

**Intent**

At LFADM, we believe a high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world. We have designed our computing curriculum to ensure the NC is covered and to ensure that all pupils:

- ✓ understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- ✓ analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.
- ✓ evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- ✓ responsible, competent, confident and creative users of information and communication technology.

**The computing curriculum**

We use Purple mash and the national curriculum as the basis in sequencing key concepts and knowledge; a detailed overview of each project is highlighted in the computing subject narrative section.

We adapted the Purple Mash yearly curriculum into two cycles and the computing overview highlights which computing projects and content are taught when. This has been mapped out alongside National Curriculum to ensure there is correct coverage of computing across all year groups.

To address gaps and understand children's prior learning, we access 'crash course' videos designed for teachers to watch before the delivery of the lesson. This also supports teacher's subject knowledge.

**Focus actions for 2021/2022**

- ✓ Ensure there is correct coverage and breadth across all year groups of computing being taught by using Purple Mash and National Curriculum guidance as support.
- ✓ Ensure teachers feel confident in teaching and assessing computing.
- ✓ Ensure curriculum planning is fit for purpose and has all the necessary active ingredients to cater for needs of all learners (where needed crash coursed are used to support computing)
- ✓ Ensure appropriate equipment is available for computing lessons.
- ✓ Ensure teacher are showcasing children's work.

**Implementation**

Pupils are taught using a range of well-known software including Word, PowerPoint and Excel as well as a range of online resources and Purple mash. The programs enable children to be taught effective computing skills for life in word process and formula writing alongside more specific skills in coding and programming. Each child has access to the Purple Mash, internet and is taught how to use it appropriately and safely alongside how search engines and websites operate. Every child also has access to online safety resources from Purple mash with an individual login. Internet safety is taught regularly at an age appropriate level and forms the basis of all Computing learning. Children are also taught about vocabulary linked to computing and key skills for life including touch typing. Across the school, we teach computing once per week with our children handing in 'To Dos' set by the class teacher. Examples of these can be shown on each classes wall on Purple Mash.

**What does our planning include?**

- ✓ Progression of knowledge and skills.
- ✓ Do Now and retrieval.
- ✓ Knowledge organisers.
- ✓ Learning objectives
- ✓ Active learning opportunities

**What approaches to T&L do we use?**

- ✓ Quizzes
- ✓ Retrieval opportunities at the beginning of each lesson
- ✓ Partner/group talk during whole class teaching.
- ✓ High-quality visits/visitors

**How do we provide feedback for our children?**

- ✓ Verbal feedback and written marking on their Purple Mash tasks.
- ✓ Opportunities for self and peer assessment.
- ✓ End of project quizzes to check hat children have remembered and learned the taught skills.

**Key resources in school**

NC documents, Purple Mash, progression of skills outline, a developing bank of resources for each computing topic.

**Adapted approaches to learning**

Teachers have a range of strategies to use for individual children, for example: templates, word banks, guided activities, grouping of children, use of ICT

**How do we evaluate the impact of T&L?**

- ✓ Triangulation of planning, online displays, discussions with staff and pupil voice with digital leaders to identify standards, strengths and areas for improvement
- ✓ Evaluation of content being covered for the next time this is taught.
- ✓ Each part of the Computing curriculum is reviewed on a termly basis by the subject leader.