

Computing

“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.”

DfE 2014

Intent:

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 terms, 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.

Implementation:

As a school, we have chosen the Purple Mash Computing Scheme of Work. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool. Furthermore, it gives excellent supporting material for less confident teachers.

Impact:

Our Computing curriculum is high quality, 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.

After the implementation of this robust computing curriculum, children at Emerson Valley will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation will become second nature.