

## **Laying the foundations for Computing**

## At LCPS Pupils are taught:

- To explore technology within their play prior to using it formally.
- The knowledge and relevant vocabulary about their immediate environment.
- To develop their understanding of technologies used in the world around them, from mobile phones and programmable toys to pedestrian crossings.
- Common uses of control technology.
- To be responsible, competent, confident and creative users of information and communication technology.
- How to be safe online.

Links to the NC	Little Learners 2 Year olds and N1 learn to:	Nursery 3 and 4 year olds learn to:	Reception In Reception children learn to:
Computer Science	With support, begins to understand how to operate simple equipment, e.g. turns on CD player, uses a remote control, can navigate touch-capable technology with support.	Understand how to operate simple equipment, e.g. turns on CD player, uses a remote control, can navigate touch-capable technology with support.	Complete a simple program on electronic devices (Bee Bots, Codapillars,2 Simple).  Know that an algorithm is a set of instructions to carry out a task, in a specific order.
	Follow instructions as part of practical activities and games.  Understand the meaning of directional arrows and follow a simple sequence of instructions.	Give simple instructions.  Experiment with programming a Bee-Bot/Blue-Bot developing familiarity with algorithms.	Use logical reasoning to read and give simple instructions and predict the outcome.  Understanding how to debug instructions, with the help of an adult, when things go wrong.
	Shows an interest in technological toys with knobs or pulleys, real objects such as cameras, and touchscreen devices such as mobile phones and tablets.  Repeat actions that have an effect.	Explore how things work (hardware tinker tray).  Children play with and investigate mechanical equipment (wind-up toys, pulleys, sets of cogs with pegs and board).	Independently explore how things work.  Children play with and investigate mechanical equipment (wind-up toys, pulleys, sets of cogs with pegs and board).
	Use, and pretend to use technology purposefully.	Use technology purposefully to create digital content.	Use technology purposefully to create content such as a video recording, stories, and/or draw a picture on screen (ipads, cameras, 2Simple).



Information Technology		Know the different parts of a computer: mouse, screen, keyboard.	Start to use a mouse and a keyboard effectively developing basic skills, including typing, moving and clicking and using an online paint tool.
		Begin to use simple programmes to support learning.	Use ICT hardware to interact with age appropriate computer software.
		Listen to a range of music.	Select and listen to a range of music from hardware.
Digital Literacy	To use technology safely and respectfully.	With support, begin to recognise common uses of information technology beyond school.  To use technology safely and respectfully.	Begin to recognise common uses of information technology beyond school.
		Begin to understand that information can be retrieved from digital devices and the internet.	To use technology safely and respectfully.
	Name and recognise uncomfortable, embarrassed and upset emotions.	Recognise, online or offline, that they can say 'no thank you'/ 'please stop'/ 'I'll tell'/'I'll ask' to something that makes them feel sad,	Talk about how to use the internet as a way of finding information online and identify devices they could use to access information on the internet.  Identify some simple examples of their personal
		uncomfortable, embarrassed or upset.	information (e.g. name, address, birthday, age, location) and describe who would be trustworthy to share this information with.