



## **St Luke's C.E Primary School**

### **Computing Intent, Implementation and Impact**

#### **Intent:**

Technology is an integral part of everyday life. At St Luke's, we aim to prepare our children for a future in an environment which is shaped by technology. The content taught at St Luke's allows for a broad, deep understanding of computing and how it links to children's lives. It offers a range of opportunities for consolidation, challenge and variety. This allows children to apply the fundamental principles and concepts of computer science. They develop analytical problem-solving skills and learn to evaluate and apply information technology. It also enables them to become responsible, competent, confident and creative users of information technology.

#### **Implementation:**

At St Luke's, computing is taught using a blocked curriculum approach. This ensures children are able to develop depth in their knowledge and skills over the duration of each of their computing topics. Teachers use the 'Twinkl - PlanIt' scheme as a starting point for the planning of their computing lessons, which are often richly linked to engaging contexts in other subjects and topics. Each lesson contains revision, analysis and problem-solving. Through the sequence of lessons, we intend to inspire pupils to develop a love of the digital world, see its place in their future and to give staff at St Luke's the confidence to deliver high-quality learning opportunities for pupils. The lesson plans and resources help children to build on prior knowledge at the same time as introducing new skills and challenges. In KS1, the focus is on developing the use of algorithms, programming and how technology can be used safely and purposefully. In KS2, lessons still focus on algorithms, programming and coding but in a more complex way and for different purposes. Children also develop their knowledge of computer networks, internet services and the safe and purposeful use of the internet and technology. Data Handling is featured more heavily in UKS2. Skills learnt through KS1 and UKS2 are used to support data presentation. Adult guides are offered, as well as end-of-unit assessments, enabling staff to feel confident in the progression of skills and knowledge and that outcomes have been met. Teachers are provided with a specific sequence of lessons for their year group, offering structure and narrative. These are not to be used exclusively but will support teachers' planning.

#### **Impact:**

Learning in computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Children will use digital and technological vocabulary accurately, alongside a progression in their technical skills. They will be confident using a range of hardware and software and will produce high-quality purposeful products. Much of the subject-specific knowledge developed in our computing lessons will equip pupils with experiences that will benefit them in secondary school, further education and future places of work. Children will see the digital world as part of their world, extending beyond life at St Luke's, and understand that they have choices to make. They will be confident and respectful digital citizens going on to lead happy and healthy digital lives.

They will aim to achieve age related expectations in Computing at the end of the year.

They will meet the requirements as set out in the National Curriculum:



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Reception	
Year 1 Year 2	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"><li>• understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions;</li><li>• create and debug simple programs;</li><li>• use logical reasoning to predict the behaviour of simple programs;</li><li>• use technology purposefully to create, organise, store, manipulate and retrieve digital content;</li><li>• recognise common uses of information technology beyond school;</li><li>• 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.</li></ul>
Year 3 Year 4 Year 5 Year 6	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"><li>• design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts;</li><li>• use sequence, selection, and repetition in programs; work with variables and various forms of input and output;</li><li>• use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs;</li><li>• understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration;</li><li>• use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content;</li><li>• select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information;</li><li>• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</li></ul>