Computing Curriculum

Intent	It is our intention to provide the children of Porters Grange with a computing curriculum which starts them on the road to being lifelong users of technology at a level suitable for the future workplace and as active participants in a digital world. The workplace of the future will undoubtedly rely heavily upon computing skills and providing a strong start to their understanding of the subject will enable them to be aspirational with their future career choices. Computing has strong links with other curriculum areas through its use of computational thinking and creativity of thought. By strengthening the children's ability to think logically and problem solve, we better equip them to deal with the requirements across the whole curriculum both at primary school and beyond.	

Implementation

What

Key Stage 1: The focus here is to teach the foundations of computational thinking. This incorporates 'unplugged' lessons which help them to develop an understanding of algorithms and simple programs. Whilst many children come to school with experience of devices, the aim is for them to develop a wider understanding of their uses including how to do so safely.

Lower Key Stage 2: The children in lower KS2 begin to develop their ability to manipulate computers by writing their own programs. They develop their understanding of computer science by learning about networks, including the internet, and understand how to use them safely.

Upper Key Stage 2: They deepen their understanding of programming by designing, writing and debugging their own programs. They draw together their learning from across the school to be able to make appropriate choices of tools to solve different problems.

How

Resources and Equipment	Planning	Environment
We are resourced with a computer suite, iPad trolleys and laptops. We review this provision regularly and look for ways of increasing the number of devices available. We also have an onsite technician to ensure that hardware and software are working correctly. A quick way to put teachers and students off computing is for the equipment not to work.	Our planning is taken from the National Centre for Computing Education which is funded by the DFE. It provides a comprehensive scheme of work covering KS1 And KS2. The planning ensures good coverage of the National Curriculum objectives and provides excellent resources to supplement the teachers' understanding.	Pupils are exposed to technology in many aspects of their lives and school is no different. The teachers are assisted in their teaching with an interactive whiteboard; they are set work through their online learning platform; and they regularly use tools such as the iPads and computer suite. Through computing lessons, these devices become useful tools to aid them in their learning.

Impact

Quality of Education	Behaviour and Attitudes	Personal Development
The adoption of the Teach Computing curriculum ensures that teachers are equipped with planning from highly qualified sources. This increases teacher knowledge and ambition which has a positive effect on the children's learning.	In its nature, computing appeals to the interests of children. Because it is approached in a well thought out and challenging way, the children are highly engaged and focused on their learning. Our children look forward to computing and enjoy their lessons.	Children learn the ability to solve problems through the application of logical thinking. This helps them in a range of subjects such as science and maths. They also develop resilience and perseverance to solve problems.

Monitoring

Conversations with Pupils	Work Scrutiny	Teaching and Learning Observations