



Computing and Online Safety

The computing curriculum at Pye Bank aims to develop pupils' understanding of digital world by giving them the opportunity to experience a wide range of computer equipment, programs and software. The curriculum is planned to build pupils' skills and knowledge systematically in order to ensure they develop a good understanding of key computing concepts whilst engaging in fun and creative units of work. The four key strands that underpin Pye Bank's computing curriculum are: Programming, Creating Media, Data and Information and Computer Systems and Networks. Pupils have the opportunity to cover each of these units through each phase revisiting and building upon core skills previously taught. Pupils have weekly computing lessons and have access to laptops, chrome books and iPads in school.

Pupils are encouraged to develop resilience and perseverance through a wide range of open-ended tasks. Through the Creating Media and Data and Information units, the computing curriculum ensures that pupils become digitally literate and are able to confidently use, express themselves and develop their ideas through a variety of creative topics and computer software programs, such as, photography, website creation, digital music, animation, film making and 3D printing. Along with this, the Programming and Computer Systems and Networks units, provide opportunities for pupils to develop their knowledge and understanding of computer science, through which pupils are taught the principles of computational thinking, how digital systems work and how to apply this knowledge through programming. In Programming, pupils start in Key Stage One by exploring sequencing, algorithms and block coding through a variety of different apps and the use of Bee Bots. As pupils progress into Key Stage Two, they continue to build upon the skills learnt through the use of Scratch, coding physical components and the use of Micro Bits. Alongside this, the pupils are taught key computing vocabulary in order to aid them with their understanding. The computing curriculum supports pupils' development in other subjects through cross curricular planning with computing units linking to other key areas of learning such as English, maths, music, art, and design and technology.

Pupils are taught how to keep themselves safe online and how to use technology responsibly. Each year group has an online safety focus per half term, with the first computing lesson being dedicated to delivery of this using the lessons from the Sheffield Online Safety Curriculum. This learning is then reinforced through the rest of the half terms computing lessons. As well as this, pupils have the opportunity to participate in the national Online Safety Day each February. In year 5 and 6, pupils also cover elements of online safety through the JIGSAW curriculum and PHSE lessons. By the time pupils leave Year 6, they are equipped with a good understanding of the opportunities for learning and growth that the internet provides, but also new types of risks that they could be exposed to and how to manage these in order to ensure their kept safe at all times.