Menston Primary School Computing Curriculum Statement

Quality of Education in Computing

At Menston Primary School, we use the Primary Teach Computing curriculum, developed by the National Centre for Computing Education (NCCE). In doing so, we are demonstrating our commitment to the NCCE's principles that every child in every school in England should receive a world-leading computing education. We believe that setting young people up for success begins with laying the right foundations during primary education.

The Teach Computing Curriculum provides a comprehensive collection of materials to facilitate the delivery of the entire English computing curriculum from key stage 1 to 4 (5- to 16-year-olds). The curriculum was created by the Raspberry Pi Foundation on behalf of the National Centre for Computing Education (NCCE). The materials are suitable for all pupils irrespective of their skills, background, and additional needs.

Weekly computing lessons are taught using the specified units from the Teach Computing curriculum. The Teach Computing curriculum is structured into units for each year group from Y1 to Y6, and each unit is broken down into lessons. Units can generally be taught in any order, with the exception of programming, where concepts and skills rely on prior knowledge and experiences. Lessons within units are taught in numerical order. The cornerstones of children's digital literacy are laid during the Early Years Foundation Stage (EYFS). During their Reception year, children learn about everyday technologies and information communication technologies (ICT), and use these technologies to enhance and support their learning.

The units for key stages 1 and 2 are based on a spiral curriculum. This means that each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme. This style of curriculum design reduces the amount of knowledge lost through forgetting, as topics are revisited yearly. It also ensures that connections are made even if different teachers are teaching the units within a theme in consecutive years

The Teach Computing Curriculum acknowledges that physical computing plays an important role in modern pedagogical approaches in computing, both as a tool to engage pupils and as a strategy to develop pupils' understanding in more creative ways. Additionally, physical computing supports and engages a diverse range of pupils in tangible and challenging tasks. The physical computing units in the Teach Computing Curriculum are:

■ Year 5 – Selection in physical computing, which uses a Crumble controller

■ Year 6–Sensing movement, which uses a Micro:bit

At Menston Primary School, children across school have the opportunity to use high quality physical computing resources such as Code-a-pillars, Bee-Bots and Pro-Bots.

Each unit details where aspects relating to online safety, or digital citizenship, are covered within the Teach Computing curriculum. Not all of the objectives in the Education for a Connected World framework are covered in the Teach Computing Curriculum, as some are better suited to personal, social, health, and economic (PSHE) education; spiritual, moral, social, and cultural (SMSC) development; and citizenship. However, the coverage required for the computing national curriculum is provided. At Menston Primary School, we use the CORAM SCARF PSHE curriculum, which includes comprehensive content on safety, managing risks and respectful relationships. In

teaching the CORAM SCARF PSHE curriculum alongside the Teach Computing curriculum, we ensure that the objectives in Education for a Connected World are covered.

Although computing is taught as a stand-alone subject, meaningful links to other subjects such as science, art, and music are made to enable children to apply and transfer skills in meaningful ways.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work, as well as on and offline activities. Lessons are varied and engaging and appeal to all learning styles. The children in all year groups have the opportunity to use high quality physical devices to support their learning, such as, Code-a-pillars, Bee-Bots, Pro-Bots and Micro:bits.

The Teach Computing curriculum provides children with a range of skills to enable them to succeed in their secondary education and be active participants in the ever- developing digital world.

In framing our computing education within the Teach Computing curriculum, children will:

- Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
- Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- Show a clear progression of technical skills across all areas of the computing National Curriculum - Computer Science, Information Technology and Digital Literacy.
- Be able to use technology both individually and as part of a collaborative team.
- Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner
- Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
- Meet the end of key stage expectations outlined in the National curriculum for computing.