

## Deanery CE Primary School

### Subject Vision – Computing

*“A high quality computing education equips pupils to understand and change the world through computational thinking. It develops and requires logical thinking and precision. It combines creativity with rigour: pupils apply underlying principles to understand real-world systems, and to create purposeful and usable artefacts,”*

Computing Curriculum, Programmes of Study, 2019

Intent
<p>The Deanery CE Primary School computing curriculum aims to ensure that all pupils:</p> <ul style="list-style-type: none"><li>• can understand and apply the fundamental principles and concepts of computer science, including logic, algorithms, decomposition, patterns, abstraction and evaluation.</li><li>• can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems</li><li>• can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems and produce an effective end result</li><li>• are responsible, competent, confident, resilient and creative users of information and communication technology.</li></ul>
Implementation
<p>Computational thinking is vital in helping children to solve problems, design systems, and understand the power and limits of human and machine intelligence. We believe it is a skill that empowers, and one that all pupils should be aware of and develop competence in. Pupils who can think computationally are better able to conceptualise, understand and use computer-based technology, and so are better prepared for today's world and future</p> <p>.At Deanery CE Primary School we equip our pupils to use computational thinking and creativity to understand and change the world. The computing curriculum has deep links with mathematics, science and design and technology and provides insights into both natural and artificial systems. The core of the computing curriculum embeds computational thinking skills into the teaching and learning of how systems work and how to put this knowledge to use through programming. Throughout the school, children are encouraged to: identify patterns; use logical reasoning, use decomposition and abstraction whilst building and debugging algorithms and evaluate the systems they produce. Children are encouraged to 'tinker' and take an explorative approach to their learning in order to develop a deeper understanding of the tools they use.</p> <p>Building on this knowledge and understanding, children are equipped to use information technology to create programs, systems and a range of content. They are exposed to a variety of hardware and software systems and use these together to produce work they can be proud of which is displayed to a wider audience on the school website.</p> <p>Our computing curriculum also ensures that pupils become digitally literate. Our children become confident users of ICT who are able to work independently to stay organised, express themselves, develop ideas and produce material well-suited for its purpose. The curriculum ensures that all children are taught how to use technology safely, how to recognise potential dangers and how to respond to these appropriately.</p>
Impact
<p>At Deanery CE Primary School, our ambition for the computing curriculum is that it will equip pupils with the knowledge, skills and understanding to become confident, creative, resilient, active participants in a constantly evolving digital world.</p>