

St. Joseph's R.C. Primary School
Computing Curriculum Plan



	Autumn 1	Autumn 2	Spring 1	Summer 1	Summer 2
Reception	Computing systems and networks 1	Programming 1	Computing systems and networks 2	Programming 2	Introduction to Data
	Using a computer	All about instructions	Exploring hardware	Bee-Bots	
	Lesson 1: Keyboards WALT: locate relevant keys on a keyboard	Lesson 1: Following instructions WALT: follow instructions as part of practical activities and games	Lesson 1: Exploring hardware WALT: explore and tinker with hardware to develop familiarity and introduce relevant vocabulary	Lesson 1: Understanding arrows WALT: follow a simple sequence of instructions	Lesson 1: Loose parts play WALT: sort and categorise objects
	Lesson 2: Logging in and out WALT: log in and out and understand why this is important	Lesson 2: Giving simple instructions WALT: guide a partner through an obstacle course by giving instructions	Lesson 2: Real world WALT: recognise that a range of technology is used in places such as homes and schools	Lesson 2: Introducing Bee-Bots WALT: experiment with programming a Bee-Bot	Lesson 2: Sorting ourselves WALT: explain how items have been sorted and categorised
	Lesson 3: Mouse Control WALT: control a mouse with moving the cursor and clicking	Lesson 3: Dressing up instructions WALT: give and follow instructions as part of practical activities and games	Lesson 3: Pictures of play WALT: operate a camera and take pictures.	Lesson 3: Bee-Bot programming WALT: give simple commands and debug instructions when things go wrong.	Lesson 3: Yes or No? WALT: sort and categorise objects and explain how they have been sorted
	Lesson 4: Mouse control – clicking WALT: use the mouse to create digital art	Lesson 4: Debugging instructions (washing hands) WALT: carry out a task in a specific order and debug when things go wrong	Lesson 4: Picture walk WALT: further develop our photography skills	Lesson 4: Understanding algorithms WALT: follow an algorithm as part of an unplugged game	Lesson 4: Creating a branching database WALT: explore and understand the concept of branch databases
	Lesson 5: Mouse control – clicking and dragging WALT: hold down our finger on the mouse as we move an object across the screen.	Lesson 5: Predictions WALT: reason to predict an outcome given a simple set of instructions	Lesson 5: Class photo album WALT: to create a class gallery	Lesson 5: Programming a Bee-Bot WALT: programme a Bee-Bot with simple commands and debug instructions when things go wrong.	Lesson 5: Exploring pictograms WALT: read a simple pictogram and represent data in a pictogram

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Computing Systems & Networks	Programming 1	Online Safety	Creating Media	Programming 2	Data Handling
	Improving mouse skills	Algorithms Unplugged		Digital Imagery	Beebot	Introduction to data
	Lesson 1: Logging In WALT: log in to a computer and access a website	Lesson 1: What is an algorithm? WALT: understand and explain what an algorithm is.	Lesson 1: Using the internet safely WALT: know what the internet is and how to use it safely	Lesson 1: Planning a photo story WALT: understand and create a sequence of pictures	Lesson 1: Getting to know a Bee-Bot WALT: explore a new device	Lesson 1: Zoo data WALT: represent data in different ways.
	Lesson 2: Click and drag skills WALT: develop mouse skills	Lesson 2: Algorithm pictures WALT: follow instructions precisely to carry out an action	Lesson 2: online emotions WALT: understand different feelings when using the internet	Lesson 2: Taking photos WALT: take clear photos	Lesson 2: Making a Bee-Bot video WALT: create a demonstration video	Lesson 2: Picture data WALT: use technology to represent data.
	Lesson 3: Drawing shapes WALT: use mouse skills to draw and edit shapes	Lesson 3: Virtual assistants WALT: understand and explain that computers and devices around us use inputs and outputs	Lesson 3: Always be kind and considerate WALT: understand how to treat others, both online and in-person	Lesson 3: Editing photos WALT: crop, resize and add colour filters in order to improve my photo	Lesson 3: Precise instructions	Lesson 3: Minibeast hunt WALT: collect and record data
	Lesson 4: Drawing a story WALT: draw a scene from a story using digital tools	Lesson 4: Step by step WALT: understand and explain what decomposition is	Lesson 4: Posting and sharing online WALT: understand the importance of being careful about what we post and share online	Lesson 4: Searching for images WALT: search for and import images	Lesson 4: Bee-Bot world WALT: program a device WALT: plan and follow a precise set of instructions	Lesson 4: Animal branching databases WALT: sort data
	Lesson 5: Self Portrait WALT: create a self-portrait using digital techniques	Lesson 5: Debugging directions WALT: know how to debug and algorithm		Lesson 5: Photo Collage WALT: create a photo collage	Lesson 5: Three little Pigs WALT: create a program that tells a story	Lesson 5: Inventions WALT: design an invention to gather data

