

EMP CURRICULUM AT A GLANCE

What is a 'Computer Scientist'?

A 'Computer scientist' uses information technology safely to create, adapt and share technological content.



Computing in Early Years

Within Early Years, children are given opportunities to use and understand technology, considering its many uses in the environments known to them. They develop 'computational thinking' skills which prepares children for the National Curriculum for computing in Year 1.

Computing at East Morton: Intent

At East Morton CE Primary we are committed to ensuring that every learner is able to meet their full potential in a world which is becoming increasingly transformed by technology. Through engaging and creative Computing lessons, learners are equipped with the **skills, knowledge** and **understanding** necessary to allow them to use technology effectively and confidently. At East Morton CE Primary, we are starting to develop deep cross-curricular links between Computing and Mathematics, Science and Design Technology and we strive to provide a broad and balanced curriculum, whilst ensuring that learners become digitally literate and digitally resilient. Technology is ever evolving, and we aim to develop learners who can use technology to express themselves, develop their ideas, share information and thereby use communication technology at a suitable level for the future workplace and become active participants in a digital world.

Inclusion

All learners at East Morton CE Primary take part in all aspects of our computing curriculum; where required, lessons and resources are adapted through scaffolding or appropriate technological adjustments.

Assessment

Progress and attainment in Computing are assessed against National Curriculum objectives for each year group. We believe that age-appropriate demonstration of the **knowledge, skills** and **understanding** within these objectives ensures that our learners become successful, effective and safe users of technology. At the start of each unit of work, learners informally draw together their existing knowledge about a subject area, then learners working through a sequence of lessons building towards an end point, in which the key **skills, knowledge** and **understanding** that they have gained is demonstrated. At the end of each unit '**end point**', informal assessment takes place in the form of quizzing or the mapping of children's attainment using NCCE Team Computing rubrics. Formal assessment is undertaken annually, reported and then analysed by the Computing Subject Leader.

Computing Curriculum Implementation

Through our use of the Teach Computing (NCCE) Scheme of Work, which is aligned to the National Curriculum, learners are equipped with the **skills, knowledge** and **understanding** necessary to allow them to use technology effectively and confidently. Use of this high-quality scheme enables us to ensure consistency and continuity in teaching and learning in Computing as this subject is predominantly taught by non-specialist teachers and HLTAs.

The Primary National Curriculum for Computing at Key Stage 1 and Key Stage 2 is split into three areas: **information technology**, **digital literacy**, and **computer science**. **Information technology** is about the use of computers for functional purposes, such as collecting and presenting information, or using search technology **Digital literacy** is about the safe and responsible use of technology, including recognising its advantages for collaboration or communication **Computer science** helps children of all ages to understand how computers and networks work. It gives all children the opportunity to learn basic computer programming, from simple floor robots in Years 1 and 2, right up to creating on-screen computer games and programmes by Year 6, using programming software such as Scratch or Kodu.

The Teach Computing Scheme of Work follows the NCCE's taxonomy of ten strands, which are aligned with the National Curriculum, and are mapped to **four key themes**. Each year each class (in Years 1-6) covers units within the same 4 themes, ensuring that units build on each other from one key stage to the next.

- 1) Computing Networks and Systems (**computer science**)
- 2) Programming (**computer science**)
- 3) Data and Information (**information technology**)
- 4) Creating Media (**information technology**)

This approach allows us to use the spiral curriculum approach to progress skills and concepts from one year group to the next. Cross-curricular use of technology and computing skills enables us to provide a broad and balanced curriculum which is enhanced by the effective use of technology. **Digital literacy** is embedded across all units of work, as well as within the comprehensive Online Safety units covered.

E-safety is explicitly taught within Computing lessons, using the Project Evolve materials. Teaching about E-safety is also linked into learning in PSHE where related topics are supported by Project Evolve E-safety resources. In addition to this, E-safety is embedded within all use of technology, both within and – wherever possible - outside of school.

Associated Documents: Curriculum Learning guide and Year Group Long Term Plans.

EMP CURRICULUM AT A GLANCE



2022 OFSTED Report (GOOD)

“Leaders weave online safety and other aspects of staying safe, such as fire safety, throughout the curriculum. Teachers plan a range of scenarios for pupils to explore around personal development. Visitors, such as local police officers, are invited to talk to pupils about staying safe. As a result, pupils develop a growing knowledge of ways to keep safe, including staying safe online.”



COMPUTING



Enhancement

A whole school focus on E-safety takes place annually on **Safer Internet Day**, ensuring that key messages are consistently embedded and that the high profile of E-safety is maintained.

In addition to this, a local Community Police Officer visits annually to deliver E-safety sessions with years 4-6, in addition to this, year 5 and 6 have a yearly 'Cyberbullying' session also.

Opportunities to share information with parents are used to keep them up to date with current 'trends', associated risks, helpful information and signpost support. Our weekly parent newsletter contains regular E-safety messages to ensure parents have key messages around E-safety.

Other lessons such as P4C, for example, may also include themes and key learning around E-safety to reinforce messages.

Impact

Learners will:

- know more, remember more and understand more about computing.
- **have the key skills, knowledge and understanding** necessary to allow them to use technology effectively and confidently express themselves, develop their ideas and share
- use technology and the internet safely; knowing and understanding how to keep themselves safe
- be **digitally literate and digitally resilient**: knowing how to use and evaluate the trustworthiness of information found online, as well as deal with negative experiences online appropriately.
- achieve age-related expectations in computing.