

Computing Scheme of Work

Fordcombe C of E Primary School

EYFS + Y1

Autumn 1	Computing systems and networks	Autumn 2	Programming 1
	Improving mouse skills (5 lessons) 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		Algorithms unplugged (5 lessons) Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific.
Spring 1	Skills showcase	Spring 2	Programming 2
	Rocket to the moon (5 lessons) Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.		Programming Bee-Bots (5 lessons) (Option 1: Bee-Bot) (Option 2: Virtual Bee-Bot) Introducing programming through the use of a Bee-Bot and exploring its functions.
Summer 1	Creating media	Summer 2	Data handling
	Digital imagery (5 lessons) Taking and editing photos, searching for and adding images to a project.		Introduction to data (5 lessons) 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.
Online safety	Online safety		
	Online safety Y1 (5 lessons) Learning how to stay safe online and how to manage feelings and emotions when someone or something has upset us.		

Computing Scheme of Work

Fordcombe C of E Primary School

Y2+Y3+Y4

Even year start

Autumn 1	Computing systems and networks	Autumn 2	Programming
	Networks (5 lessons) Learning what a network and how devices communicate and share information.		Scratch (5 lessons) Exploring the programme Scratch, following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.
Spring 1	Computing systems and networks	Spring 2	Computing systems and networks
	Emailing (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Sending emails with attachments and understanding what cyberbullying is.		Journey inside a computer (5 lessons) Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.
Summer 1	Creating media	Summer 2	Data handling
	Video trailers (5 lessons) (Option 1: Using devices other than iPads) (Option 2: Using iPads) Developing digital video skills to create trailers, with special effects and transitions.		Comparison cards databases (5 lessons) Learning about records, fields and data and sorting and filtering data.
Online safety	Online safety		
	Online safety Y3 (5 lessons) Learning: the difference between fact, opinion and belief; and how to deal with upsetting online content. Knowing how to protect personal information online.		

Computing Scheme of Work

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Y2+Y3+Y4

Odd year start

	Computing systems and networks		Programming
Autumn 1	Collaborative learning (5 lessons) (Option 1: Google) (Option 2: Microsoft Office) Learning how to work collaboratively and exploring a range of collaborative tools.	Autumn 2	Further coding with Scratch (5 lessons) Revisiting the key features and beginning to use 'variables' in code scripts.
Spring 1	Website design (5 lessons) (Option 1: Google) (Option 2: Microsoft Office 365) Learning how web pages and sites are created and how to embed media and links.	Spring 2	HTML (5 lessons) Learning about the markup language behind a webpage; becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remix' a live website.
Summer 1	Creating media Computational thinking (5 lessons) Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.	Summer 2	Investigating weather (5 lessons) Researching and storing data on spreadsheets and designing a weather station.
Online safety	Online safety Online safety Y4 (5 lessons) Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.		

Computing Scheme of Work

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Y5-Y6

Even year start

Autumn 1	Computing systems and networks	Autumn 2	Programming 1
	Search engines (5 lessons) Learning about how page rank works and how to identify inaccurate information.		Programming: Music (5 lessons) 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!
Spring 1	Data handling	Spring 2	Programming 2
	Mars Rover 1 (5 lessons) Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.		Micro:bit (5 lessons) Creating algorithms and programs that are used in the real world. Using the 'predict, test and evaluate' cycle to create and debug programs with specific aims.
Summer 1	Creating media	Summer 2	Skills showcase
	Stop motion animation (5 lessons) (Option 1: Stop Motion Studio) (Option 2: with cameras) Creating animations, storyboard ideas and decomposing a story into small parts before putting together to create the illusion of a moving image.		Mars Rover 2 (5 lessons) Exploring how the Mars rover: moves, follows instructions, collects and sends data; understanding how computers work, what data is and how it is transferred.
Online safety	Online safety		
	Online safety Y5 (5 lessons) Learning about app permissions; the positive and negative aspects of online communication; that online information is not always factual; how to deal with online bullying and managing our health and wellbeing.		

Computing Scheme of Work

Fordcombe C of E Primary School

Y5-Y6

Odd year start

Autumn 1	Computing systems and networks	Autumn 2	Computing systems and networks
	Bletchley Park and the history of computers (5 lessons) Discovering the history of Bletchley Park, historical figures and the importance of code breaking and passwords. Designing a computer of the future and creating an audio advert for their designs.		Exploring AI (5 lessons) Exploring what AI is and how it generates text, images and code. Learning about creating and refining prompts to improve AI responses while also considering the ethical implications of AI and its potential to replace human roles.
Spring 1	Data handling	Spring 2	Programming
	Big data 1 (5 lessons) Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID.		Intro to Python (5 lessons) Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.
Summer 1	Data handling	Summer 2	Skills showcase
	Big data 2 (5 lessons) 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.		Inventing a product (5 lessons) Designing a product, pupils: evaluate, adapt and debug code to make it suitable for their needs and designing products in CAD and creating a website and video.
Online safety	Online safety		
	Online safety Y6 (6 lessons) 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.		