**SS John & Monica Catholic Primary School**

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| Computing Policy  2025-27 |



**Our Mission**

**‘At SS John and Monica’s we learn through the example of Jesus to love, respect, understand and value each other**

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**SS John & Monica’s Catholic Primary School**

**Computing Policy**

### Vision and Intent

At SS John & Monica’s Catholic Primary School, our Computing curriculum is designed to equip children with the skills and knowledge needed to thrive in an increasingly digital world. Through engaging and structured lessons, we aim to develop computational thinking, creativity, and digital literacy, ensuring that our pupils are confident, responsible, and discerning users of technology.

We follow the **KAPOW** scheme, which provides a well-structured and progressive curriculum covering Digital Literacy, Computer Science, and Information Technology. The KAPOW scheme enhances teaching and learning through high-quality resources, interactive activities, and clear assessment tools, ensuring continuity and progression from the Foundation Stage to Year 6.

### Aims

Our Computing curriculum ensures that all children:

* Understand and apply fundamental principles of computer science, including abstraction, logic, algorithms, and data representation.
* Develop computational problem-solving skills through practical experiences, including programming and debugging.
* Evaluate and apply information technology to solve real-world problems.
* Become responsible, competent, and creative users of digital technology.
* Recognise and manage risks online, promoting safe and respectful online behaviour.

### **Objectives**

#### **Key Stage 1**

* Understand the concept of algorithms and how they are implemented as programs.
* Create and debug simple programs using logical reasoning.
* Use technology purposefully to create, store, manipulate, and retrieve digital content.
* Recognise common uses of information technology beyond school.
* Use technology safely and respectfully, keeping personal information private.

#### **Key Stage 2**

* Design, write, and debug programs that accomplish specific tasks, including control and simulation.
* Work with variables, inputs, outputs, and logical reasoning to predict and correct errors in programming.
* Understand computer networks, including the internet, and the opportunities they provide for communication and collaboration.
* Use search technologies effectively and critically evaluate digital content.
* Use a range of software to create, analyse, evaluate, and present digital work.
* Demonstrate responsible digital citizenship, recognising acceptable and unacceptable online behaviour.

### Teaching and Learning Principles

Computing is taught through a combination of discrete lessons and cross-curricular opportunities. The KAPOW scheme provides a structured framework that ensures:

* High-quality, engaging lessons that develop computational thinking and digital literacy.
* A range of teaching strategies, including group work, discussions, and hands-on digital activities.
* A focus on Online Safety embedded within all aspects of the curriculum.
* Opportunities for creativity, collaboration, and problem-solving.

### Differentiation and Inclusion

We ensure that all pupils, regardless of ability or need, can access and succeed in Computing. Adaptations include:

* Differentiated activities and resources.
* Targeted support for pupils with additional needs.
* Opportunities to extend learning for more able pupils.

### Cross-Curricular Links

Computing is integrated into various subjects, enhancing learning across the curriculum:

* **English:** Using digital libraries and word processing software.
* **Maths:** Applying computational thinking in data analysis and problem-solving.
* **Science:** Using technology to collect and present experimental data.
* **Creative Arts:** Using digital tools for design, photography, and video editing.

### Online Safety

### Online Safety is a core aspect of our Computing curriculum. It is taught explicitly through the KAPOW scheme and reinforced throughout the year, including:

* **Annual participation in Safer Internet Day.**
* **Dedicated Online Safety lessons in PSHE.**
* **A whole-school approach to fostering responsible digital behaviour.**
* **Use of additional resources such as UK Safer Internet Centre and Internet Matters.**
* **Procedures for reporting concerns, in line with our Safeguarding Policy.**

### Assessment, Recording, and Reporting

* Ongoing formative assessment is embedded within lessons.
* Pupil progress is tracked against key objectives gathering evidence from a set number of tracked children.
* Self and peer assessment opportunities encourage reflection.
* Parents receive updates on progress through annual reports.

### Monitoring and Review

**Policy Consultation**: February 2025

**Review Date**: December 2026 (or earlier if legislation dictates)

**Person Responsible**: Mr A Ullah (Coordinator)

Queries about the content of this policy should be addressed to Mr Ullah

**Computing Overview**

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| --- | --- | --- | --- | --- |
|  | **Unit 1** | **Unit 2** | **Unit 3** | **Unit 4** |
| **Year R** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(3 lessons)** | **Using a computer**  **(5 lessons)** | **All about instructions (5 lessons)** | **Introduction to data (EYFS Level- 5 lessons)** |
| **Year 1** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(4 lessons)** | **Improving Mouse Skills (5 lessons)** | **Algorithms Unplugged (5 lessons)** | **Introduction to data (Y1 Level- 5 lessons)** |
| **Year 2** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(4 lessons)** | **What is a computer? (5 lessons)** | **Algorithms and Debugging (5 lessons)** | **International Space Centre (5 lessons)** |
| **Year 3** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(4 lessons)** | **Networks and the Internet (5 lessons)** | **Programming: Scratch (5 lessons)** | **Comparison Cards Databases (5 lessons)** |
| **Year 4** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(6 lessons)** | **Journey Inside a Computer (Y3 Level- 5 lessons)** | **Further coding with Scratch (5 lessons)** | **Investigating Weather (Microsoft 365- 5 lessons)** |
| **Year 5** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(5 lessons)** | **Search Engines (5 lessons)** | **Programming Music (Scratch)**  **(5 lessons)** | **Mars Rover 1 (5 lessons)** |
| **Year 6** | *Online Safety* | *Computing Systems and Networks* | *Programming* | *Data Handling* |
| **(6 lessons)** | **Bletchley Park (5 lessons)** | **Intro to Python (5 lessons)** | **Big Data 1 (5 lessons)** |

Computing Curriculum Overview

At SS John and Monica’s, the Kapow learning scheme is used to deliver the three key areas of the Computing National Curriculum: Computer Science, Information Technology and Digital Literacy.

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| --- | --- |
| Computing Science | Pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. |
| Information Technology | Building on their knowledge and understanding of Computing Science, pupils are equipped to use information technology to create programs, systems and a range of content. |
| Digital Literacy | The ability for pupils to use, and express themselves and develop their ideas through, information and communication technology. |

The Kapow Scheme addresses these three National Curriculum areas through 4 unit types:

* Computing Systems and Networks (CS)
* Programming (CS and IT)
* Data Handling (IT and DL)
* Online Safety (DL)

Teaching

Each year group will study 4 unit blocks for Computing each year, allowing for a full unit of lessons to be taught on a two-weekly basis over 10 weeks.

Additionally, we will have a whole-school focus on ‘Online Safety Day’ each Spring Term.

The teaching of Digital Literacy skills are used throughout the curriculum in opportunities such as using ‘MyOn’ for reading digitally; apps such as ‘Times Table Rockstars’ for Mathematics skills; and using search engines for researching in Wider Curriculum lessons.

Resources

* Each class has access to a bank of iPads and laptops for use in Computing Lessons.
* Key vocabulary for each unit will be explored through the use of Kapow Knowledge Organisers.