



St Augustine's Computing MTP 2023-2024

Cedar (EYFS Topics)

	Week 1	Week 2	Week 3	Week 4	Week 5
Advent Term	Computing through continuous provision				
Advent Term 2	Computer Systems and Networks 1: Using a computer Learning about the main parts of a computer and how to use the keyboard and mouse. Learning how to log in and out.				
	Keyboards Learning what a keyboard is and how to locate relevant keys	Logging in and out Learning to log in and out	Mouse Control Learning what a mouse is and developing control when using a mouse	Mouse control – clicking Developing basic mouse skills, including moving and clicking, and using an online paint tool	Mouse control – clicking and dragging Further developing mouse skills, to include the ability to click and drag
Lent Term 1	Programming 1: All about instructions The children learn to receive and give instructions and understand the importance of precise instructions.				
	Following instructions The class follow instructions as part of practical activities and games	Giving simple instructions Children guide a partner through an obstacle course to develop an understanding of giving simple instructions	Dressing up instructions The children follow instructions as part of a dressing up game and learn to give simple instructions	Debugging instructions (washing hands) Children follow instructions as part of a practical handwashing activity and to learn to debug when things go wrong	Predictions Pupils learn that an algorithm is a set of instructions to carry out a task, in a specific order. They use logical reasoning to read simple instructions and predict the outcome
Lent Term 2	Computing Systems and Networks 2: Exploring hardware Tinkering and exploring with different computer hardware and learning to operate a camera.				
	Exploring hardware tinker tray Pupils explore and tinker with different hardware and introduced to the relevant vocabulary	Real work tinker tray Children explore and tinker with hardware and identify where technology is used in places that they are familiar with, such as homes and school	Pictures of play Children learn to operate a basic camera to take photographs of their independent play	Picture walk Children further develop their photography skills, taking photos of their discoveries on a walk around the school grounds	Class photo album Working with an adult, children take selfie photographs to create a class gallery
Pentecost Term 1	Programming 2: Programming Bee-bots Children learn about directions, experiment with programming a Bee-bot and tinker with hardware.				
	Understanding arrows Children learn the meaning of directional arrows and follow a simple sequence of instructions	Introducing a Bee-bot Children experiment with programming a Bee-bot and tinker with hardware to develop familiarity and introduce relevant vocabulary	Simple Bee-bot programming Children experiment with programming a Bee-bot and learn how to give simple commands	Understanding algorithms Children follow an algorithm as part of an unplugged game and learn to debug instructions when things go wrong	Programming a Bee-bot Children experiment with programming a Bee-bot and learning how to give simple commands. The children learn how to debug with the help of an adult, when things go wrong
Pentecost Term 2	Data Handling: Introduction to data Children sort and categorise data and are introduced to branching databases and pictograms.				
	Loose parts play Children sort and categorise objects	Sorting ourselves Children sort themselves into groups based upon given categories before undertaking this activity independently	Yes or no? Children respond to yes/no questions as an introduction to branching databases	Creating a branching database Children learn branching databases through physical sorting and categorising	Exploring pictograms Children learn to interpret a basic pictogram



St Augustine's Computing MTP 2023-2024

Sycamore (Year 2 Topics)

	Prior Knowledge	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Advent Term 1	Computing systems and networks 1: Using a computer (EYFSA2)	Computer Systems and Networks 1: What is a computer? Exploring what a computer is by identifying how inputs and outputs work and how computers are used in the wider world to design their own computerised invention.				
		Computer parts To recognise the parts of a computer	Inputs To recognise how technology is controlled	Technology safari To recognise technology	Invention To create a design for an invention	Real world roleplay To understand the role of computers
Advent Term 2	Programming 1: Algorithms unplugged (Y1A2)	Programming 1: Algorithms and debugging Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient, introduction of loops.				
		Dinosaur algorithm To decompose a game to predict the algorithms that are used	Machine learning To understand that computers can use algorithms to make predictions (machine learning)	Through the maze To plan algorithms that will solve problems	Making maps To understand what abstraction is	Unplugged debugging To understand what debugging is
Lent Term 1	Skills Showcase: Rocket to the moon (Y1L1)	Computer Systems and Networks 2: Word Processing Developing touch typing skills, learning keyboard shortcuts and simple editing tools.				
		Getting to know the keyboard To begin to learn to touch type	Getting started with word processing To understand how to use a word processor	Newspaper writer To understand how to add images to a text document	Poetry book To create a poetry book using sources from the internet	Digital writer To create a digital piece of writing
Lent Term 2	Programming 1: Algorithms and debugging (Y2A2)	Programming 2: Programming ScratchJr (option 1 - using tablet devices) Exploring what 'blocks' do' by carrying out an informative cycle of predict > test > review. Programming a familiar story and make a musical instrument.				
		Using ScratchJr To explore a new application	Creating an animation To create an animation	Making a musical instrument To use characters as buttons	Programming a joke To follow an algorithm	'The Three Little Pigs' algorithms To plan and use code to create an algorithm
Pentecost Term 1	Creating media: Digital imagery (Y1P1)	Creating Media: Stop Motion (option 1 – using tablet devices) Learning how to create simple animations from storyboarding creative ideas.				
		What is animation? To understand what animation is	What is stop motion? To understand what stop motion animation is	My first animation To create a stop motion animation	Planning my project To plan my stop motion animation	Creating my project To create my stop motion animation
Pentecost Term 2	Data handling: Introduction to data (EYFSP2/Y1P2)	Data Handling: 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.				
		Homes in space To understand how computers can help humans survive in space	Space bag To create a digital drawing of essential items for life in space	Warmer, colder To understand the role of sensors on the ISS	Experiments in space To create an algorithm for growing a plant in space	Goldilocks planets To interpret data