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	Computing Systems & Networks 1	Computing Systems & Networks 2	Programming 1	Online Safety	Data Handling	Programming 2
	What is a computer?	Word processing	Algorithms & Debugging		International Space Station	Scratch Jr
	Lesson 1: Computer parts WALT: recognise parts of a computer	Lesson 1: Getting to know the keyboard WALT: begin to learn to touch type	Lesson 1: Dinosaur algorithm WALT: decompose a game to predict the algorithms that are used.	Lesson 1: What happens when I post online? WALT: understand what happens to information posted online.	Lesson 1: Home in space WALT: understand how computers can help humans survive in space	Lesson 1: Using Scratch Jr WALT: explore a new application
	Lesson 2: Inputs WALT: recognise how technology is controlled	Lesson 2: Getting started with word processing WALT: understand how to use a word processor	Lesson 2: Machine learning WALT: understand that computers can use algorithms to make predictions (machine learning).	Lesson 2: How do I keep my things safe online? WALT: know how to keep things safe and private online	Lesson 2: Space bag WALT: create a digital drawing of essential items for life in space	Lesson 2: Creating an animation WALT: create an animation
	Lesson 3: Technology safari WALT: recognise technology	Lesson 3: Newspaper writer WALT: understand how to add images to a text document	Lesson 3: Through the maze WALT: plan algorithms that will solve problems.	Lesson 3: Who should I ask? WALT: explain what should be done before sharing information	Lesson 3: Warmer, colder WALT: understand the role of sensors on the ISS	Lesson 3: Making a musical instrument WALT: use characters as buttons
	Lesson 4: Invention WALT: create a design for an invention	Lesson 4: Poetry book WALT: create a poetry book using sources from the internet	Lesson 4: Making maps WALT: understand what abstraction is.	Lesson 4: It's my choice WALT: explain why I have the right to say no and deny permission.	Lesson 4: Experiments in space WALT: create an algorithm for growing a plant in space	Lesson 4: Programming a joke WALT: follow an algorithm
	Lesson 5: Real-world role play WALT: understand the role of computers	Lesson 5: Digital writer WALT: create a digital piece of writing	Lesson 5: Unplugged debugging WALT: understand what debugging is.	Lesson 5: Is it true? WALT: understand strategies that will help me decide if something seen online is true or not	Lesson 5: Goldilocks plants WALT: interpret data	Lesson 5: 'The Three Little Pigs' algorithms WALT: plan and use code to create an algorithm

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	Computing Systems & Networks	Programming	Online Safety	Data Handling	Programming	Creating media
	Networks and the Internet	Scratch		Comparison cards databases	Stop motion	Video trailers
	Lesson 1: What is a network? WALT: recognise what a network is	Lesson 1: Tinkering with scratch WALT: explore a programming application	Lesson 1: Beliefs, opinions and facts on the internet WALT: understand how the internet can be used to share beliefs, opinions and facts	Lesson 1: Records, fields and data WALT: understand the terminology around databases	Lesson 1: What is animation? WALT: understand what animation is	Lesson 1: Book trailer WALT: plan a book trailer
	Lesson 2: A file's journey WALT: demonstrate how information moves around a network	Lesson 2: Using loops WALT: use repetition (a loop) in a program	Lesson 2: When being online makes me upset WALT: understand the effects that some internet use can have on our feelings and emotional wellbeing	Lesson 2: Race against the computer WALT: compare paper and computerised databases	Lesson 2: What is a stop motion? WALT: understand what stop motion animation is	Lesson 2: Filming WALT: take photos or videos that tell a story
	Lesson 3: How a website works WALT: demonstrate how a website works	Lesson 3: Making an animation WALT: program an animation	Lesson 3: Sharing of information WALT: understand the ways personal information can be shared on the internet	Lesson 3: Sorting and filtering WALT: sort, filter and interpret data	Lesson 3: My first animation WALT: create a stop motion animation	Lesson 3: Editing the trailer WALT: edit a video
	Lesson 4: Routers WALT: explore the role of a router	Lesson 4: Storytelling WALT: program a story	Lesson 4: Rules of social media platforms WALT: understand the rules for social media platforms	Lesson 4: Representing data WALT: represent data in different ways	Lesson 4: Planning my project WALT: plan my stop motion animation	Lesson 4: Transitions and text WALT: add text and transitions to a video
	Lesson 5: What is packet data? WALT: identify the role of packet data.	Lesson 5: Programming a game WALT: program a game	Lesson 5: Informative poster WALT: share our knowledge of being safe online	Lesson 5: Planning a holiday WALT: sort data for a purpose	Lesson 5: Creating my project WALT: create my stop motion animation	Lesson 5: Video review WALT: evaluate video editing

