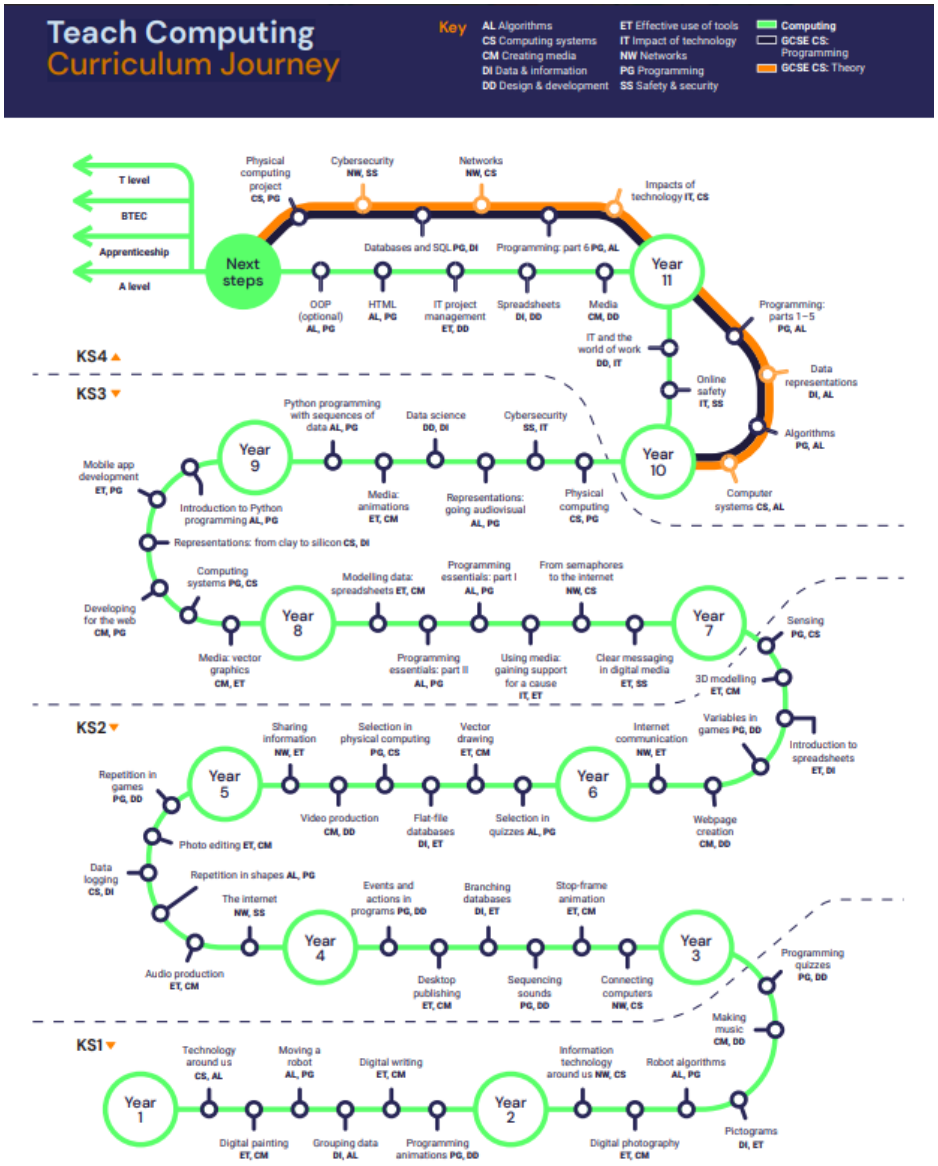
Computing curriculum and progression framework

National Curriculum:

High-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

The national curriculum for computing aims to ensure that all pupils: can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation; can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems; can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems; are responsible, competent, confident and creative users of information and communication technology.

At Twin Oaks, we use the **Teach Computing Curriculum Journey**, created by STEM. Set out below is the progression document provided by TCCJ. The skills and knowledge progress in difficulty year upon year and gives teachers and leaders a clear view of where the children have come from and where the children need to get to in their Computer learning. We have prioritise E-Safety as part of our curriculum, based on the digital literacy of our children. This is revisited at the beginning of each computing lesson and is also an integral part of our RSE curriculum, to ensure our children know how to be safe online in an ever changing evolving online world. We encourage our teachers to use computing with other STEM subjects, to apply their knowledge of computing in other areas of the curriculum.

Teach Computing Curriculum Journey