



## **Computing**

### **Aim**

The national curriculum for computing aims to ensure that all children:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Are responsible, competent, confident and creative users of information and communication technology.
- Enhance the deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems.

### **Intent**

Technology is an integral part of everyday life. With technology playing such a significant role in society today, we believe 'Computational thinking' is a skill children must be taught if they are to be able to participate effectively and safely in this digital world.

Moss Lane is committed to ensuring all children have full access to a high-quality computing education. We have a range of resources to support children in their learning across the whole curriculum as well as in their discrete computing lessons.

Our main priority of computing at Moss Lane is to create children who are confident with the skills derived from the National Curriculum. We also encourage a love of computing and work to develop confident, independent learners who are able to plan, design, create, program and evaluate information through the use of ICT.

As well as the benefits of ICT, we are also aware of the risks. This is why we prepare our children to stay safe online through the use of e-safety awareness units of work, E-safety sessions, circle times and Safer Internet Days.

### **Implement**

At Moss Lane we implement Computing by:

- Ensuring high standards of teaching and learning in computing, we implement and provide a curriculum that is progressive throughout the whole school.
- Having a clear and effective scheme of work that provides coverage in line with the National Curriculum and progression of skills. At Moss Lane, we use Purple Mash.
- Discussing online safety topics and informing children of how to be safe when using technology.
- Keeping parents informed when issues relating to online safety arise and further information/support is provided if required.
- Using interactive whiteboards in the classroom to aid learning.
- Holding termly staff meetings to provide staff with relevant training to keep their skills relevant and ensuring they have a good understanding of the computing curriculum.
- Having weekly lessons in our computer suite and/or using iPads in the classroom.
- Having a technology area in our EYFS classroom.
- The use of online computer programmes to support home learning: e.g. Mathletics and Purple Mash.



### **Impact**

- At Moss Lane, by following our scheme of work, children will be able to develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their life, both at home and in school.
- Children will have a secure knowledge of the implications of technology and digital systems. This is important in a world where digital technologies are constantly evolving. They will be confident to use them for their own benefit, but more importantly – safely.
- Children will understand the consequences of using the internet and be aware of how to keep themselves safe online.
- Children will have a love and passion for computing and enjoy their lessons.