

## Computing

*'A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world.'* Department of Education, National Curriculum

### Intent

At Two Moors we provide a broad and balanced computing curriculum that is fully inclusive for every child. We want children to become masters of technology and not slaves to it. The children will learn key knowledge about how computer systems work, and how they are designed and programmed. By the end of Key Stage Two, children will have gained in increasing depth specific key knowledge and skills in computer science (including programming and understanding digital systems), information technology (storing, retrieving and sending information) and digital literacy (evaluating digital content and using technology safely and respectfully). Children will have the opportunity to increase their computational thinking across the key stages ensuring a secure skills base for future learning and development. Computing skills are learned through a mixed approach of discrete and cross-curricular learning. In this way, children will become confident and digitally literate when choosing and evaluating programmes and applications, and ensure that computing “works for them”. Teachers use the comprehensive collection of resources from Purple Mash and TeachComputing.org as a springboard to plan, support and monitor children’s computing development. Children have a range of opportunities to employ their skills effectively in the context of a rich and varied curriculum. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught. Children can share and evaluate their own and others’ learning.

The revised EYFS framework 2021 aims to develop a range of pupils’ personal experiences to increase their knowledge, sense of the technological world around them and how this can support their learning in other areas. Children will have access to a wide range of technology and resources including interactive whiteboards, iPads, technological and digital toys, BeeBots, interactive books, cameras and recording equipment. Teachers facilitate children’s curiosity with challenge and model how to use the equipment carefully and safely including developing their understanding of internet safety as they explore how technology is an everyday part of their learning and understanding of the world.

### Implementation

Teachers build on prior learning, introducing new components in each lesson, assessing understanding and building the spiral of knowledge and skills in computing. 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, and helps the development of topic-based and discrete learning. In each computing unit, pupils will be given a word bank / knowledge organiser to support their learning. Children have regular access to iPads and laptops ensuring they are confident in using a range of devices and programs. Children work independently and collaboratively, using a wide range of resources, becoming increasingly confident

in discussing and applying their computational thinking skills. Children have computer files to record their work as well as on Purple Mash.

### **Impact**

Children are supported and challenged to help them meet age-related expectations each year. We monitor the impact of our computing teaching through:

- Using pupil voice to discuss individual learning.
- Monitoring pupils' computing files and their work on Purple Mash for quality of work, progression of skills and depth of knowledge and understanding.
- Moderating assessments for attainment and progress across year groups and across the key stages.
- Visits to computing lessons.
- Monitoring the knowledge and understanding the children retain over time and the number of children who are successfully meeting the end of year milestones.

