

## ST. PETER'S CATHOLIC PRIMARY SCHOOL

### CURRICULUM INTENT, IMPLEMENTATION AND IMPACT STATEMENT

# COMPUTING

#### INTENT

Within an ever changing and technological world, St Peter's Catholic Primary understands and values the importance of teaching Computing from a young age. We acknowledge that future generations will rely heavily on their computational confidence and digital skills in order to support their progress within their chosen career paths.

Therefore, it is our school's aim to equip children with the relevant skills and knowledge that is required to understand the three core areas of Computing (Computer Science, Information Technology and Digital Literacy) and to offer a broad and balanced approach to providing quality first teaching of this subject.

Computing is an integral part to a child's education and everyday life. Consequently, we intend to support our pupils to access and understand the core principles of this subject through engaging and activities. Whilst ensuring they understand the advantages and disadvantages associated with online experiences, we want children to develop as respectful, responsible and confident users of technology, aware of measures that can be taken to keep themselves and others safe online.

#### Our aims for Computing are:

To instil an enthusiasm and appreciation of Computing via engaging and well-planned lessons, allowing children to use their skills to create and develop new ideas.

To follow a scheme of work, in conjunction with the National Curriculum, which provides progression and a breadth of knowledge across all year groups.

To ensure that teaching staff continue to access the opportunities to attend subject relevant CPD in order to deliver sessions with confidence and to help identify areas

in which they can use computational skills within a cross-curricular approach (as part of their termly topics, for example).

To identify real world examples and creative challenges in which pupils can explore and extend their understanding of the fundamental principles and concepts of Computing.

To ensure that pupils develop a respectful and responsible attitude towards using information and communication technology, especially with regards to their own and other's safety.

To provide a safe space in which pupils can navigate and interact with the digital world, whilst exploring their own personal expression and identity.

## **IMPLEMENTATION**

At St Peter's, we follow the 'Teach Computing' scheme of work which covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing content (concepts, knowledge, skills and objectives) has been organised into interconnected networks called learning graphs.

The curriculum aims to equip young people with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: **computer science, information technology and digital literacy**, with the aims of the curriculum reflecting this distinction.

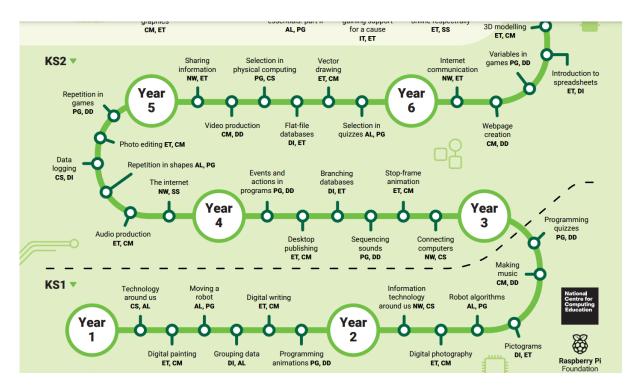
This scheme of work gives full coverage of the national curriculum for computing and aims to ensure all pupils:

- -can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation (Computer science)
- -can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems (Computer science)
- -can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (Information technology)
- -are responsible, competent, confident and creative users of information and communication technology. (Digital literacy)

A key part of implementing our computing curriculum is to ensure that safety of our pupils is paramount. We take online safety very seriously and we aim to give

children the necessary skills to keep themselves safe online. Children have a right to enjoy childhood online, to access safe online spaces and to benefit from all the opportunities that a connected world can bring them, appropriate to their age and stage. Online safety and responsible use of technology are topics covered in computing and PSHE lessons, assemblies and during events such as Safer Internet Day.

# Teach Computing Primary Curriculum Map.



### Key

- **AL** Algorithms
- CS Computing systems
- **CM** Creating media
- DI Data and information
- **DD** Design and development
- ET Effective use of tools
- IT Impact of technology
- **NW** Networks
- **PG** Programming
- SS Safety and security
- Computing

#### **IMPACT**

Within Computing, we encourage a creative and collaborative environment in which pupils can learn to express and challenge themselves. The success of the curriculum itself will be assessed via the analysis of yearly progress data, lesson observations and skills audits. This will then inform future adaptions of the scheme of work and help to ensure that progression is evident throughout school.

In order to demonstrate that we have accomplished our aims, pupils at St Peter's should:

Be enthusiastic and confident in their approach towards Computing.

Present as competent and adaptable 'Computational Thinkers' who are able to use identified concepts and approaches in all of their learning.

Be able to identify the source of problems and work with perseverance to 'debug' them.

Create and evaluate their own project work.

Have a secure understanding of the positive applications and specific risks associated with a broad range of digital technology.

Transition to secondary school with a keen interest in the continued learning of this subject.