# Computing Curriculum

## Intent

In line with the National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand the subject. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. By the time pupils leave Fressingfield Primary School, children will have gain key knowledge and skills in the three main areas of the computing curriculum: computer science, information technology and digital literacy. The objectives within each strand support the development of progressive learning across key stages, ensuring a solid grounding for future learning and beyond.

## Implementation

At Fressingfield Primary School, 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 follow the National Curriculum which allows pupils to receive a progressive and challenging curriculum. We have laptops available that all year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught. There are also computers in the activity areas. Each class also has a tablet and a class camera. The implementation of the curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon. For example, children in Key Stage 1 learn what algorithms are, which leads them to the design stage of programming in Key Stage 2, where they design, write and debug programs, explaining the thinking behind their algorithms.

## Impact

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. The quality of children's learning is evident in their scrap books which show the progressive curriculum we follow throughout their primary school experience. Evidence such as this is used to feed into teachers' future planning, teachers are able to revisit misconceptions and knowledge gaps in computing when teaching other curriculum areas. This supports varied paces of learning and ensures all pupils make good progress. Much of the subject-specific knowledge developed in our computing lessons equip pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at Fressingfield Primary School gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.