

Sprowston Infant School Computing Medium Term Plan

EYFS – detailed are the enhanced provision or directed activities

KS1 – see the corresponding knowledge organisers

	Autumn	Spring	Summer
Nursery	Cause and Effect	E – safety	Exploring technology
Reception	E – safety Using equipment – <i>CD player, interactive whiteboard, ipad</i>	E – safety Using equipment – <i>chromebook, camera, microwave</i>	E – safety Technology choices
Year 1	E- safety and E – sense Programming a robot	Digital Painting	Coding Animations
Year 2	E- safety and E – sense Coding with Espresso	Photography	Data and Information

Our Computing Curriculum Journey

Early Years

We begin in nursery by pupils exploring cause and effect with a range of devices. They learn that actions have effects and, through this, begin to understand how things work and how to create effects that they can control. As the year progresses, we continue to give children access to a range of technology and begin to understand how they work and what they can do with them. We believe e-safety is extremely important for children in today's world and introduce it in nursery. Children begin to learn about how we can use technology to communicate and that they must feel empowered to say no, or tell an adult if they see anything they don't like, or if someone upsets them. In Reception, we continue to teach the children about a range of different technology, to gain further understanding of how it works. This will include learning how to use beebots and make them move around in different directions. We also continue teaching esafety throughout the year, to make sure pupils develop a sound understanding of this appropriate to their age, so they are well prepared to engage with further technology in KS1.

Key Stage 1

Y1 begins by working with beebots. They build on Reception learning by learning how to program the beebots in advance to make them move to certain places. Terms such as 'algorithm', 'program', 'commands' are introduced, which will be crucial in their future learning in Computing. Children will further their esafety knowledge by beginning to learn about privacy and safety online, including the idea of a 'digital footprint'. Children will look at paint software to understand how computers can be used to make art. In summer, they will build on their learning about programming and algorithms to learn how to code, as well as animations. At the beginning of Y2, they pick up on this and combine their knowledge of coding and animations to create their own animations and design an app that builds on their knowledge of inputs and outputs. They also return to online safety, this time extending it to encompass learning around safe amounts of online activity and knowing not everyone is who they say they are online. Again, these are crucial to pupils' healthy development in computing as they progress into KS2. Children learn about photography next and are embedding their prior knowledge that digital devices can create art and that work can be saved and retrieved. They learn about software tools to edit pictures, which will be taken further in their future learning. In summer of Y2, pupils learn about data handling and some of the foundational knowledge they will need in future learning, such as how data can be represented in different ways, and beginning to understand data that is presented to them. This builds on their previous knowledge of labelling and placing objects into groups, as well as Maths and science learning that may include, for example, tally charts and tables.