Online Safety: 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.



St Augustine's Computing MTP 2023-2024

Olive (Year 3 Topics)

	Prior Knowledge	Week 1	Week 2	Week 3	Week 4	Week 5
Advent Term 1	Computing systems and networks 1: What is a computer? (Y2A1)	Computer Systems and Networks 1: Networks and the internet (option 2 – Microsoft Office 365) Learning what a network is and how devices communicate and share information.				
		What's a network? To understand what a network is and understand our school network	A file's journey To understand how information moves around a network and begin to recognise real world networks	A website's journey To understand how the internet works and explain a website's journey	Routers To explore the role of routers	Understanding packets To understand the role of packets
Advent Term 2	Programming 2: Scratch Jr (Y2L2)	Programming: Programming: Scratch Exploring the programme Scratch, following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.				
		Tinkering with Scratch To explore programming application	Using loops To use repetition (a loop) in a programme	Making an animation To programme an animation	Storytelling To programme a story	Programming a game To programme a game
Lent Term 1	Computing systems and networks 2: Word processing (Y2L1)	Computer Systems and Networks 2: Emailing (option 2 – Microsoft Office 365) Sending emails with attachments and understanding what cyberbullying is.				
		Communicating with technology To understand how we communicate with technology	Sending an email To understand what emails are and how to send one	Adding attachments To know how to create an email with an attachment	Be kind online To understand the importance of being kind online	Fake emails To recognise when an email is not genuine
Lent Term 2	Computing systems and networks 1: What is a computer? (Y2A1)	Computer Systems and Networks 2: Journey inside a computer Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.				
		Inputs and outputs To recognise basic inputs and outputs	Building a paper laptop To decompose a laptop	Following instructions To understand the purpose of computer parts	Computer memory To understand the purpose of computer parts	Dismantling a tablet To decompose a tablet computer
Pentecost Term 1	Creating media: Stop Motion (Y2P1)	Creating Media: Video trailers (option 2 – using iPads) Developing digital video skills to create trailers, with special effects and transitions.				
		Planning a book trailer To plan a book trailer	Filming To take photos or videos to tell a story	Editing the trailer To edit a video	Transitions and text To add text and transitions to a video	Video trailers To evaluate video editing
Pentecost Term 2	Data handling: International Space Station (Y2P2)	Data Handling: Comparison cards databases Learning about records, files and data and sorting and filtering data.				
		Records, fields and data To understand the terminology around databases	Race against the computer To compare paper and computerised databases	Sorting and filtering To sort, filter and interpret data	Representing data To represent data in different ways	Planning a holiday To sort data for a purpose

Online Safety: Learning the difference between fact, opinion and belief; and how to deal with upsetting online content. Knowing how to protect personal information online.



St Augustine's Computing MTP 2023-2024

Acacia and Willow (Year 4 Topics)

