



St Mary's RC Computing Progression – Attainment Expectations



Information Technology

WT Y1 (ELG)	AT Year 1		AT Year 2		AT Year 3		AT Year 4		AT Year 5		AT Year 6		AB Y6
		WT Y2	AB Y1	WT Y3	AB Y2	WT Y4	AB Y3	WT Y5	AB Y4	WT Y6	AB Y5		
<ul style="list-style-type: none"> Learn how to type letters quickly and correctly using a keyboard. Explore combining painting tools to make digital art. Complete a simple program on a computer. Use ICT hardware to interact with age-appropriate computer. 	<ul style="list-style-type: none"> Learn how to type words quickly and correctly using a keyboard. Make simple word processed documents and change the appearance of text. Create a multimedia e-book combining: text, painted pictures and recorded sound. 	<ul style="list-style-type: none"> Make word processed documents combining images with text. Change the appearance of text so it matches a document's theme. Compare tools for editing images saved from the web. 	<ul style="list-style-type: none"> Type text into different programs and change its style by applying a range of font effects. Create documents and posters by combining text boxes with inserted images. Create a photo collage. Create a multimedia e-book combining: text, images voice recordings and shapes. Shoot a digital photo and explore tools to edit it. 	<ul style="list-style-type: none"> Type and design a variety of documents, posters and leaflets using ICT. Learn rules for creating neat word processed work. Produce a multimedia video topic about topic with music and narration. Create online multiple-choice quizzes. Shoot and edit digital photos effectively. Create a word collage. 	<ul style="list-style-type: none"> Enter formulae into a spreadsheet to solve calculations and model scenarios, including using =SUM() and statistical functions. Change the format of cells using: text alignment, borders and data types. Create pictures using drawing tools (shapes). Create an animated GIF image. Create a multimedia on-screen presentation over several slides, adding animation and transition effects to enhance it. Compare ways for manipulating digital images to enhance them. 	<ul style="list-style-type: none"> To design an information app that contains multimedia pages linked together using hyperlinks. Create an on-screen presentation with slide transitions, advanced animation effects and action buttons. Edit images using layering techniques. Create and edit a stop motion animation. 	<ul style="list-style-type: none"> Write spreadsheet formulae to solve maths problems (e.g. unit convertors). 						



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Digital Literacy

WT Y1 (ELG)	AT Year 1		AT Year 2		AT Year 3		AT Year 4		AT Year 5		AT Year 6		AB Y6
		WT Y2	AB Y1	WT Y3	AB Y2	WT Y4	AB Y3	WT Y5	AB Y4	WT Y6	AB Y5		
<ul style="list-style-type: none"> Navigate around websites with guidance. Know where to go for help or support when online. 	<ul style="list-style-type: none"> Know rules for staying safe online, including how to safely use Internet media players. 	<ul style="list-style-type: none"> Know how to use a web browser to navigate websites effectively when doing Internet research. Search for sensible, suitable images online and insert them into a document. Know rules for staying safe online and why they must be followed. Scan QR codes. Learn how to communicate sensibly using Seesaw. 	<ul style="list-style-type: none"> Compare digital communication methods, including when they are appropriate to use. Explain the features of a strong password. Know what electronic mail is and the services offered by an email client. Explore a virtual map and compare different viewing options on it. Understand how to stay safe when playing computer games. 	<ul style="list-style-type: none"> Learn how to search the web effectively. Learn how to interpret URLs. Learn about the importance of only joining and using child-friendly websites. Understand that there are consequences for making bad decisions online. 	<ul style="list-style-type: none"> Compare online encyclopedias for doing Internet research on. Cross-reference search results to help validate information on them. Describe online hazards and how to respond to them safely. Explain the 'Zip it, Block it, Flag it' slogan. Know how to stay safe when watching and recording vlogs. Compare techniques used for manipulating and putting pressure on people online. Understand how to safely send text messages. 	<ul style="list-style-type: none"> Learn how to evaluate the usefulness of a website. Discuss reasons for and against sharing material publicly online. Understand the importance of online consent. Learn how to safely share images online. Research localities using a digital map and use advanced tools like route finders. Understand the term 'digital footprint' and describe strategies for reducing it. 	<ul style="list-style-type: none"> Describe the safest response to possibly dangerous online scenarios (concept cartoons). 						



