



English Martyrs Catholic Primary School



Computing

Intent

At English Martyrs Catholic Primary School, we realise that Computing is more than just a subject but a lifelong skill that have become a permanent part of our pupil's everyday lives. We understand that technology is forever evolving and we want to give our students to learn vital computing skills and knowledge and give as much opportunity to embed, experience, explore and explain across a wide variety of technology throughout the curriculum. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. This will enable them to become more informed and become thoughtful members of the digital community.

In computing we aim to develop **curiosity**. We want pupils to ask questions about digital safety and how this technology can be use across the curriculum to enhance their lives.

We want children to be **aspirational** in their work. We want them to challenge themselves to develop their coding skills to make them algorithms and be skilled at debugging.

We want them to be fully **engaged** in computing lessons to enable them to work independently, become self-motivated and love exploring the use of technology in their everyday lives.

Implementation

The national curriculum for computing aims to ensure that all pupils:

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

We follow a computing scheme called Purple Mash. This scheme support EYFS, Key Stage 1 and Key Stage 2. To make the best of the scheme, children need to be logged onto Purple Mash with their own individual usernames and passwords, using 2dos to

complete work so their work will be saved in their own folders automatically and can be easily reviewed and assessed by the class teacher. Lesson plans also make use of the facility within Purple Mash to set activities for pupils which they can then complete and hand-in online (2Dos). This enables teachers to assess their work easily as well as distribute resources to all pupils.

There are Long Term Plans which outline where units are taught for each year group.

Units that link to the maths curriculum:

- 1.2 Grouping and Sorting
- 1.3 Pictograms
- 2.4 Questioning
- 3.6 Branching Databases
- 3.8 Graphing
- 5.4 Databases
- 6.9 Spreadsheets

All years: Spreadsheet units

Units that could be part of English lessons:

- 3.7 Simulations
- 4.4 Writing for Different Audiences
- 5.8 Word Processing

Units that could easily be theme linked:

Any of the data handling units suggested in the maths section.

- 1.6 Animated stories
- 2.6 Creating Pictures
- 2.8 Presenting Ideas
- 3.9 Presenting
- 4.6 Animation
- 5.5 Game Creator
- 5.7 Concept maps
- 6.7 Quizzing

For lessons taught more discretely as computing such as Email (3.5) and Blogging (6.4), topic themes could still be used to double-up on objectives covered.

Online safety units can be part of RSE\PSHE lessons; there is a strong link between the learning objectives related to online safety with many of the online safety lessons aligning with RSE\PSHE objectives.

Music topics could be incorporated into music lessons with a modelling of musical skills on both instruments and using the computer:

- 2.7 Making Music
- 4.9 Making Music

Children's work is recorded online under their account name.

Curriculum Impact

During computing lessons, there are enough laptops for children to share one between two. This way children can support each other and learn to cooperate and work together collaboratively. For assessment purposes, teachers can split the class into two groups to ensure pupils can apply their knowledge and skills to the activities.