

## **Computing at Meadowcroft**

The National Curriculum (2014) states: A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

**Computing in EYFS** The early learning goals that previously linked to computing (EYFS technology) have been removed from the Early Years Foundation Stage Framework 2020. There is no mention of the teaching of technology in the education programmes or development matters document either. We understand how important it is that children develop their technology skills and will continue to use a range of technology to support and enhance learning in other areas of the curriculum. For example, the children will continue to use the Bee-Bots when learning about direction and will use Ipads to listen to and watch animated stories, watch videos linked to our topics and play games to develop phonic and number skills.

#### What computing looks like in the Early Years...

- Daily access to a range of technology resources such as torches with switches, remote controlled cars, beebots, talking tins, voice-recording toys, as well as class ipads and interactive whiteboards.
- Use a range of technology resources to support learning in other areas of the curriculum.
- Taught how to use the resources for different purposes eg ipads to watch videos, play games, take photographs and listen to stories

**Computing in KS1 and KS2** is taught following topics that cover all aspects of the National Curriculum requirements. This is taught following the recommendations set out in Purple Mash (an online computing platform for schools). The summary of topics is outlined below:

# **All Unit Summary**

Predominant Computing strand\*

	Computer Science
	Information Technology
	Digital Literacy

Most units will include aspects of all strands

## Early Years (Reception)

Rather than a scheme with set lessons, the early years resources are designed to integrate into the day-today routine and set-up of an early years setting with opportunities for using Mini Mash or Purple Mash as part of the Early Years curriculum to support children in working towards early learning goals.

In addition, there are units of suggested ideas that focus on computing skills specifically, that can also be provided as opportunities for learning as part of the topics in other areas to give children a sound basis to explore topics using technology and to be ready for progressing through the Computing curriculum. These are as follows and are designed to be integrated and linked to wider early years curriculum areas. These have been loosely classified into the three streams but there is overlap between all three streams.

Mouse and Trackpad Skills	Keyboard Skills	Drawing skills	Robots	Sounds	Photography
Technology Around Us	Hardware	Safety and Privacy	Quizzes	Using Purple Mash with an Individual Login	

#### Year 1

	Unit 1.1	Unit 1.2	Unit 1.3	Unit 1.4	Unit 1.5	Unit 1.6	Unit 1.7	Unit 1.9
	Online Safety & Exploring Purple Mash	Grouping & Sorting	Pictograms	Lego Builders	Maze Explorers	Animated Story Books	Coding	Technology outside school
Number of lessons	4	2	3	3	3	5	6	2
Main tool			2Count		2Go	2Create A Story	2Code	

#### Year 2

	Unit 2.1	Unit 2.2	Unit 2.3	Unit 2.4	Unit 2.5	Unit 2.6	Unit 2.7	Unit 2.8
	Coding	Online Safety	Spreadsheets	Questioning	Effective Searching	Creating Pictures	Making Music	Presenting Ideas
Number of lessons	6	3	6	5	3	5	3	4
Main tool	2Code		2Calculate	2Question 2Investigate		2Paint A Picture	2Sequence	

## Year 3

	Unit 3.1	Unit 3.2	Unit 3.3	Unit 3.4	Unit 3.5	Unit 3.6	Unit 3.7	Unit 3.8	Unit 3.9	Unit 3.10
	Coding	Online safety	Spreadsheets	Touch Typing	Email (inc. email safety)	Branching Databases	Simulations	Graphing	Presenting	micro: bit
# lessons Main tool	6 2Code	3	6 2Calculate	4 2Type	6 2Email	4 2Question	3 2Simulate	2 2Graph	5\6*  Power  Point or  Google  Slides	Free code micro: bit

<sup>\*</sup>Platform dependent

## Year 4

	Unit 4.1 Coding	Unit 4.2 Online Safety	Unit 4.4 Writing for Different Audiences	Unit 4.5 Logo	Unit 4.6 Animation	Unit 4.7 Effective Searching	Unit 4.8 Hardware	Unit 4.9 Making Music	Unit 4.10	Unit 4.11 microsbit
# lessons	6	4	5	4	3	3	2	4	4	4
Main tool	2Code			2Logo	2Animate			Busy Beats		Free code micro: bit

## Year 5

	Unit 5.1	Unit 5.2	Unit 5.3	Unit 5.4	Unit 5.5	Unit 5.6	Unit 5.7	Unit 5.8	Unit 5.9	Unit 5.10
	Coding	Online Safety	Spreadsheets	Detabeses	Game Creator	3D Modelling	Concept Maps	Word Processing	External Devices	micro:bit
# lessons	6	3	6	4	5	4	4	7/8*	6	4
Main tool	2Code		2Calculate	2Investiga te	2DIY 3D	2Design & Make	2Connect	MS Word or Google Docs	2Code Purple Chip	Free code micro:bit

<sup>\*</sup>Platform dependent

## Year 6

	Unit 6.1	Unit 6.2	Unit 6.4	Unit 6.5	Unit 6.6	Unit 6.7	Unit 6.8	6.9
	Coding	Online Safety	Blogging	Text Adventures	Networks	Quizzing	Understanding Binary	Spreadsheets
# lessons	6	2	4	5	3	6	4	8
Main tool	2Code		2Blog			2Quiz		Excel or Google Sheets