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 4	Computing Systems & Networks	Programming 1	Online Safety	Data Handling	Programming 2	Creating Media
	Collaborative Learning	Further coding with Scratch		Investigating Weather	Computational Thinking	Website Design
	Lesson 1: Teamwork WALT: understand that software can be used to work online collaboratively	Lesson 1: Scratch reminder WALT: recall the key features of scratch	Lesson 1: What happens when I search online WALT: describe how to search for information with a wide group of technologies and make a judgement about the probable accuracy	Lesson 1: What's the weather? WALT: log data taken from online sources in a spreadsheet	Lesson 1: What is computational thinking? WALT: understand that computational thinking is made up for 4 key strands	Lesson 1: Getting to know Microsoft Sway WALT: explore the features of Microsoft Sway
	Lesson 2: Sharing a document WALT: understand how to contribute to someone else's work effectively	Lesson 2: Identifying what code does WALT: understand how a Scratch game works by using decomposition to identify key features	Lesson 2: How to companies encourage us to buy online? WALT: describe some of the methods used to encourage people to buy things online	Lesson 2: Weather stations WALT: design a weather station	Lesson 2: Decomposition WALT: understand what decomposition is and how to solve problems	Lesson 2: Book review webpage WALT: plan content for a collaborative webpage
	Lesson 3: Microsoft Forms 1 WALT: understand how to create a digital survey	Lesson 3: Introduction to variables WALT: understand what a variable is and how to make one	Lesson 3: Fact, opinion or belief? WALT: explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.	Lesson 3: Extreme weather WALT: design an automated machine to respond to sensor data	Lesson 3: Abstraction and pattern recognition WALT: understand what pattern recognition and abstraction mean	Lesson 3: Adding features WALT: create an engaging webpage
	Lesson 4: Microsoft Forms 2 WALT: Create and share a Microsoft form	Lesson 4: Making a variable WALT: understand how to make a variable in Scratch	Lesson 4: What is a bot? WALT: explain that technology can be designed to act like or impersonate living things	Lesson 4: Satellites and forecasts WALT: understand how weather forecasts are made	Lesson 4: Algorithm design WALT: understand how to create an algorithm and what it can be used for	Lesson 4: Planning my website WALT: plan and create a website
	Lesson 5: Shared spreadsheets WALT: analyse data	Lesson 5: Times tables project WALT: Use knowledge of how variables work to create a quiz	Lesson 5: What is my TechTimetable like? WALT: explain how technology can be a distraction and identify when I might need to limit the amount of time spent using technology	Lesson 5: Presenting forecasts WALT: use tablets or digital cameras to present a weather forecast	Lesson 5: Applying computational thinking WALT: combine computational thinking skills to solve a problem	Lesson 5: Creating my website WALT: create and evaluate a website

