All Souls' Catholic PRIMARY SCHOOL

Computing Curriculum Overview

2026 - 2027

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception						
Year 1		**Basic Computing Skills -** Develop an understanding of technology and how it can help them. To become more familiar with the different components of a computer by developing their keyboard and mouse skills, and also start to consider how to use technology responsibly. NC 1.4, 1.5, 1.6		**Programming – Moving a Robot** Explore using individual commands, both with other learners and as part of a computer program. Identify what each floor robot command does and use that knowledge to start predicting the outcome of programs. Introduce them to the early stages of program design through the introduction of algorithms.NC 1.1, 1.2, 1.3, 1.5		**Digital Painting** Explore the world of digital art and its exciting range of creative tools. Create their own paintings, while getting inspiration from a range of other artists. NC 1.4
Year 2	**Robot Algorithms** Develops understanding of instructions in sequences and the use of logical reasoning to predict outcomes. Use given commands in different orders to investigate how the order affects the outcome. Learn about design in programming. Design algorithms and then test those algorithms as programs and debug them. NC 1.1, 1.2, 1.3		**Data and Information – Pictograms** Introduce the term 'data'. Begin to understand what data means and how this can be collected in the form of a tally chart. Learn the term 'attribute' and use this to help them organise data. Present data in the form of pictograms and finally block diagrams. Use the data presented to answer questions. NC 1.4, 1.6		**Programming – An introduction to quizzes** Begin to understand that sequences of commands have an outcome and make predictions based on their learning. Use and modify designs to create their own quiz questions in ScratchJr and realise these designs in ScratchJr using blocks of code. Evaluate their work and make improvements to their programming projects.NC 1.1, 1.2, 1.3, 1.4	
Year 3	**Programming – Sequence in music** They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences.NC 2.1, 2.2, 2.3, 2.6	**Desktop Publishing** Become familiar with the terms 'text' and 'images' and understand that they can be used to communicate messages. Use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. Introduce to the terms 'templates', 'orientation', and 'placeholders' and begin to understand how these can support them in making their own template for a magazine front cover. Add text and images to create their own pieces of work using desktop publishing software.NC 2.5, 2.6	**Branching databases** Develop their understanding of what a branching database is and how to create one. Gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. Create physical and on-screen branching databases. Evaluate the effectiveness of branching databases and decide what types of data should be presented as a branching database.NC 2.6, 2.7			**Creating media – Animation** Use a range of techniques to create a stop-frame animation using laptops and animation cameras. Next, they will apply those skills to create a story-based animation. Add other types of media to their animation, such as music and text.NC 2.6, 2.7

Year 4	**Creating media – Audio editing** Identify the input device (microphone) and output devices (speaker or headphones) required to work with sound digitally. Discuss the ownership of digital audio and the copyright implications of duplicating the work of others. Use Audacity to produce a podcast, which will include editing their work, adding multiple tracks, and opening and saving the audio files. Evaluate their work and give feedback to their peers.NC 2.5, 2.6, 2.7	**Programming – Repetition in shapes** Look at repetition and loops within programming. Create programs by planning, modifying, and testing commands to create shapes and patterns. Use Logo, a text-based programming language. NC 2.1, 2.2, 2.3, 2.6	**Programming – Repetition in games** Explores the concept of repetition in programming using the Scratch. Discover similarities between Logo and Scratch. Look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition. design and create a game which uses repetition, applying stages of programming design throughout. NC 2.1, 2.2, 2.3, 2.6		**Computing systems and networks – The Internet** Apply knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure. Learn that the World Wide Web is part of the internet, and will be given opportunities to explore the World Wide Web for themselves in order to learn about who owns content and what they can access, add, and create. Evaluate online content to decide how honest, accurate, or reliable it is, and understand the consequences of false information. NC 2.4, 2.5, 2.6, 2.7	
Year 5	**Computing systems and networks – Sharing information** Develop understanding of computer systems and how information is transferred between systems and devices. Consider small-scale systems as well as large-scale systems. Explain the input, output, and process aspects of a variety of different real-world systems. Take part in a collaborative online project with other class members and develop their skills in working together online. NC 2.4, 2.7	**Creating Media – Vector Drawing** Learn how to use different drawing tools to help them create images. Learners recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. Learners layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work. This unit is planned using the Google Drawings app, other alternative pieces of software are available.NC 2.6	**Data and information – Flat-file databases** Use a flat-file database to organise files. Use tools within a database to order and answer questions about data. Create graphs and charts from their data to help solve problems. Use a real-life database to answer a question, and present their work to others.NC 2.5, 2.6	**Programming – Selection in quizzes** develop knowledge of selection by revisiting how conditions can be used in programs and then learning how the If… Then… Else structure can be used to select different outcomes depending on whether a condition is true or false. Represent this understanding in algorithms and then by constructing programs using the Scratch programming environment.NC 2.1, 2.2, 2.3, 2.6	**Creating media – Video editing** Create short videos in groups. Develop skills of capturing, editing, and manipulating video. NC 2.2, 2.6, 2.7	**Programming – More complex algorithms** Further development of children's programming knowledge and skill, constructing further programs using Scratch and other programmes. Children make use of repetition structures within programmes and develop conciseness in their construction of algorithms. NC 2.5, 2.6
Year 6	**Programming – Variables in games** Explore the concept of variables in programming through games in Scratch. Learn what variables are, and relate them to real-world examples of values that can be set and changed. They will apply their knowledge of variables and design to improve their game in Scratch.NC 2.1, 2.2, 2.3, 2.6	**Creating media – Web page creation** Identify what makes a good web page and use this information to design and evaluate their own website using Google Sites. Throughout the process they will pay specific attention to copyright and fair use of media, the aesthetics of the site, and navigation paths. NC 2.5, 2.6, 2.7	**Programming – Sensing** Final KS2 programming unit and brings together elements of all the four programming constructs. They will use these constructs in a different, but familiar environment whilst also utilising a physical device - the micro:bit. NC 2.1, 2.2, 2.3, 2.6	**Data and information – Spreadsheets** Organise data into columns and rows to create their own data set. Format data to support calculations, introduce formulas and begin to understand how they can be used to produce calculated data. Apply formulas that include a range of cells, and apply formulas to multiple cells by duplicating them. Create graphs and charts, and evaluate their results in comparison to questions asked. NC 2.6	**Creating media – 3D Modelling** Develop knowledge and understanding of using a computer to produce 3D models. Familiarise themselves with working in a 3D space, including combining 3D objects. Examine the differences between working digitally with 2D and 3D graphics. Progress to making accurate 3D models of physical objects, such as a pencil holder. Finally, learners will examine the need to group 3D objects, then go on to plan, develop, and evaluate their own projects. NC 2.6, 2.7	**Computing systems and networks – Communication** Learn about the World Wide Web as a communication tool. First, they will learn how we find information on the World Wide Web, through learning how search engines work (including how they select and rank results) and what influences searching, and through comparing different search engines. They will then investigate different methods of communication, before focusing on internet-based communication. Finally, they will evaluate which methods of internet communication to use for particular purposes.NC 2.4, 2.5, 2.7