St Luke's RC Primary School

Computing

Subject Intent

All pupils at St Luke's have the right to have rich, deep learning experiences that balance all the aspects of computing. With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill that children must be taught if they are to be able to participate effectively and safely in this digital world beyond our school.

At St Luke's, children will develop a wide range of fundamental skills, knowledge and understanding which will equip them for the rest of their life. The children will be taught based on the three core strands of computing: Information Technology (the use of computers for functional purposes), Digital Literacy (the safe and responsible use of technology) and Computer Science (computers and their networks and programming).

To ensure that children are digitally literate, they are exposed to a wide range of technology including laptops, IPads and interactive whiteboards. We allow them to continually practice and improve the skills that they learn. We would like our children to be able to find, explore, analyse and present information in a variety of different ways across all aspects of the curriculum, making connections where possible in other subjects including Maths, Science and Design-Technology. This ensures that they become digitally literate – at a level suitable for the future workplace and as active participants in a digital world. At St Luke's, one of our core values which we promote is to be unique which is why we want our children to be confident and creative enough to express themselves in varied ways through technology, as this will help them to become independent learners. It is our intention that children have plentiful opportunities to allow them to achieve this.

We teach the children in our school to be loving, kind, inclusive and empathetic. Taking this into consideration, we expect our children to be responsible, safe and respectful digital citizens. To uphold these values, not only do we educate our children to apply these standards online, but our children take an active leadership role within our school community, where they educate others about online safety initiatives. We would like our pupils to have enough experience to not only understand their selves as individuals but also as members of a wider online and global community.

We understand that Computer Science is now an integral part of a constant evolving world and as a result we ensure that all of our children can understand and apply the fundamental three principles and concepts of computer science by the time they leave in year six. Equipped with these skills, we hope our children will strive to become the best that they can be in life.

National Curriculum Aims

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

- can understand and apply the fundamental three 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