



Computing at Ashmole Primary School

‘Computing at Ashmole allows the children to explore the breadth and depth of the National Curriculum and is woven into all parts of the curriculum allowing for a greater understanding of the world around us.’

Intent

Children will develop their competence and confidence and will gain an understanding of computational systems of all kinds, whether or not they include computers (through unplugged activities). As children become digitally literate they will be able to use and express themselves and develop their ideas through information and communication technology. Online Safety is taught throughout the year, ensuring that pupils know how to stay safe online and know the steps to take if they have any concerns.

In line with the National Curriculum (2014) we aim to ensure children are receiving high-quality computing whereby they are able to use their computational thinking and creativity to deepen their understanding of our ever changing world. We encourage computing to be cross-curricular as well for skills to be taught discretely as the skills they learn in computing can be applied in mathematics, science, and design and technology. Furthermore, by encouraging computing to be taught creatively, we are promoting invention and resourcefulness to prepare our children to function appropriately in Modern Britain.

At Ashmole Primary School, we believe that computational thinking is vital in helping children to solve problems, design systems, and understand the power and limits of human machine intelligence. Pupils will be empowered to become creative, logical and critical thinkers, who reason systematically and work collaboratively.

Pupils will be finding things out, exchanging and sharing information, reviewing, modifying and evaluating work. Advancing their knowledge of how computers, software, the internet, the web and search engines work with a critical understanding of how these technologies impact on their lives and on society. Pupils will develop knowledge of fundamental concepts and principles of computer science to include abstraction, logic, and algorithms and data representation. Pupils will learn to analyse and breakdown problems into logical steps and to create programs through Scratch, Bee-Bots and online resources.

Risk taking and innovation will be enriched through the computer science, as children become independent and skilful users of digital technology. Children will develop their competence and confidence and will gain an understanding of computational systems of all kinds, whether or not they include computers (through unplugged activities). As children become digitally literate they will be able to use and express themselves and develop their ideas through information and communication technology.

A key area of focus identified within our school is the continuous rise in the use of the internet, we therefore ensure that we make clear links in the teaching of internet safety with the principles of our safeguarding, PSHE and RSE policies.

Online Safety is taught throughout the year in all year groups, ensuring that pupils know how to stay safe online and know the steps to take if they have any concerns.

Implementation

At Ashmole Primary School, computing is embedded in the curriculum and taught in discreet computing lessons. The computing curriculum has been developed from the National Curriculum (2014) with our targets broken down into three strands: Computer Science, Digital Literacy and Information Technology. These targets ensure our children have a good coverage of the curriculum and are able to develop their depth of knowledge. By teaching discreetly and with topic links allows the children to see the value of computing to their presenting skills and the importance of computing to the digital life. In order to support pupil knowledge, teachers receive training, where appropriate of new developments in computing. Children use laptops and iPads during lessons to aid research and plugged activities across all core and foundations subjects. Teachers also use Google Classroom to upload homework, promoting children to engage with the platform allowing parents to oversee tasks set by the teachers. Google Classroom fosters an environment of online learning and outstanding communication between teachers and parents. Each classroom at Ashmole Primary has an interactive whiteboard allowing teachers to teach engaging and interactive lessons across the curriculum.

Impact

Through our Computing curriculum, the children are able to explore the breadth and depth of the National Curriculum (2014) and learn within a coherent and progressive framework. Through our integrated computing and discreet computing lessons, pupils are able to understand the purpose and value of their learning and see its relevance to their past, present and future. Furthermore, through our Project links, the children are able to develop and demonstrate their creativity whether it be through making an animation about the Romans or using Word to publish their writing. We provide enrichment opportunities beyond the classroom through our Scratch Club. We also take part in Safer Internet Week where the children focus on Online Safety. We also have 45 laptops, 150 iPads, access to Google Classroom, Timetable Rockstar's to enable a fully immersive technological- cross- curricular learning environment. Each classroom also has two elected online safety rangers which monitor any concerns children may have about their online safety at Ashmole Primary when using laptops or iPads. Children also have the opportunity to complete end of unit evaluations about the progress they have made in their unit during each half-term.