



# Computing at Nevill Road Junior School



## Intent

All pupils at Nevill Road have the right to have rich, deep learning experiences that balance all the aspects of computing. 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. 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 Nevill Road Junior School, the core of computing is Computer Science in which pupils are introduced to a wide range of technology, computers, 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:

- Understand and apply the essential principles and concepts of Computer Science, including logic, algorithms and data representation;
- Analyse problems in computational term, and have repeated practical experience of writing computer programs in order to solve such problems;
- Evaluate and apply information technology analytically to solve problems;
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.

## Internet Safety

Nevill Road Junior 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 and children understand how to stay safe when using technology. The Computing Curriculum makes close ties with the PSHE Curriculum when covering aspects of e-safety and elements of e-safety are discussed at regular points through the year in addition to being highlighted in assembly on Safer Internet Day.

## Implementation

Teachers are provided with an additional three planning half days per year in addition to their PPA, to plan their curriculum. As part of this planning process, teachers need to plan the following:

- A knowledge organiser which outlines knowledge (including vocabulary) all children must master;
- A cycle of lessons for each subject, which carefully plans for progression and depth;
- A low stakes quiz which is tested regularly to support learners' ability to block learning and increase space in the working memory;
- Challenge questions for pupils to apply their learning in a philosophical/open manner;
- Trips and visiting experts who will enhance the learning experience.

## Impact

Our Computing curriculum is well thought out and is planned to demonstrate progression. If children are keeping up with the curriculum, they are deemed to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes
- Whether children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation;
- Whether children can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems;
- Whether children can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems;
- Whether children are responsible, competent, confident and creative users of information and communication technology.
- Pupil discussions about their learning – pupil voice.