

Holy Cross Catholic Primary - Skills & Progression in Computing



| | EYFS | Year 1&2 (Year A) | Year 1&2 (Year B) | Year 3 | Year 4 | Year 5 | Year 6 |
|--------------------------------|---|--|---|--|--|---|--|
| Computing Systems and Networks | <p>Recognise and explore technology used at home and in school (e.g., cameras, tablets, interactive boards). Understand that technology helps us in daily life.</p> <p>Pupils can identify simple technology and understand its purpose in familiar settings.</p> | <p>Identify parts of a computer (mouse, keyboard, screen) and know their basic functions. Begin to log on and shut down independently.</p> <p>Pupils can confidently use simple hardware and understand how computers help us.</p> | <p>Understand that devices are connected in a network. Explore how information `is shared in school systems.</p> <p>Pupils can describe how computers connect and share information.</p> | <p>Explore input/output and how devices work together. Understand the basic concept of the internet.</p> <p>Pupils can explain how digital systems connect and communicate.</p> | <p>Understand how networks transmit information and the role of routers and switches.</p> <p>Pupils can explain how information travels between devices in a network.</p> | <p>Understand search engines, indexing and online safety. Explore cloud-based tools.</p> <p>Pupils can use the internet efficiently and evaluate digital sources.</p> | <p>Understand how data is transferred securely online. Explore internet services and digital citizenship.</p> <p>Pupils can explain how digital systems support communication and data protection.</p> |
| Creating Media | <p>Use simple digital devices to create images or sounds (e.g., take a photo, use a drawing tool). Talk about what they've made.</p> <p>Pupils can use digital tools to make simple media and describe their creations.</p> | <p>Use basic digital tools to type, format text, and draw pictures. Understand how to save and open files.</p> <p>Pupils can create and edit text and images with support.</p> | <p>Use software to create simple digital stories with images and audio. Begin to make decisions about layout and design.</p> <p>Pupils can combine media for storytelling with increasing independence.</p> | <p>Create digital animations or presentations. Develop use of software tools for formatting and editing.</p> <p>Pupils can plan and produce multimedia content with purpose.</p> | <p>Create audio, video or slideshows using a range of software. Include text, images, transitions and sound.</p> <p>Pupils can create and refine multimedia content for different audiences.</p> | <p>Plan and produce audio or video recordings. Edit for clarity and impact.</p> <p>Pupils can evaluate and improve digital work based on feedback.</p> | <p>Design interactive content (e.g., web pages). Use hyperlinks, layout and multimedia elements effectively.</p> <p>Pupils can design purposeful digital products with a user in mind.</p> |
| Data and Information | <p>Sort objects into groups based on basic criteria (e.g., colour, size) using physical and pictorial representations.</p> <p>Pupils can classify and organise using simple categorisations.</p> | <p>Collect simple data using tally charts or pictograms. Sort objects using software.</p> <p>Pupils can represent data digitally and begin to interpret it.</p> | <p>Use software to organise and present data (e.g., charts, tables). Ask and answer simple questions about data.</p> <p>Pupils can create digital representations of data and draw conclusions from them.</p> | <p>Build and use branching databases to classify and sort data.</p> <p>Pupils can organise and present data logically.</p> | <p>Collect, present and analyse data using spreadsheets or survey tools.</p> <p>Pupils can organise and interpret data to draw clear conclusions.</p> | <p>Use spreadsheets to collect, analyse and graph data. Understand formulas.</p> <p>Pupils can use digital tools to solve real-world data problems.</p> | <p>Plan and carry out data collection, then analyse and present findings using advanced digital tools.</p> <p>Pupils can interpret and present data clearly, drawing reasoned conclusions.</p> |

| | EYFS | Year 1&2 (Year A) | Year 1&2 (Year B) | Year 3 | Year 4 | Year 5 | Year 6 |
|---------------|---|--|---|--|--|---|---|
| Programming | <p>Use simple programmable toys (e.g., Bee-Bots) to follow a set of instructions. Understand 'forwards', 'backwards', and 'turn'.</p> <p>Pupils can create simple sequences using clear directional instructions.</p> | <p>Understand what an algorithm is. Use block-based programming (e.g., ScratchJr) to create simple sequences.</p> <p>Pupils can create and debug basic algorithms using visual code.</p> | <p>Design, write and debug simple programs with sequencing. Understand the need for clear instructions.</p> <p>Pupils can predict outcomes and identify errors in their code.</p> | <p>Use repetition and loops in Scratch. Begin to use logical reasoning.</p> <p>Pupils can write programs that include repetition and test for accuracy.</p> | <p>Use variables and loops in block-based programming. Break problems into steps.</p> <p>Pupils can create structured programs with more complexity.</p> | <p>Use logical reasoning, selection, and variables in programs. Test and debug effectively.</p> <p>Pupils can write, test and refine more sophisticated code.</p> | <p>Design, write and debug complex programs with different inputs/outputs (e.g., micro:bit). Evaluate performance.</p> <p>Pupils can develop scalable, interactive programs for specific goals.</p> |
| Online Safety | <p>Know how to use technology safely in the classroom. Understand that personal information should not be shared. Recognise when something seen online makes them feel uncomfortable and tell an adult.</p> | <p>Understand the importance of keeping personal information private. Begin to identify trusted adults. Recognise online risks such as pop-ups or links and know not to click on unfamiliar content.</p> | <p>Explain what personal information is and why it should be protected. Identify signs of unsafe websites or behaviour. Understand the need to be kind and respectful online.</p> | <p>Recognise reliable sources online. Understand how to create strong passwords and keep them secure. Know what to do if something inappropriate appears online.</p> | <p>Understand the risks of sharing content and the permanence of digital footprints. Begin to explore safe social media behaviour. Know how to report online concerns.</p> | <p>Evaluate online sources for credibility. Understand privacy settings and how to block/report inappropriate behaviour. Discuss online relationships and digital responsibility.</p> | <p>Understand online reputation and the impact of online behaviour. Discuss cyberbullying, misinformation, and how to manage screen time. Apply strategies for managing online risks and know how to seek help.</p> |