Intent

At Sacred Heart Catholic Primary School, we recognise that our world is becoming ever more technologically advanced and the way we live our lives is changing all the time. Our Computing curriculum aims to ensure our pupils are well-prepared citizens of the future. Through a rich variety of digital technologies and hardware, project-based learning and lesson activities, we aim to provide our children with a solid foundation of digital literacy that enables them not only to become competent end-users of technology but to develop autonomy, creativity, resilience, confidence, responsibility, problem-solving skills and critical thinking skills.

Implementation

What will our children have learned by the end of KS1 and KS2?

By end of Key Stage 1, pupils can recognise digital technology in wider society and begin to explore the use and impact of technology in the world around them. They will have grasped a basic understanding of what algorithms are through programming Beebots and understand the importance of precise instructions. Our children also learn how to create, edit, save and retrieve digital content using Microsoft applications as well as online software. By end of Key Stage 2, pupils are confident in using the Internet safely. They understand the plethora of opportunities the Internet has to offer especially for collaboration and communication but equally understand its threats and risks and know procedures to follow if they encounter inappropriate content or behaviour while online. The children are able to comprehend, design, create, and evaluate algorithms and create software to allow computers to solve problems. They understand what a computer is and how its constituent parts function together as a whole, within a network that retrieves and shares information. The children are also able to select and create a range of media for a variety of purposes including animations, podcasts, films, and webpages.

■ Data and information — Understand how data is stored, organised, and used to represent real-world artefacts and scenarios

■ Design and development — Understand the activities involved in planning, creating, and evaluating computing artefacts

Effective use of tools — Use software tools to support computing work

 \blacksquare Impact of technology — Understand how individuals, systems, and society as a whole interact with computer systems

■ Safety and security — Understand risks when using technology,

Impact

The NCCE units for Key Stage 1 and 2 are based on a spiral curriculum. This means that each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme. This style of curriculum design reduces the amount of knowledge lost. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences. As well as scaffolded activities, embedded within the lessons are a range of pedagogical strategies which support making computing topics more accessible