



Computing

Springfield Infant School and Nursery

Intent

At Springfield, we have designed and follow a creative curriculum. We feel that this provides the opportunity to celebrate individuality and creativity in all of our children in all areas of the curriculum. Our computing curriculum is accessible for our learners and provides them with opportunities to develop and progress with their knowledge, understanding and computing skills. Computing is an integral part of everyday life and will play a continual part in our children's futures. Therefore, at Springfield, we have ensured that our computing curriculum, teaches the importance of staying safe on-line, so that we can safeguard our children and that the children know and understand how to keep themselves safe. E-safety is a thread running throughout our computing curriculum.

Our Springfield 'I CAN' values are embedded in our computing curriculum. At Springfield, computing has a pivotal role of enabling **inclusivity**, in a world where we are becoming reliant on technology, children having their computing skills **nurtured**, being **creative** with the programmes and work they produce and having the chance to challenge themselves and be **ambitious** in their computing work. We provide children with the skills, knowledge and enthusiasm to live and thrive in a world increasingly dependent on computing. Our curriculum is well-sequenced and structured and it supports our children in becoming proficient IT users and enthusiastic, life-long learners.

The children will develop knowledge and skills in the three main areas of the computing curriculum:

- Computer science (programming and understanding how digital systems work)
- Information technology (using computer systems to store, retrieve and send information)
- Digital literacy (evaluating digital content and using technology safely and respectfully).

Implementation

At Springfield, our children visit our well-resourced computing suite on a weekly basis and have practical and engaging computing lessons. However, computing is not just a standalone subject, it is a cross-curricular subject and is embedded throughout the curriculum. Children will have the opportunity to use a range of devices, equipment and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links, provides lessons with purpose as well as links to their wider life. At Springfield, we find this motivates our children because as they start to make connections within their learning they are becoming life-long learners. From the EYFS children are introduced to algorithms, at Springfield we use Purple Mash to support our computing teaching and learning. Purple Mash is an award-winning cross curricular scheme of work, as well as, an online platform for primary school children, enabling them to explore and enhance their computing skills, understanding and knowledge in a fun and creative way. Our youngest learners to become familiar with and understand what algorithms are; how they are implemented as programs on digital devices and that all programs work by following very precise instructions. All of our children will investigate problems and they will learn to create and debug simple programs using logical reasoning.

As children progress into Key Stage One, they will continue this and begin to predict the behaviour of simple programs using coding and creating outputs.

Throughout the curriculum, children will use technology purposefully to create, organise, store, manipulate and retrieve digital content. In the EYFS, children are encouraged to use devices as soon as they enter Reception, in order to support fine motor control, encourage understanding of how technology works and how it can help them, and give them independence when collecting information about themselves and others. The children in Key Stage One progressively move towards retrieving, adapting and organising information from sources in order to aid their learning.

At Springfield, we pride ourselves in a strong partnership with parents. We recognise the use of technology beyond school. We encourage all children and adults to use technology safely and respectfully. This vital message is addressed through our computing curriculum, as well as our e-safety and safeguarding policies. All children are regularly taught what being safe online looks like. Regular discussions, modelling and teaching encourages children to identify and report anything that they have concerns about including content or contact on the internet and other online technologies. We have a range of texts, in-school, which support the teaching, learning and importance of staying safe online. In addition to this, we annually take part in the national E-safety day. Materials, support and updates are regularly sent to parents.

Impact

At Springfield we believe that our engaging and purposeful computing curriculum provides our children with the knowledge and understanding they need to continue using technology as they develop into young adults. E-safety is a paramount as it gives our children confidence to use technology, devices and the internet safely. Being confident and skilled users will support our children's wellbeing, and enable them to be vigilant with ever changing technological environments and trends that are rapidly evolving around them.