



Moor First School

## Computing

'Together we unlock potential and learn for life.'

### Intent

At Moor First School, it is our intent to provide a powerful computing curriculum to equip children to be prepared for the ever-changing world where work and leisure activities are increasingly transformed through technology. It is our intention to promote and encourage a love of computing and to enable children to find, explore, analyse and present information in a safe, responsible and respectful manner. Through a variety of computing opportunities, we aim to deliver a progressive approach to learning in terms of the knowledge and skills required to program, explore data, solve problems and reason with computational language. As with other subjects in our curriculum, computing is taught with the use of concepts. Our aim is to use these concepts to organise and prioritise information as to bring focus and depth, and ensure knowledge and skills are both relevant at a deeper level.

### Implementation

At Moor First School, we use Purple Mash to teach our computing curriculum in a mixed age 2-year cycle and each class receives 1 hour per week.

The Purple Mash Computing Scheme of Work exposes pupils to a wide variety of skills, experiences and poignant real-life scenarios which supports the notion of Cultural Capital; providing the foundations that lead to well-rounded global citizens. Pupils are introduced to a wide range of technology, including laptops, iPads, beebots and interactive whiteboards, allowing them to continually practice and improve the skills they learn.

To ensure effective implementation of our computing curriculum, we have adopted the principles of Rosenshine's instructional strategies. We provide explicit and systematic instruction, breaking down complex concepts into manageable parts, and offering ample opportunities for guided practice and feedback. This approach allows children to gradually build their knowledge and skills, leading to a deeper understanding of computing concepts. This scaffolded approach supports our children with SEND (Special Educational Needs and Disabilities) as each step is broken down in manageable parts as not to overload them. Purple Mash is designed to provide a clear progression of skills, vocabulary and knowledge across different year groups. Our curriculum covers a broad range of topics, including computer hardware and software, programming/coding, data representation, internet safety, logical reasoning, digital creation and media. The skills they develop with this subject are transferable to other subject areas for example how to record data in a Science lesson. Online safety is also taught through PSHE focussed sessions as well as during Internet Safety Weeks. By following our concept-led curriculum, children will develop a range of transferable skills, including problem-solving, critical thinking, collaboration, and creativity. With regards to Early Years, although it is no longer in development matters, it is imperative that our children have access to technology from an early age. In the Early Years setting, computing activities are designed to be hands-on and interactive, allowing children to explore and experiment with various devices and software. Through age-appropriate apps, games, and devices, they learn to navigate digital interfaces, manipulate objects on the screen, and develop basic digital literacy skills.

Online safety is interwoven into lessons throughout the year using Purple Mash's 2BeSafe – Being Safe in A Digital World.

#### Impact

At Moor First, we expect to see a range of positive impacts on our children. Progress is measured through regular teacher assessments. Assessment takes place during every lesson and at the end of each unit but reviews also take place to identify any misconceptions/consolidation required. Books are used to provide hard-copy samples of pupil's work in each class and work done through Purple Mash is saved electronically in the children's personal document folders. Children are also able to save any work completed at home into their personal folder for their Class Teacher to see.

Through our emphasis on progression, Children will demonstrate increasing competence and fluency in coding and digital literacy. They will be able to create and debug programs independently, demonstrating their understanding of algorithms, variables, loops, and conditionals. They will develop an appreciation for the power of technology and its potential for innovation and creativity. Our Children will also gain a solid understanding of internet safety and digital citizenship, ensuring responsible and ethical use of technology. They will be equipped to navigate the digital world with confidence, recognizing potential risks and making informed decisions to protect their online identities and privacy. They will also be well-prepared for future academic and career pathways related to computer science, as well as the ever-increasing demands of the digital age.