



Computing Curriculum Coverage

Computing is split into five units; Online Safety (Term 1), Computing Systems and Networks (Term 2), Creating Media (Term3), Programming A (Term 4), Data and Information (Term 5) and Creating Media (Term 6).

Early Years Foundation Stage

At St Gregory School we recognise that future engagement with computing will depend on how well introductory curricula prepare children therefore despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, there are opportunities for our young children to use and discuss technology throughout our EYFS curriculum design. Our EYFS curriculum is very fluid and regularly reviewed to ensure we provide opportunities and experiences that meet the needs, interests and development of all children.

EYFS computing curriculum coverage:

CURRICULUM MAP & COVERAGE – EYFS (2023-2024)

Topic Name	TERM 1 Super me!	TERM 2 Let's Celebrate	TERM 3 Our Wonderful World	TERM 4 Food, glorious, food	TERM 5 All Things Wild	TERM 6 Whizz, Pop, Bang!
Core Texts	Supertato	Thread of love	The Queen's Hat	The Hungry Caterpillar	Dear Zoo	Instructions - How to make gloop
Computing <i>Although computing is not included within Development Matters or within the ELGs, it is still vitally important that children enter Year 1 with a strong foundation of knowledge. Computing in EYFS also ensures that children develop listening skills, problem-solving and questioning. We know the importance of our children understanding digital literacy.</i>	Taking photographs with the VTECH camera Choosing filters and games on the camera Watching videos and exploring music on the interactive whiteboard Using mobile/house phones in house role play Discuss and create online safety rules for class and home Identifying age appropriate apps and programmes for our age Share online safety rules with parents	Continue taking photographs with the camera Watching videos and exploring music on the interactive whiteboard Technology within role play area Using sound button flowers in outside area to record messages and play them back Introduce Beebots and following simple algorithms with our own bodies eg. tum left, take one step forward Revisit online safety rules Identifying age appropriate TV shows/streaming platforms	Playing age appropriate games on the interactive whiteboard Selecting favourite songs and videos Revisit Beebots Using iPads/digital cameras to take pictures on a local walk Introduce walkie talkie headsets Revisit online safety rules Know who to talk to about digital safety Visit from digital safeguarding team	Playing age appropriate games on the interactive whiteboard Revisiting Beebots and create own simple algorithms Using keyboards to type Introduce class laptop trolley Revisiting online safety rules Discussing the use of passwords and personal information	Construct pictograms (children's favourite fruit) Carry out surveys and discuss results (favourite food) Revisiting Beebots and create own simple algorithms Visit the computer room or have laptop trolley once a fortnight Using a mouse Make marks using 2Paint Changing the colour of paintbrush on 2Paint Revisit online safety rules	Naming parts of a computer (screen, mouse, keyboard) Open and close pictures made in 2Paint/Microsoft Paint Adding a text box and typing names onto 2Paint/Microsoft Paint Revisit online safety rules



We recognise that keeping our children safe is of paramount importance therefore we discreetly teaching Online Safety termly in EYFS:

Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
I know the rules for keeping ourselves safe online.	I can use a range of technology safely.	I can play age appropriate games on the Internet.	I understand what password privacy means.	I can discuss appropriate TV programmes and websites.	I can talk about who can help me if I feel uncomfortable/unsafe online.

