Computing 2023/2024





<u>Intent</u>

In our teaching of Computing at Warren Wood Primary School, we intend to instil a sense of enjoyment around using technology and to develop pupil's appreciation of its capabilities and the opportunities technology offers to, create, manage, organise and collaborate. 'Tinkering' with software and programs forms a part of the ethos of the scheme as we want to develop pupils' confidence when encountering new technology, which is a vital skill in the ever evolving and changing landscape of technology. Through our curriculum, we intend for pupils not only to be digitally competent and have a range of transferable skills at a suitable level for the future workplace, but also to be responsible online citizens.

Our chosen scheme of work is called 'Kapow Primary', which we confidently believe provides a structured computing curriculum based on the Computing National Curriculum and encompasses the 3 strands of Digital literacy, Information Technology and Computer science.

The scheme of work enables pupils to meet the end of Key Stage Attainment targets outlined in the National curriculum and the aims align with those in the National Curriculum. In conjunction with our RSE & PSHE scheme, our Computing scheme of work also satisfies all the objectives of the DfE's Education for a Connected World framework. This guidance was created to help equip children for life in the digital world, including developing their understanding of appropriate online behaviour, copyright issues, being discerning consumers of online information and healthy use of technology.

<u>Implementation -</u>

The National Curriculum purpose of study states:

'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'

Therefore, our Computing scheme of work is designed with three strands which run throughout:

- Computer science
- Information technology
- Digital literacy

Our <u>Curriculum overviews</u> shows which of our units cover each of the National curriculum attainment targets as well as each of these three strands. Our <u>Progression of skills</u> document shows the skills that are taught within each year group and how these skills develop year on year to ensure attainment targets are securely met by the end of each key stage.

The Computing Curriculum is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

The implementation of our Scheme of Work ensures a broad and balanced coverage of the National curriculum requirements and our 'Skills showcase' units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful, units have been created to link to other subjects such as science, art and music to enable the development of further transferable skills and genuine cross-curricular learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Subject knowledge is strengthened in a variety of ways for staff enabling them to be able to deliver a highly effective and robust computing curriculum. Each unit of lessons include teacher videos to develop subject knowledge and support ongoing CPD.

Devices available at Warren Wood include:

- Laptops 30 available to each Key Stage
- Ipads 15 available allowing a minimum of one between two
- Beebots
- Cameras
- Unplugged Resources

Impact -

The impact of our Computing Curriculum is monitored through both formative and summative assessment opportunities. Each lesson includes guidance to support teachers in assessing pupils against the learning objectives and each unit has a unit quiz and knowledge catcher which teachers can use at the start and/ or end of the unit.

Children will leave Warren Wood equipped with a range of skills to enable them to succeed in their further education and be active participants in the ever increasing digital world.

Our Computing Curriculum enables the children at Warren Wood to:

- 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 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 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.

We tie our learning together with golden threads at Warren Wood to help the children to contextualise their learning. The golden threads in Computing are as follows: Computer Systems and Networks, Programming, Creating Media, Data Handling and Online Safety.