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	Computing Systems & Networks	Data Handling	Online Safety	Creating Media	Programming	Programming
	Search Engines	Mars Rover 1		Stop Motion Animation	Scratch	Micro:bit
	Lesson 1: Searching basics WALT: understand what a search engine is and how to use it	Lesson 1: Mars Rover WALT: identify how and why data is collected from space	Lesson 1: Online protection WALT: understand how apps can access our personal information and how to alter the permissions	Lesson 1: Animation explored WALT: understand what animation is	Lesson 1: Tinkering with Scratch music elements WALT: tinker with Scratch music elements	Lesson 1: Tinkering with BBC Micro:bit WALT: tinker with a new piece of software
	Lesson 2: Inaccurate information WALT: be aware that not everything online is true	Lesson 2: Binary code WALT: read and calculate numbers using binary code	Lesson 2: Online communication WALT: be aware of the positive and negative aspects of online communication	Lesson 2: Exploring stop motion WALT: understand what stop motion is	Lesson 2: Scratch soundtracks WALT: create a program that plays themed music	Lesson 2: Programming an animation WALT: program an animation
	Lesson 3: web quest WALT: search effectively	Lesson 3: Computer architecture WALT: identify the computer architecture of the Mars Rovers	Lesson 3: Online reputation WALT: understand how online information can be used to form judgements	Lesson 3: Planning my stop motion project WALT: plan my stop motion video, thinking about the characters I want to use	Lesson 3: Planning a soundtrack WALT: plan a soundtrack program	Lesson 3: Polling program WALT: recognise coding structures
	Lesson 4: Information poster WALT: create an informative poster	Lesson 4: Using binary numbers WALT: use simple operations to calculate big patterns	Lesson 4: Online bullying WALT: discover ways to overcome bullying	Lesson 4: Stop motion creation WALT: create a stop motion animation	Lesson 4: Programming a soundtrack WALT: program a soundtrack	Lesson 4: Programming a pedometer WALT: create a program for a specific task
	Lesson 5: Web crawlers WALT: understand how search engines work	Lesson 5: Using binary text WALT: represent binary as text	Lesson 5: Online health WALT: understand how technology can affect health and wellbeing	Lesson 5: Editing my stop motion WALT: edit and assess my stop motion animation	Lesson 5: Battle of the bands WALT: program music for a specific purpose	Lesson 5: Programming a scoreboard WALT: create a program

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	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	Computing Systems & Networks	Data Handling	Online Safety	Creating Media	Programming	Skills Showcase
	Bletchley Park	Big Data		History of Computers	Introduction to Python	Inventing a product
	Lesson 1: Secret codes WALT: understand there are many different types of secret codes	Lesson 1: Barcodes WALT: identify how barcodes and QR codes work	Lesson 1: Life online WALT: describe issues online that give us negative feelings and knows ways to get help	Lesson 1: Playing with sound WALT: tinker with sound	Lesson 1: Tinkering with Logo WALT: tinker with a new piece of software	Lesson 1: Invention design WALT: design an electronic product
	Lesson 2: Brute force hacking WALT: understand the importance of having a secure password	Lesson 2: Transmitting data WALT: know how infrared waves transmit data	Lesson 2: Sharing online WALT: think about the impact and consequences of sharing online	Lesson 2: Radio plays WALT: record, edit and add sound effects to a radio play	Lesson 2: Nested loops WALT: understand nested loops	Lesson 2: Coding and debugging WALT: code and debug a program
	Lesson 3: Bletchley Park WALT: understand the importance of Bletchley Park to World War II	Lesson 3: RFID WALT: recognise how RFID is used	Lesson 3: Creating a positive online reputation WALT: know how to create a positive online reputation	Lesson 3: First computers WALT: understand how computers have changed and the impact this has had on the modern world	Lesson 3: Using python WALT: understand basic Python commands	Lesson 3: Computer Aided Design WALT: use CAD to design a product
	Lesson 4: Computing heroes WALT: research historical figures that contributed to technological advances in computing	Lesson 4: Using RFID WALT: input and analyse real-world data	Lesson 4: Capturing evidence WALT: be able to describe how to capture bullying content as evidence	Lesson 4: Computers that changed the world WALT: research one of the computers that changed the world and present information about	Lesson 4: Using loops in Python WALT: use loops when programming	Lesson 4: My product's website WALT: create a website
	Lesson 5: Computing heroes WALT: research and present information about historical figures in computing	Lesson 5: Transport data WALT: analyse and evaluate data	Lesson 5: Password protection WALT: manage personal passwords effectively	Lesson 5: Future computer WALT: design a computer of the future	Lesson 5: Coding Mondrian WALT: understand the use of random numbers	Lesson 5: Video advert WALT: create and edit a video
			Lesson 6: Think before you click WALT: be aware of strategies to help be protected online			Lesson 6: Persuasive advertisements WALT: understand the techniques used in advertising a product