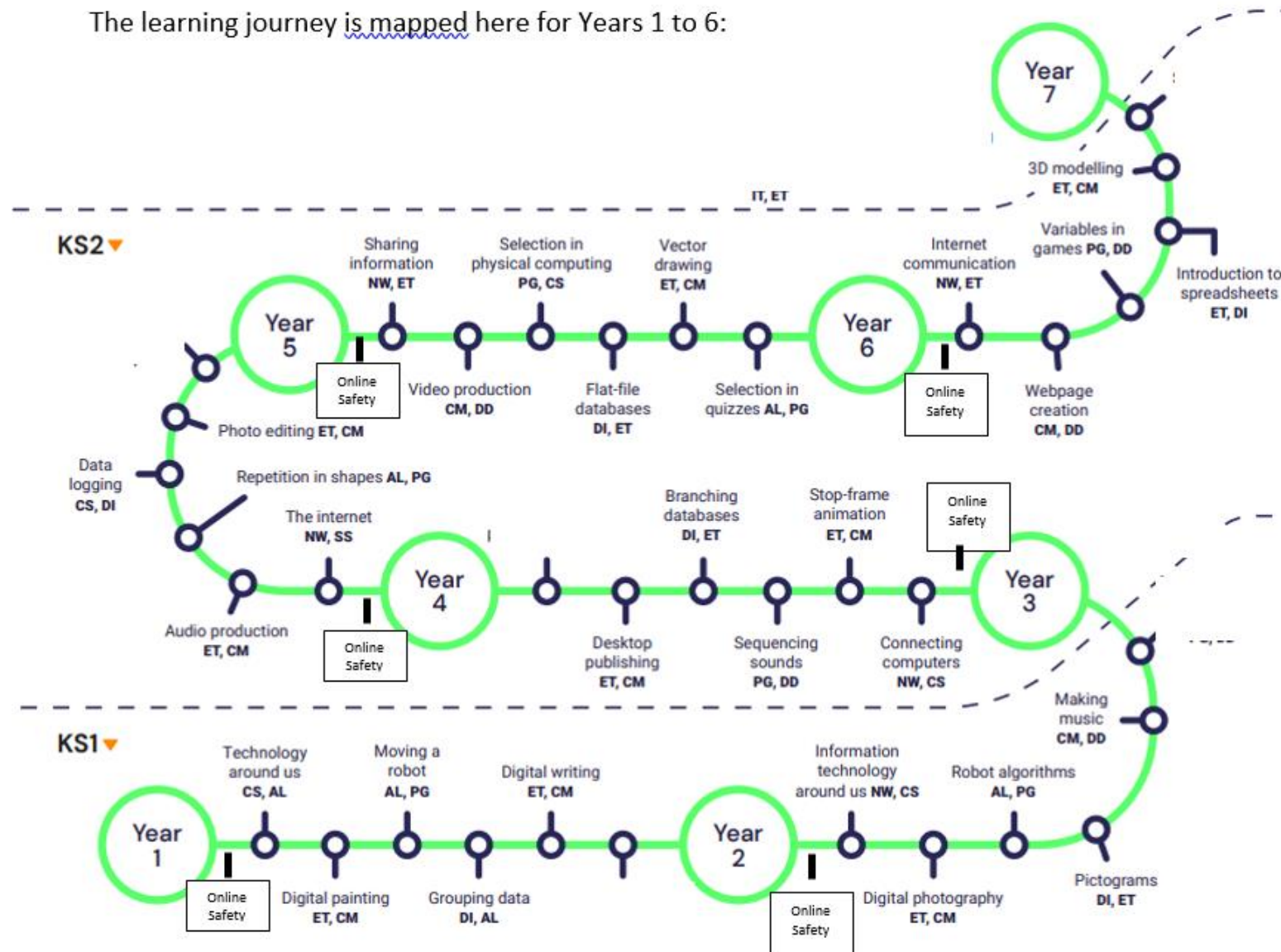
For the academic year 2023-24 – Programming B will not be taught due implementation the new scheme – Teach Computing.

In Year 4 we are piloting a scheme with Pates Grammar school; sharing expertise and resources therefore three units are planned and team-taught with Pates Grammar. Our pupils have the opportunity to work with Year 13 students and Pates staff to enhance their skills and knowledge during these units. This is a scheme introduced and reviewed in 2022-23 and continuing to 2024-25. We constantly review outcomes for children and adapt where needed.



2023-24 Learning Journey

The learning journey is mapped here for Years 1 to 6:





Year group	Online Safety	Computing Systems and Networks	Data and Information – Grouping Data	Creating Media – Digital Painting	Creating Media – Digital Writing	Programming A – Moving a robot	Programming B
Year 1	• Agree online-safety rules for class. • Use a selection of websites and consider who can see the information online. • Play appropriate games on internet, including games against real people. • Discuss appropriate TV shows/streaming. • Talk about how adults can help us, e.g. when we see something we do not like or makes us feel uncomfortable. • Play games that reinforce the idea of personal information, including password privacy.	-To identify technology -To identify a computer and its main parts -To use a mouse in different ways -To use a keyboard to type on a computer -To use the keyboard to edit text -To create rules for using technology responsibly	-To label objects -To identify that objects can be counted -To describe objects in different ways -To count objects with the same properties -To compare groups of objects -To answer questions about groups of objects	-To describe what different freehand tools do -To use the shape tool and the line tools -To make careful choices when painting a digital picture -To explain why I chose the tools I used -To use a computer on my own to paint a picture -To compare painting a picture on a computer and on paper.	-To use a computer to write -To add and remove text on a computer -To identify that the look of text can be changed on a computer -To make careful choices when changing text -To explain why I used the tools that I chose -To compare typing on a computer to writing on paper	-To explain what a given command will do -To act out a given word -To combine forwards and backwards commands to make a sequence -To combine four direction commands to make sequences -To plan a simple program -To find more than one solution to a problem	-To choose a command for a given purpose -To show that a series of commands can be joined together -To identify the effect of changing a value -To explain that each sprite has its own instructions -To design the parts of a project -To use my algorithm to create a program



