

Curriculum overview for parents and carers

Computing

Summary of key Computing learning for Reception to Year 5/6.



EYFS: Reception			
Autumn 1	Computing through continuous provision Exploring different forms of technology in the children's daily classroom play.	Autumn 2	Computing systems and networks
			Using a computer Discovering the main parts of a computer and how to use the keyboard and mouse. Learning how to log in and out.
Spring 1	Programming 1	Spring 2	Computing systems and networks
	All about instructions Receiving and giving instructions and understanding the importance of precise instructions.		Exploring hardware Tinkering and exploring with different computer hardware and learning to operate a camera.
Summer 1	Programming 2	Summer 2	Data handling
	Programming Bee-Bots Learning about directions, experimenting with programming a Bee-Bot/Blue-Bot and tinkering with hardware.		Introduction to data Sorting and categorising data and introducing branching databases and pictograms.

Year 1/2 Cycle B

	Year 1/2 Cycle B		
	Programming 1		Creating media
Autumn 1	Programming Bee-Bots Introducing programming through the use of a robot (Bee-Bot) and exploring its functions.	Autumn 2	Digital imagery Taking and editing photos, searching for and adding images to a project.
	Data handling		Programming 2
Spring 1	Introduction to data Learning what data is and the different ways it can be represented. Learning why data is useful and the ways it can be gathered and recorded.	Spring 2	MakeCode Exploring Microsoft MakeCode, planning and building a program. ScratchJr Exploring what 'blocks' do' by carrying out an informative cycle of predict > test > review. Programming a familiar story and make a musical instrument.
	Creating media		Data handling
Summer 1	Stop Motion Learning how to create simple animations from storyboarding creative ideas.	Summer 2	International Space Station Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans, to survive.
	Online safety		
Online safety	Online safety Y2 Learning: how to keep information safe and private online; who we should ask before sharing things online and how to give, or deny permission online.		

Year 3/4 Cycle B

	Year 3/4 Cycle B		
Autumn 1	<p>Computing systems and networks</p> <p>Networks Learning what a network is and how devices communicate and share information.</p>	Autumn 2	<p>Data handling</p> <p>Comparison cards databases Learning about records, fields and data and sorting and filtering data.</p>
Spring 1	<p>Computing systems and networks</p> <p>Journey inside a computer Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.</p>	Spring 2	<p>Computing systems and networks</p> <p>Collaborative learning Learning how to work collaboratively and exploring a range of collaborative tools.</p>
Summer 1	<p>Data handling</p> <p>Investigating weather Researching and storing data on spreadsheets and designing a weather station.</p>	Summer 2	<p>Computing systems and networks</p> <p>HTML Learning about the markup language behind a webpage; becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remixing' a live website.</p>
Online safety	<p>Online safety</p> <p>Online safety Y4 Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.</p>		

Year 5/6 Cycle B

Year 5/6 Cycle B			
Autumn 1	Programming 1	Autumn 2	Creating media
	Programming music Building-on programming and music skills to create different sounds, beats and melodies which are put to the test with a Battle of the Bands performance!		Stop motion animation Creating animations, storyboard ideas and decomposing a story into small parts before putting together to create the illusion of a moving image.
Spring 1	Computing systems and networks	Spring 2	Data handling
	Search engines Learning about how pagerank works and how to identify inaccurate information.		Big data 1 Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID.
Summer 1	Data handling	Summer 2	Creating media
	Big data 2 Further developing understanding of how networks and the Internet are able to share information. Learning how big data can be used to design smart buildings.		Intro to Python Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.
Online safety	Online safety		
	Online safety Y6 Learning to deal with issues online; about the impact and consequences of sharing information online; how to develop a positive online reputation; combating and dealing with online bullying and protective passwords.		