



Computing at Tacolneston & Morley

<p>Vision Statement</p> <p>At our schools, we aim to cover the requirements of the Computing programmes of study on an annual basis. Revisiting each year will ensure both continuity and progression for pupils. Each class will adapt the subject content to meet the needs of the current cohort, combing discrete computing lessons to deliver subject knowledge expectations with the embedding of computational thinking across the curriculum. This will ensure that there is a clear sense of building on what the children have already experienced, and what subsequent steps in learning are likely to involve.</p>	<p>Big Ideas</p> <ul style="list-style-type: none"> • Become creative, logical, critical thinkers, who reason systematically and work collaboratively. Risk taking and innovation will be enriched through computer science • Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems • Appreciate the relevance of digital literacy in our society and that it as an essential tool for learning, communication, finding information and for controlling and understanding the environment • To explore attitudes towards computing and its value. For example, to learn about issues of security, confidentiality and accuracy. As children’s confidence grows they will be able to make informed and discerning choices about their use of information technology 	<p>Content and Sequencing</p> <p>The teaching of Computing is:</p> <ul style="list-style-type: none"> • Knowledge and skills rich • Grounded in creative, practical, active, exploratory and hands-on experiences • Well sequenced and builds on what has been learned so far • Challenges all pupils to think deeply, reason and problem solve • Include discrete and cross-curricular teaching and learning • Clearly aligned to the Computing Programme of Study
<p>Cross-curricular Links</p> <p>Computing is one of the most fundamentally cross-curricular subject areas in education. It’s about using technology, logic, creativity and computational thinking to solve problems that cross all disciplines. It requires the systematic breakdown (decomposition) of both the problem and the solution. We need to prepare pupils for how to live in an increasingly digital world by equipping them with the knowledge, understanding and skills to solve yet unknown problems using tools and technologies that do not yet exist. We can work towards achieving this by using computing as a means of making sense of the world and using what the children learn in computing across the curriculum.</p>	<p>Support</p> <p>We recognise that all classes have children with widely differing abilities. This is especially true when some children have access to digital technologies at home, while others do not. We provide suitable learning opportunities for all children by matching the challenge of the task to the ability and experience of the child. We achieve this in a variety of ways, by:</p> <ul style="list-style-type: none"> • Setting common tasks which are open-ended and require a variety of responses, including problem solving and creative and analytical thinking • Setting tasks of increasing difficulty, evidenced in planning through differentiation and expected outcomes • Providing appropriate adult support to scaffold learning and to aid the work of the individual or group 	<p>Progress</p> <p>Content is taught in small, manageable steps to reduce cognitive load.</p> <p>Children are given the opportunity to demonstrate that they have made progress. We can do this by:</p> <ul style="list-style-type: none"> • Evidence – Using individual or class folders on the school network to contain digital work • Teacher Feedback • Self/Peer review • Assessment Projects – Using end-of-unit open-ended project tasks allow pupils to demonstrate learning • Progress Tracking – Understanding where pupils are and planning next steps to meet age-related expectations