



## Grange Primary School

### Computing

#### Intent

With technology playing such a significant role in society today, we believe that children must be taught key skills and have access to a range of technologies if they are to be able to participate effectively and safely in this digital world. A high-quality computing education equips pupils to use 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. At Grange Primary School, the core of the computing curriculum is Computer Science, Digital Literacy and Information Technology. Pupils are introduced to a wide range of technology, including laptops, iPads and interactive whiteboards, allowing them to continually practice and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology– at a level suitable for the future workplace and as active participants in a digital world.

We teach a curriculum that enables children to become effective users of technology who can: apply essential principles and concepts, analyse and solve problems and communicate ideas effectively.

#### Internet Safety

Grange Primary school takes internet safety extremely seriously. We have an E-Safety Policy that provides guidance for teachers and children about how to use the internet safely. Every year group participates in lessons on e-safety (as part of both the computing and PSHE curriculums) and children understand how to stay safe when using technology.

#### Implementation:

The subject leader monitors all aspects of the computing curriculum: coverage, progression, planning, teaching, learning and outcomes. To ensure consistency across the curriculum, the following are requirements for all subjects:

- A knowledge organiser for each unit which outlines knowledge (including vocabulary) all children must master.
- Homework projects using and applying computing and other curricular areas.



- A cycle of lessons for each unit, which carefully plans for progression and depth.
- Detailed progression documents to ensure skills and knowledge are built upon across year groups, phases and key stages.
- Catalyst questions for pupils to apply their learning in a philosophical/open manner.
- Trips and visiting experts who will enhance the learning experience.
- A means to display, showcase and celebrate the pupils' computing work in their class.
- Assessment and monitoring on a pupil, class and subject level.

### **Impact**

Our computing curriculum is high quality, well thought out and is planned to demonstrate progression. Progress and attainment is measured and tracked against age-related expectations, statements and standards using the National Curriculum over-arching aims:

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

Rigorous and meaningful assessment is vital for consolidation, addressing misconceptions, determining next steps (individually and as a school) and celebrating success and achievements.

In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes;
- A celebration of learning for each term which demonstrates progression across the school;
- Pupil discussions about their learning; which includes discussion of their thoughts, ideas, processing and evaluations of work.