St Charles RC Primary School
Computing Curriculum Map
2024-2025

Term	Nursery	Reception	Year 1	Year 2	Year 3 and 3/4	Year 4	Year 5	Year 6
Autumn	Children play with a range of battery operated and cause and effect toys.	Children have the language skills to give simple single instructions Children use simple programmes on the IWB (eg busy things) with support	**Safety Rules** **Computing systems and networks** Learning how to login and navigate around a computer; developing mouse skills; learning how to drag, drop, click and control a cursor to create works of art Kapow-Improving mouse skills **Online Safety** ESafety Kapow-online safety	**Safety Rules** **Computing systems and networks 1** Exploring what a computer is by identifying how inputs and outputs work and how computers are used in the wider world. Kapow-What is a computer? **Online Safety** ESafety Kapow-online safety	**Safety Rules** **Computing systems and networks 1** Learning what a network is and how devices communicate and share information. Kapow-Networks **Online Safety** ESafety Kapow-online safety	**Safety Rules** **Computing systems and networks** Exploring a range of collaborative tools. Kapow-Collaborative learning **Online Safety** ESafety Kapow-online safety	**Safety Rules** **Computing systems and networks** Learning about how pagerank works and how to identify inaccurate information. Kapow-Search engines **Online Safety** ESafety Kapow-online safety	**Safety Rules** **Computing systems and networks** Discovering the history of Bletchley and learning about code breaki*ng* Kapow-Bletchley PArk **Online Safety** ESafety Kapow-online safety

Spring	Children listen to instructions. Children can follow simple two step instructions. Children are able to use a simple paint programme on the IWB with support.	Children are able to follow simple process based instructions including those that involve Positional language Children are starting to understand that they can find information using computers.	**Programming 1** Identifying where algorithms, decomposition and debugging can be found in relatable, familiar contexts. Kapow-Algorithms unplugged **Creating media** Taking and editing photos, searching for and adding images to a project. Kapow-Digital imagery **Online Safety** ESafety Kapow-online safety	**Programming 1** Developing an understanding of; what algorithms are Kapow-Algorithms and debugging **Data Handling** Learning how data is collected, used and displayed Kapow-International Space Station	**Computing systems and networks 3** Understanding how a computer works Kapow-Journey inside a computer **Creating media** Developing digital video skills to create trailers, with special effects and transitions. Kapow-Video trailers	**Programming 1** Revisiting the key features of the programme Scratch and beginning to use 'variables' in code scripts. Kapow-Further coding with Scratch **Data Handling** Researching and storing data on spreadsheets Kapow-Investigating weather	**Creating media** Creating animations Kapow-Stop motion animation **Programming** Building-on programming and music skills to create different sounds Kapow-Programming music	**Creating media** Learning about how computers have evolved. Kapow-History of Computers **Programming** Using the programming language 'Python' to create designs and art. Kapow-intro to Python
Summer	Children are able to follow simple process based instructions including those that involve Positional language Children are able to take turns on the IWB with support.	Children have the language skills to give simple instructions Children use a mouse to create a picture on an art programme.	**Programming 2** Introducing programming through the use of a robot (Bee-Bot) and exploring its functions. Kapow-Bee-bot	**Programming 2** Exploring what 'blocks' do' by carrying out an informative cycle of predict > test > review. Kapow-ScratchJr	**Programming** Exploring the programme Scratch, following the predict > test > review cycle. Using 'loops' and programming an	**Programming 2** Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.	**Data Handling** Learning about the Mars Rover, exploring how and why it transfers	**Data Handling** Identifying how barcodes and QR codes work. Learning how infrared

		Children use Ipad and other cameras to take pictures	Option 2 Virtual Beebot **Online Safety** ESafety Kapow-online safety	**Online Safety** ESafety Kapow-online safety	animation, story and game. Kapow-Programming: Scratch **Online Safety** ESafety Kapow-online safety	Kapow-Computational thinking **Online Safety** ESafety Kapow-online safety	data including instructions Kapow-Mars Rover 1 **Online Safety** ESafety Kapow-online safety	waves are used while recognising the uses of RFID. Kapow-Big data 1 **Online Safety** ESafety Kapow-online safety