# Midsomer Norton Primary School

## **Computing Curriculum Statement**

Our definition of learning: a change in long-term memory

Our definition of progress: knowing and remembering more

#### Intent:

At Midsomer Norton Primary School, we believe that high-quality computing lessons provide skills for all children to: be confident, independent programmers and users of IT across the curriculum; inspire children children to want to know more about uses of IT; help children to understand their place in the world and how IT connects us locally, nationally and globally and inspire children to think and act like computer scientists— promoting curiosity and fascination.

We aim to develop an awareness of the diverse nature of the UK and global populations and the contributions different societies, communities and individuals have made to human understanding and computing.

Our intention is that our children:

- 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

Our school curriculum drivers also shape our computing curriculum:

- Culture
- Community
- Equality

#### Recovery Curriculum

During the recovery period, we intend to maintain the breadth of the school curriculum. The need to prioritise supporting children's mental health, assessment and closing gaps necessitates a focus on key knowledge. Focus will be on key skills/ threshold concepts:

- Generic IT skills (logging on efficiently, using RM unify, google classroom
- Programming

#### School Closure/Remote Learning:

In the event of a further partial or full closure, teachers will continue to teach the national curriculum remotely including through the use of live sessions within the constraints of our current technology. Priority

will be given to daily maths and English lessons. In Computing, teachers will use catch up overviews and end of year revision materials to ensure that key knowledge and threshold concepts continue to be developed.

#### Implementation:

Our Computing Long term progression document is based on the National Curriculum, using the TeachComputing scheme of work.

As part of the planning process teachers will need to refer to the following documents:

- The National Curriculum
- Education for a Connected World
- Chris Quigley Essentials Threshold Concepts and Milestones (End points)

Teachers are expected to plan a cycle of lessons which carefully makes links to previous learning; outlines the knowledge and vocabulary to be taught; plans for progression and depth; includes low stake quiz opportunities to develop deep long-term learning; meets the needs of SEND pupils and includes challenge for pupils to apply their learning.

The TeachComputing Scheme of Work from Year 1 to Year 6 supports our teachers in delivering engaging lessons that help to raise standards and allow all pupils to achieve to their full potential. The scheme of work is ambitious, meets the National Curriculum for Computing and provides a solid grounding in understanding e-safety, threshold concepts and skills and knowledge.

The threshold concepts taught in computing are:

- Code: This concept involves developing an understanding of instructions, logic and sequences.
- Connect: This concept involves developing an understanding of how to safely connect with others.
- Communicate: This concept involves using apps to communicate one's ideas.
- Collect: This concept involves developing an understanding of databases and their uses.

#### **Early Years**

We aim to provide our pupils with a broad, play-based experience of Computing in a range of contexts. We believe the following:

- Early Years learning environments should feature ICT scenarios based on experience in the real world, such as in role-play.
- Pupils gain confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Outdoor exploration is an important aspect, supported by ICT toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Recording devices can support children to develop their communication skills. This is especially useful for children who have English as an additional language.

### <u>Impact</u>

Children are encouraged to self, peer and group assess work in a positive way using online collaborative tool such as Google classroom. Formative assessment is undertaken each session/interaction in Computing and pupils are very much encouraged to be involved in that process.

The impact of teaching on pupils' long-term memory will be checked by pupil conferencing to identify what pupils have learnt and remembered in each year group. In addition, pupil's work will be checked to determine their progress in computing goals and their depth of understanding.