Year 2	Online Safety • Agree sensible online-safety rules for the classroom. • Use a selection of websites and consider who can see the information online. • Play appropriate games on the internet, including games against real people. • Talk about how adults can help us, including when we see something we don't like or something makes us feel uncomfortable. • Discuss appropriate TV shows/ streaming • Play games that reinforce idea of personal information, including password privacy.	Computing systems and networks – IT around us -To recognise the uses and features of information technology -To identify the uses of information technology in the school -To identify information technology beyond school -To explain how information technology helps us -To explain how to use information technology safely -To recognise that choices are made when using information technology	Data and information – Pictograms -To recognise that we can count and compare objects using tally charts -To recognise that objects can be represented as pictures -To create a pictogram -To select objects by attribute and make comparisons -To recognise that people can be described by attributes -To explain that we can present information using a computer	Creating media – Digital photography -To use a digital device to take a photograph -To make choices when taking a photograph -To describe what makes a good photograph -To decide how photographs can be improved -To use tools to change an image -To recognise that photos can be changed	Creating media - Digital music -To say how music can make us feel -To identify that there are patterns in music -To experiment with sound using a computer -To use a computer to create a musical pattern -To create music for a purpose -To review and refine our computer work	Programming A – Robot algorithms -To describe a series of instructions as a sequence -To explain what happens when we change the order of instructions -To use logical reasoning to predict the outcome of a program -To explain that programming projects can have code and artwork -To design an algorithm -To create and debug a program that I have written	Programming B - Programming quizzes -To explain that a sequence of commands has a start -To explain that a sequence of commands has an outcome -To create a program using a given design -To change a given design -To create a program using my own design -To decide how my project can be improved
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Year 3	<u>Online Safety</u> • Agree sensible online-safety rules for the classroom. • Choose a secure password for age-appropriate websites. • Discuss what actions could be taken if they are uncomfortable or upset online e.g. Report Abuse button. • Talk about what games they enjoying playing and what good choices are when playing games e.g. content, screen time. • Discuss appropriate TV shows/ streaming • Talk about who can see it, and how to communicate safely and respectfully • Comment and provide positive feedback on the work of classmates in school or online, or the work of others online.	Computing Systems and Networks – Connecting Computers -To explain how digital devices function -To identify input and output devices -To recognise how digital devices can change the way we work -To explain how a computer network can be used to share information -To explore how digital devices can be connected -To recognise the physical components of a network	Data and Information – Branching Databases -To create questions with yes/no answers -To identify the attributes needed to collect data about an object -To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database -To independently create an identification tool	Creating Media – Stop Frame Animation -To explain that animation is a sequence of drawings or photographs -To relate animated movement with a sequence of images -To plan an animation -To identify the need to work consistently and carefully -To review and improve an animation -To evaluate the impact of adding other media to an animation	Creating Media – Desktop Publishing -To recognise how text and images convey information -To recognise that text and layout can be edited -To choose appropriate page settings -To add content to a desktop publishing publication -To consider how different layouts can suit different purposes -To consider the benefits of desktop publishing	Programming A – Sequencing Sound -To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order -To change the appearance of my project -To create a project from a task description	Programming B – Events and actions in Programs -To explain how a sprite moves in an existing project -To create a program to move a sprite in four directions -To adapt a program to a new context -To develop my program by adding features -To identify and fix bugs in a program -To design and create a maze-based challenge
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Year 4	<u>Online Safety</u> • Agree sensible online-safety rules for the classroom. • Choose a secure password for age-appropriate websites. • Discuss what actions could be taken if they are uncomfortable or upset online e.g. Report Abuse button. • Talk about what games they enjoying playing and what good choices are when playing games e.g. content, screen time. • Use a class blog to share information and talk about who can see it, and how to communicate safely and respectfully. • Discuss appropriate TV shows/ streaming • Comment and provide positive feedback on the work of classmates in school or online, or the work of others online.	Computing Systems and Networks – The Internet -To describe how networks physically connect to other networks -To recognise how networked devices make up the internet -To outline how websites can be shared via the World Wide Web (WWW) -To describe how content can be added and accessed on the World Wide Web (WWW) -To recognise how the content of the WWW is created by people -To evaluate the consequences of unreliable content	Data and Information – Data Logging (PATES PLANNING) -To explain that data gathered over time can be used to answer questions -To use a digital device to collect data automatically -To explain that a data logger collects ‘data points’ from sensors over time -To recognise how a computer can help us analyse data -To identify the data needed to answer questions -To use data from sensors to answer questions	Creating Media – Audio Production -To identify that sound can be recorded -To explain that audio recordings can be edited -To recognise the different parts of creating a