	Prior Knowledge	Week 1	Week 2	Week 3	Week 4	Week 5
Advent Term 1	Computer systems and networks 2: emailing (Y3L1)	Computer Systems and Networks: Collaborative Learning (option 2 – Microsoft Office 365) Learning how to work collaboratively and exploring a range of collaborative tools.				
		Teamwork To understand that software can be used to work online collaboratively	Sharing a document To understand how to contribute to someone else's work effectively	Microsoft Forms 1 To understand how to create a digital survey	Microsoft Forms 2 To create and share a Microsoft Form	Shared spreadsheets To analyse data
Advent Term 2	Programming: Scratch (Y3A2)	Programming 1: Further coding with Scratch (option 2 – Microsoft Office 365) Revisiting the key features and beginning to use 'variables' in code scripts.				
		Scratch reminder To recall the key features of Scratch	Identifying what code does To understand how a Scratch game works by using decomposition to identify key features	Introduction to variables To understand what a variable is and how to make one	Making a variable To understand how to make a variable in Scratch	Times tables project To use knowledge of how variables work to create a quiz
Lent Term 1	Computing systems and networks: Collaborative learning (Y4A1)	Creating Media: Website design (option 2 – Microsoft Office 365) Learning how web pages and sites are created and how to embed media and links.				
		Getting to know Microsoft Sway To explore the features of Microsoft Sway	Book review webpage To plan content for a collaborative webpage	Adding features To create an engaging webpage	Planning my website To plan and create a website	Creating my website To create and evaluate a website
Lent Term 2	Creating media: website design (Y4L1)	Skills Showcase: HTML 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.				
		Introduction to HTML To understand and identify examples of HTML tags	Remixing HTML To change HTML code for a specific purpose	Changing HTML and CSS To change the HTML and CSS to alter the appearance of an object on the web	Website hacking To understand and explore complex components of a web page	Replacing images To alter key elements on a web page including text and images
Pentecost Term 1	Programming 1: Algorithms and debugging (Y2A2)	Programming 2: Computational thinking Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.				
		What is computational thinking? To understand that computational thinking is made up of four key strands.	Decomposition To understand what decomposition is and how to apply it to solve problems.	Abstraction and pattern recognition To understand what pattern recognition and abstraction mean	Algorithm design To understand how to create an algorithm and what it can be used for	Applying computational thinking To combine computational thinking skills to solve a problem
Pentecost Term 2	Data handling: Comparison cards databases (Y3P2)	Data Handling: Investigating weather (option 2 – Microsoft Office 365) Researching and storing data on spreadsheets and designing a weather station.				
		What's the weather? To log data taken from online sources within a spreadsheet	Weather stations To design a weather station	Extreme weather To design an automated machine to respond to sensor data	Satellites and forecasts To design an automated machine to respond to sensor data	Presenting forecasts To use tablets or digital cameras to present a weather forecast

Online Safety: Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.



St Augustine's Computing MTP 2023-2024

Juniper (Year 5 Topics)

	Prior Knowledge	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
Advent Term 1	Computing systems and networks: Collaborative learning (Y4A1)	Computer Systems and Networks: Search engines (option 2 – Microsoft Office 365) Learning about how page rank works and how to identify inaccurate information				
		Searching basics To understand what a search engine is and how to use it	Inaccurate information To be aware that not everything online is true	Web quest To search effectively	Information poster To create an informative poster	Web crawlers To understand how search engines work
Advent Term 2	Programming 1: Further coding with Scratch (Y4A2)	Programming 1: Programming music (option 2 – Scratch) 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!				
		Tinkering with Scratch music elements To tinker with Scratch music elements	Scratch soundtracks To create a program that plays themed music	Planning a soundtrack To plan a soundtrack program	Programming a soundtrack To program a soundtrack	Battle of the bands To program music for a specific purpose
Lent Term 1	Data handling: investigating weather (Y4P2)	Data Handling: Mars Rover 1 Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.				
		Mars Rover To identify how and why data is collected from space	Binary code To read and calculate numbers using binary code	Computer architecture To identify the computer architecture of the Mars Rovers	Using binary – numbers To use simple operations to calculate bit patterns	Using binary – text To represent binary as text
Lent Term 2	Programming music (Y5A2)	Programming 2: Micro:bit 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				
		Tinkering with BBC Micro:bit To tinker with a new piece of software	Programming an animation To program an animation	Polling program To recognise coding structures	Programming a pedometer To create a program for a specific task	Programming a scoreboard To create a program
Pentecost Term 1	Creating media: website design (Y4L1)	Creating Media: Stop motion animation (option 1 – Stop motion studio) Creating animations, storyboard ideas and decomposing a story into small parts before putting together to create the illusion of a moving image.				
		Animation explored To understand what animation is	Exploring stop motion To understand what stop motion animation is	Planning my stop motion project To plan my stop motion video, thinking about the characters I want to use	Stop motion creation To create a stop motion animation	Editing my stop motion project To edit and assess my stop motion animation
Pentecost Term 2	Data handling: Mars Rover 1 (Y5L1)	Skills showcase: Mars Rover 2 Exploring how the Mars rover: moves, follows instructions, collects and sends data; understanding how computers work, what data is and how it is transferred.				
		Pixels To understand how bit patterns represent images as pixels	Compressing images To explain how the data for digital images can be compressed	Fetch, decode, execute To identify and explain the 'fetch, decode, execute' cycle	Tinkering with CAD To create a safe online profile and tinker with 3D design software	TinkerCAD tutorials To modify the design of a 3D object using CAD software

Online Safety: 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.