COMPUTING CURRICULUM

INTENT

We aim to empower students with a comprehensive foundation in digital literacy, ensuring they become adept users and creators of digital content. We strive to instil a deep understanding of online safety, making sure students are aware of how to protect themselves and seek help when necessary. Our curriculum is designed to enable students to confidently explore and utilise technology, enhancing their learning across all subjects and preparing them for the digital demands of the future. Through a balanced focus on Information Communication Technology, Digital Literacy and Computer Science, we aim to nurture well-rounded digital citizens capable of innovative thinking and effective communication in an ever-changing technological landscape.

IMPLEMENTATION

Our computing curriculum is structured around three core strands: Information Communication Technology, Digital Literacy and Computer Science. Each lesson begins with an online safety reminder, underlining the importance of responsible internet use, supported by visible online safety posters throughout the school. Teachers prepare for lessons by reviewing Purple Mash planning, creating slides as needed to facilitate learning. Every computing lesson clearly outlines the learning objective and the steps to success, engaging students in discussions about key vocabulary and its application. We reinforce learning through the "Know More, Remember More" quizzes, reviewing prior knowledge at the start of each lesson. Activities are set in advance via '2Do' on Purple Mash, clarifying lesson expectations. At the conclusion of each lesson, students submit their work or save it to their personal folder, ensuring a record of their progress and achievements.

IMPACT

Our children are digitally literate who are not only confident in using technology but also understand the importance of online safety and ethical behaviour. Our students gain proficiency in a variety of digital tools, enhancing their ability to communicate, create and collaborate effectively. They develop critical thinking and problem-solving skills through computer science activities, laying a strong foundation for future learning and career opportunities. By integrating computing skills across the curriculum, through our wide range of technology such as chromebooks, we ensure our students are well-prepared to navigate the digital challenges of the future, equipped with the knowledge and skills to make positive contributions to an increasingly tech-driven world. Through our comprehensive approach, students emerge as responsible digital citizens, ready to leverage technology to enrich their lives and the lives of others.

BIG OPPORTUNITIES

Our computing curriculum is designed to provide students with an abundance of enriching opportunities, positioning them at the forefront of digital innovation and safety. Initiatives like Digital Leaders empower students to take on leadership roles, guiding their peers in navigating the digital world responsibly. The Coding Club and the use of engaging platforms such as Purple Mash and Kahoot foster a deep interest in programming and interactive learning. Celebrating Safer Internet Day, we educate our students on the importance of online safety, further supported by resources from the Breck Foundation and Natterhub. The integration of cutting-edge technology, including Chromebooks, Raspberry Pi and Microbits, ensures hands-on experience with the latest in computing hardware. Our school newspaper offers a platform for students to showcase their digital projects and achievements. Additionally, educational tools like TTRS (Times Tables Rock Stars), AR (Accelerated Reader), and IDL (Indirect Dyslexia Learning) support a wide range of learning needs, enhancing literacy and numeracy skills through technology. Peardeck and Quizlet further increase our interactive and engaging learning environment. These opportunities not only enhance our students' computing skills but also foster a culture of digital citizenship, creativity and critical thinking, preparing them for a future in an increasingly digital world.

KEY CONCEPTS, KNOWLEDGE & SKILLS

Key Concepts:
- we are digitally literate
- we are coders
- we are creators
- we are

We aim to make our students digitally literate, enabling them to navigate, analyse and contribute to the digital world effectively. As coders, they learn problem-solving through programming, laying the groundwork for computational thinking. Emphasizing creativity, we encourage students to express themselves and innovate with digital media. Online safety education ensures they understand the importance of privacy, ethical information use and respectful digital interactions. These pillars equip our students with the knowledge and skills to thrive as responsible digital citizens, combining technical proficiency with critical thinking and creativity.

ASSESSMENT

Assessment starts by evaluating children's prior knowledge and addressing misconceptions, allowing for personalised learning paths. We incorporate pupil voice through interviews, enriching our understanding of their learning journey. The subject leader reviews work samples, facilitating teacher dialogues to assess class progress. Annually, we report standards in the end-of-year summaries and maintain electronic records of learning, enabling continuous tracking. Utilising Purple Mash for specific units, we assess students against benchmarks for exceeding, expected or working towards standards post each term. This information is then recorded on Arbor, reflecting progress across covered units. Our approach ensures tailored assessment, fostering individual growth and comprehensive understanding of computing concepts.