



Inspiring a love for lifelong learning

Computing Curriculum

Curriculum Overview	<p>Through inspiring a love for lifelong learning, it is our aim at Ashford Park (APPS) for all children to understand and apply the fundamental principles and concepts of computer science, including key vocabulary, abstraction, logic, algorithms and data representation. Through our work carried out with Nesta/EdTech, we have learnt that EdTech is the way forward.</p> <p>In this rapidly and ever-changing world, we endeavour to teach our children the skills to be successful adults in jobs that do not as yet exist, therefore we understand that it is essential that we provide teaching and learning opportunities for our children to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.</p> <p>Through our specific Computing teaching supported through 'Switched On Computing', our children are taught to apply knowledge over time in a range of NC subjects. We will teach our children to evaluate and apply information technology, including new or unfamiliar technologies analytically to solve problems. We teach through a 'spiral' approach to sequencing the taught units, with themes recurring year by year. This provides ample opportunity for pupils to:</p> <ul style="list-style-type: none">• consolidate technical skills• achieve fluency with a range of key applications• develop their knowledge and understanding of the principles that underpin digital technologies and the changing consequences of these for individuals and society. <p>We also work in partnership with 'Next Thing' within KS2, to teach our children to become responsible, competent, confident and creative users of information and communication technology.</p>
Curriculum Intent	<p>To develop resilient and confident users of a wide range of IT platforms and software.</p> <p>To teach all aspects of Digital Citizenship to develop responsible, empathetic, kind and informed users of technology and to ensure children understand how to keep themselves and others safe online.</p> <p>To teach coding in a variety of contexts to develop resourceful, reflective and creative coders.</p> <p>To teach knowledge and understanding of information technology systems to create informed and empowered users of technology.</p>



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Curriculum Implementation	<p>The Computing curriculum is split into 3 disciplines: computing (coding), information technology; and digital citizenship. All aspects are taught progressively and digital citizenship is taught both explicitly as well as weaving through all Computing lessons and as well as being included in the PSHE curriculum. Special days/weeks devoted to Digital Safety also reinforce the messages of responsible and safe behaviour technology.</p> <p>The teaching of coding builds progressively from block-based coding programmes such as Scratch to text-based languages. Contexts for coding are often linked to the wider curriculum (e.g English, Science, Geography and DT). Children also have experience with using coding to control physical systems such as Lego models microprocessor-controlled lights. At Ashford Park, our children have opportunities to experience a variety of software through Google and Microsoft, investigating and learning about the similarities and differences in order to provide a broad experience of software. Our children also develop an understanding of networks.</p> <p>The curriculum provides a range of experiences and contexts for learning using Chromebooks, laptops, Ipads and 'Now Press Play' headsets. To support our children's learning throughout the curriculum, technology is reinforced and enriched through learning experiences and opportunities in maths, science, English, history, geography, art and DT, music, MFL and PE.</p>
Curriculum Impact	<p>It is the expectation that subject leads monitor their subject, provide feedback and re-visit to see the impact of teaching and learning on pupil achievement from the feedback provided. Through the impact of our monitoring (learning walks, pupil interviews, staff skills audit, book looks, governor monitoring and liaison with the Computing publishing company), it is our expectation that our children are confident and discerning users of technology across the curriculum. Each unit contains an end of unit quiz, which is used to assess children's use and understanding of their learning to date. These outcomes will inform Target Tracker judgements made by the teachers.</p> <p>Children have a clear, informed understanding of online risks, how to stay safe and how to report concerns. Our children know how to be kind, empathetic and responsible digital citizens. This has a positive impact on their mental health and wellbeing.</p> <p>The children of APPS have a good understanding of how to use coding to create a variety of outcomes or control physical processes. They have experience with using a variety of software and applications and how to create, investigate and present data.</p>



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