Christ the King Catholic Primary School

Computing Curriculum Statement

At Christ the King School, we believe that computing is an essential part of the National Curriculum. Computing is a vital part of modern-day life. It provides a broad spectrum of learning opportunities, both within computing and also across other curriculum subjects. Through the study of computing, children are able to develop a wide range of fundamental skills, knowledge and understanding that they will benefit from for the rest of their lives. Technology has become essential to our daily lives, at home and at work. 'Computational thinking' is a skill children need to learn in order to provide them with essential knowledge and skills that will enable them to participate effectively in the digital world. The three strands of the computing curriculum are Computer Science, Information Technology and Digital Literacy.

The aims of the Computing Curriculum:

- 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

In Key Stage 1 children will be taught to:

- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- Create and debug simple programs, and use logical reasoning to predict behaviours of simple programs
- Use a range of technology purposefully /create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

In Key Stage 2 children will be taught to:

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems;
- Solve problems by decomposing them into smaller parts
- Use sequence, selection and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs
- Be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration
- Use search technologies effectively, learn to appreciate how results are selected and ranked and be discerning in evaluating digital content
- Be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Christ the King School use a scheme of work from Islington Council as well as a wide variety of online and unplugged resources.