	
Autumn 2	Programmming scratch	Year 3	Programming	Scratch	
Spring 1	Investigating Weather + Online safety Lesson 1	Year 4	Data Handling	Microsoft Excel Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>Recycled materials, such as plastic packaging, bottles, cardboard packaging.</li> <li>Tape.</li> <li>Split pins, pipe cleaners.</li> <li>Plastic or paper straws.</li> </ul>
Spring 2	Website design + Online safety Lesson 2	Year 4	Creating Media	Microsoft Sway Microsoft Word	
Summer 1	Journey inside a computer + Online safety Lesson 3	Year 3	Computing systems and networks	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>Pieces of string.</li> <li>Large sized paper – one piece per table.</li> <li>Felt tip pens – variety of colours on each table.</li> <li>Tablet or device with QR code scanner installed.</li> </ul>
Summer 2	Computational thinking + Online safety Lesson 4	Year 4	Programming	Scratch	<ul style="list-style-type: none"> <li>Prepare bead strings with repeated patterns.</li> <li>Prepare a short dance or hand clap sequence – long enough that the children won't be able to easily follow it.</li> <li>Plasticine (one per pair or small group).</li> <li>Dice.</li> </ul>

Cycle B					
	Year 3/4	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Networks and the internet + Online safety Lesson 1	Year 3	Computing systems and networks	Microsoft outlook	
Autumn 2	Video trailers + Online safety Lesson 2	Year 3	Creating Media	WeVideo <b>iMovie</b> (need to download)	<ul style="list-style-type: none"> <li>• Access to a selection of books that the children will be familiar with.</li> <li>• Cameras or tablets.</li> </ul>
Spring 1	Comparison cards databases + Online safety Lesson 3	Year 3	Data Handling	Microsoft Forms. Microsoft Excel	<ul style="list-style-type: none"> <li>• Example of paper databases such as an Argos catalogue or a phone book (optional).</li> </ul>
Spring 2	Collaborative Learning + Online safety Lesson 4	Year 4	Computing systems and networks	Microsoft Word Microsoft Forms Microsoft Excel	
Summer 1	Further coding with Scratch	Year 4	Programming	Scratch	
Summer 2	HTML	Year 4	Skills showcase	Trinket (free)	

Cycle A					
	Year 5/6	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Search Engines	Year 5	Computing systems and networks	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Non-fiction texts – at least one between three.</li> <li>• At least 15 each of the following – pencils, erasers, whiteboards and rulers (or other appropriate objects).</li> </ul>
Autumn 2	Programming 1: Music	Year 5	Programming	Scratch	<ul style="list-style-type: none"> <li>• Headphones (strongly recommended).</li> <li>• Headphone splitters (if pupils are sharing laptops).</li> <li>• Choose a story for the children to work with. Ideally, it should be something the children have been working on in English/Guided Reading, or you could choose a familiar, short picture book</li> </ul>
Spring 1	Big data 1 + Online safety Lesson 1	Year 6	Data Handling	Microsoft Excel	<ul style="list-style-type: none"> <li>• Range of working remotes (e.g. for an interactive whiteboard, television, stereo, etc) – ideally one per table.</li> <li>• Video recording devices, e.g. tablets, digital cameras or laptops with built-in cameras.</li> </ul>
Spring 2	Big Data 2 + Online safety Lesson 2	Year 6	Data Handling	Sketchpad (Paint or JIT5 as an alternative)	<ul style="list-style-type: none"> <li>• Access to an outdoor space, lines marked on the ground approximately ten meters apart.</li> <li>• One tennis racket between three pupils.</li> </ul>
Summer 1	Micro:bits + Online safety Lesson 3	Year 5	Programming	Micro-bits	<ul style="list-style-type: none"> <li>• BBC micro:bits and battery packs.</li> <li>• Micro USB cables if you're using laptops.</li> <li>• If you have no access to BBC micro:bits then use the online emulator available on the website.</li> </ul>
Summer 2	Bletchly Park and the history of computers + Online safety Lesson 4	Year 6	Computer systems and networks	Scratch, Powerpoint tinkerCAD	<ul style="list-style-type: none"> <li>• Access to internal microphones or USB microphones for the computers you are using.</li> <li>• Provide headphones if possible.</li> <li>• Outdoor space or large hall for the start of the lesson.</li> </ul>

Cycle B					
	Year 5/6	Usual Curriculum Year	Key area	Software	Equipment/Additional hardware
Autumn 1	Mars Rover 1 + Online safety Lesson 1	Year 5	Data Handling		
Autumn 2	Mars Rover 2 + Online safety Lesson 3	Year 5	Data Handling	Microsoft Excel TinkerCAD	<ul style="list-style-type: none"> <li>• Squared or graph paper – one per pupil.</li> </ul>
Spring 1	Stop motion animation + Online safety Lesson 3	Year 5	Creating Media	Microsoft photos	<ul style="list-style-type: none"> <li>• Plasticine to create objects/characters.</li> <li>• Plastic containers or cellophane to wrap children's creations with.</li> <li>• Cameras – one between four (minimum).</li> </ul>
Spring 2	Exploring AI + Online safety Lesson 4	Year 6	Computing systems and networks	Kidgeni (website). Trinket	<ul style="list-style-type: none"> <li>• Devices with internet access (one between two).</li> <li>• Blank paper (one each).</li> </ul>
Summer 1	Introduction to Python	Year 6	Programming	Turtle academy, trinket, Scratch	
Summer 2	Inventing a Product	Year 6	Skills showcase	Micro-bit TinkerCAD Microsoft sway WeVideo	<ul style="list-style-type: none"> <li>• BBC micro:bits and battery packs.</li> <li>• Micro USB cables if you're using laptops.</li> <li>• If you have no access to BBC micro:bits then use the online emulator available on the website</li> </ul>