St Mary's RC Computing Progression – Attainment Expectations



Computer Science - Theory

WT Y1 (ELG)	AT Year 1		AT Year 2		AT Year 3		AT Year 4		AT Year 5		AT Year 6		AB Y6
		WT Y2	AB Y1	WT Y3	AB Y2	WT Y4	AB Y3	WT Y5	AB Y4	WT Y6	AB Y5		
<ul style="list-style-type: none"> Recognise that a range of technology is used in places such as homes and schools. Identify the main parts of a computer. 	<ul style="list-style-type: none"> Identify and name the main components of a computer. 	<ul style="list-style-type: none"> Identify and describe uses of technology beyond school. 	<ul style="list-style-type: none"> Identify uses of technology beyond school and discuss reasons why they are helpful (e.g. robots and simulations). Understand how a computer stores data. 	<ul style="list-style-type: none"> Understand the main hardware components of a computer system, including the functions of different input and output devices. Learn how the Internet works, including how it is structured and how data travels along it. Understand how search engines operate, including how they rank results. 	<ul style="list-style-type: none"> Understand how digital images are stored and displayed on a computer. Describe the impact of technology on society, including on people's: spiritual, moral, social and cultural development. Find out about the history of computing. Describe uses of GPS. 	<ul style="list-style-type: none"> Describe the services offered by the Internet. Understand what e-commerce is and what its impact is. 	<ul style="list-style-type: none"> Understand how binary numbers work. 						



St Mary's RC Computing Progression – Attainment Expectations



Computer Science - Programming

WT Y1 (ELG)	AT Year 1		AT Year 2		AT Year 3		AT Year 4		AT Year 5		AT Year 6		AB Y6
		WT Y2	AB Y1	WT Y3	AB Y2	WT Y4	AB Y3	WT Y5	AB Y4	WT Y6	AB Y5		
<ul style="list-style-type: none"> Understand that an algorithm is a sequence of instructions which can be programmed on a digital device. Design computer programs in which pictures animate around a scene in an order. 	<ul style="list-style-type: none"> Follow simple algorithms to make things happen. Design computer programs in which pictures animate around a scene based on different events – at the start, when they are clicked on and when you swipe the screen. Debug programs with support so they run correctly. 	<ul style="list-style-type: none"> Write and share simple algorithms for others to follow. To design computer programs in which pictures animate around a scene based on different events – at the start, when they are clicked on, with button presses and when you swipe the screen. Debug programs with a little support so they run correctly. 	<ul style="list-style-type: none"> Use logical reasoning to write simple algorithms explaining the sequence commands should run in. Program a sequence of actions using timings to create a simple animation. Write code that includes conditional events (e.g. run commands when objects hit). Debug programs independently so they run correctly. 	<ul style="list-style-type: none"> Use logical reasoning to create simple flowcharts explaining the sequence commands should run in. Enter and repeat LOGO commands to program an on-screen turtle so it draws shapes, patterns and pictures. Create games and apps that include variables in them (e.g. as a score counter). Test, debug and improve programs with support. 	<ul style="list-style-type: none"> Design and program games that include variables (e.g. for a score counter) and changing object properties (e.g. the speed and direction of a moving car). Generate random numbers in code. Test, debug and improve programs independently. 	<ul style="list-style-type: none"> To create flowcharts of real life systems showing how steps of algorithms are linked together. To design and program games that include conditional events, score variables, random number generators and time limits. 	<ul style="list-style-type: none"> To learn how to write code using a text-based language (e.g. Python and/or HTML). Detect and correct errors in programs (syntax and logical bugs). 						