Computing Curriculum

Intent	Computing at Newtown School intends to equip children with computational skills and knowledge that will support their future through a modern, ambitious and relevant education in computing. We recognise that we are teaching them skills for technology that may not yet have been invented and that their experiences in technology will vary greatly in their lifetime compared to any generation that have come before them as new and more modern forms of technology are produced. We want to equip pupils to use computational thinking and creativity that will enable them to become active participants in the digital world. It is important to us that the children understand how to use the ever-changing technology to express themselves, as tools for learning and as a means to drive their generation forward into the future. Whilst ensuring they understand the advantages and disadvantages associated with online experiences, we want children to develop as respectful, responsible and confident users of technology, aware of measures that can be taken to keep themselves and others safe online. Our aim is to provide a computing curriculum that is designed to balance acquiring a broad and deep knowledge alongside opportunities to apply skills in various digital contexts.
Implementation	Our whole curriculum is shaped by our school vision which aims to create a positive, safe and nurturing environment, where everyone belongs and is encouraged to shine and become the best they can be. We teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. Vocabulary and themes are revisited to help children to embed their learning. The computing curriculum at Newtown School allows children to explore different forms of information technology, learn how to create music, artwork and writing digitally, begin to understand programming, including algorithms, and learn how to use digital devices safely. The curriculum is taught through Teach Computing resources which are designed to give a broad range of experiences, using different forms of information technology for a range of purposes. Children participate in a weekly Computing lesson where skills are taught discretely using iPads, BeeBots, digital cameras and other digital devices. Children are also given opportunities to embed and develop their skills in other subjects, such as researching using the internet in geography and history, taking pictures in science, publishing in English, creating graphs in maths, and much more.
Impact	By the time children leave Newtown School they will be able to: • Explain the importance of and give some examples of ways to stay safe when using Information Technology (IT). Children will know what to do when they come across a safety issue. • Give examples of IT both at school and in the wider world and how it is used.

	• Create using forms of IT to produce, publish and share artworks, writing and music that has been digitally created by them. • Recognise how data can be sorted and grouped by a computer. • Program (including creating and debugging algorithms) using tools such a floor robot and a sprite, including predicting what will happen in an algorithm. • Save and retrieve digital content.