podcast project -To apply audio editing skills independently -To combine audio to enhance my podcast project -To evaluate the effective use of audio	Creating Media – Photo Editing -To explain that the composition of digital images can be changed -To explain that colours can be changed in digital images -To explain how cloning can be used in photo editing -To explain that images can be combined -To combine images for a purpose -To evaluate how changes can improve an image	Programming A – Repetition in Shapes (PATES PLANNING) -To identify that accuracy in programming is important -To create a program in a text-based language -To explain what ‘repeat’ means -To modify a count-controlled loop to produce a given outcome -To decompose a task into small steps -To create a program that uses count-controlled loops to produce a given outcome	Programming B – Repetition in Games (PATES PLANNING) -To develop the use of count-controlled loops in a different programming environment -To explain that in programming there are infinite loops and count controlled loops -To develop a design that includes two or more loops which run at the same time -To modify an infinite loop in a given program -To design a project that includes repetition -To create a project that includes repetition
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Year 5	<u>Online Safety</u> • Agree sensible online-safety rules for the classroom. • Discuss their own personal use of the Internet and choices they make including excessive use, personal information and password security. • Discuss how to protect devices from virus threats. • Discuss the importance of keeping an adult informed about what you're doing online, and how to report concerns. • Discuss appropriate TV shows/ streaming	Computing Systems and Networks – Systems and Searching -To explain that computers can be connected together to form systems -To recognise the role of computer systems in our lives -To experiment with search engines -To describe how search engines select results -To explain how search results are ranked -To recognise why the order of results is important, and to whom	Data and Information – Flat File Databases -To use a form to record information -To compare paper and computer-based databases -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data -To explain that computer programs can be used to compare data visually -To use a real-world database to answer questions	Creating Media – Video Production -To explain what makes a video effective -To identify digital devices that can record video -To capture video using a range of techniques -To create a storyboard -To identify that video can be improved through reshooting and editing -To consider the impact of the choices made when making and sharing a video	Creating Media – An Introduction to Vector Graphics -To identify that drawing tools can be used to produce different outcomes -To create a vector drawing by combining shapes -To use tools to achieve a desired effect -To recognise that vector drawings consist of layers -To group objects to make them easier to work with -To apply what I have learned about vector drawings	Programming A – Selection in Physical Computing -To control a simple circuit connected to a computer -To write a program that includes count-controlled loops -To explain that a loop can stop when a condition is met -To explain that a loop can be used to repeatedly check whether a condition has been met -To design a physical project that includes selection -To create a program that controls a physical computing project	Programming B – Selection in Quizzes -To explain how selection is used in computer programs -To relate that a conditional statement connects a condition to an outcome -To explain how selection directs the flow of a program -To design a program which uses selection -To create a program which uses selection -To evaluate my program
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Year 6	<u>Online Safety</u> • Agree sensible online-safety rules for the classroom. • Discuss their own personal use of the Internet and choices they make including excessive use, personal information and password security. • Discuss how to protect devices from virus threats. • Discuss the importance of keeping an adult informed about what you're doing online, and how to report concerns. • Discuss appropriate TV shows/ streaming • Explore using safe and responsible online communication tools e.g. blogs, messaging.	Computing Systems and Networks – Communication and Collaboration -To explain the importance of internet addresses -To recognise how data is transferred across the internet -To explain how sharing information online can help people to work together -To evaluate different ways of working together online -To recognise how we communicate using technology -To evaluate different methods of online communication	Data and Information – Spreadsheets -To create a data set in a spreadsheet -To build a data set in a spreadsheet -To explain that formulas can be used to produce calculated data -To apply formulas to data -To create a spreadsheet to plan an event -To choose suitable ways to present data	Creating Media – Webpage Creation -To review an existing website and consider its structure -To plan the features of a web page -To consider the ownership and use of images (copyright) -To recognise the need to preview pages -To outline the need for a navigation path -To recognise the implications of linking to content owned by other people	Creating Media – 3D Modelling -To recognise that you can work in three dimensions on a computer -To identify that digital 3D objects can be modified -To recognise that objects can be combined in a 3D model -To create a 3D model for a given purpose -To plan my own 3D model -To create my own digital 3D model	Programming A – Variables in Games -To define a 'variable' as something that is changeable -To explain why a variable is used in a program -To choose how to improve a game by using variables -To design a project that builds on a given example -To use my design to create a project -To evaluate my project	Programming B – Sensing Movement -To create a program to run on a controllable device -To explain that selection can control the flow of a program -To update a variable with a user input -To use a conditional statement to compare a variable to a value -To design a project that uses inputs and outputs on a controllable device -To develop a program to use inputs and outputs on a controllable device
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