# **Computing Framework**



#### <u>Intent</u>

We recognise that pupils are living in a rapidly changing world, in which ICT is playing an ever-increasing role. We aim, therefore, to equip children with the skills to adapt to modern technology and to give them confidence to use ICT and computing skills to further their learning and assist them in everyday life.

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. Our curriculum has been designed to incorporate uses of technology such as Microsoft Word, PowerPoint, the Google Suite as well as a variety of iPad applications.

The school's aims are to:

- Provide a broad, balanced, challenging, and enjoyable curriculum for all pupils.
- Develop pupil's computational thinking skills that will benefit them throughout their lives.
- Meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2
- To stimulate interest in modern technologies.
- To equip pupils with the confidence and skills to use digital tools and technologies throughout their lives.
- To enhance and enrich learning in other areas of the curriculum by cross curricular use of ICT
- To develop the understanding of how to use computers and digital tools safely and stay safe online.

## **Implementation**

All pupils complete a weekly computing lesson (planned using Kapow). We teach both discrete computing lessons to develop knowledge, skills and understanding but also provide a range of opportunities throughout school to employ computing skills across the curriculum. To ensure that teachers have enough subject knowledge we plan using Kapow to give ongoing CPD.

In EYFS, technology forms an element of the EYFS goal understanding the world. It aims to ensure that children recognise that a range of technology is used in places such as homes and schools and can select and use technology for particular purposes.

In Key Stage 1 and 2, all class teachers provide planning which ensures good progression and coverage across the primary age range, with prior learning being revisited and then built on across the key stage.

Computing lessons are designed with three strands which run throughout: -

- Computer Science
- Information Technology
- Digital Literacy

Lessons are 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

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.

# <u>Impact</u>

Children will be digitally literate and able to join the rest of the world on its digital platform. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.

The expected impact of our computing curriculum is that 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 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 outlines in the National curriculum for Computing.

#### <u>Curriculum</u>

We use the Kapow computing scheme. There are 6 units for each year group to complete throughout the year. There are also online safety units for each year group which can be taught as an additional lesson to each unit (depending on the length of the term) or as a complete unit as part of Internet Safety Day.

#### Assessment.

Assessment opportunities will take place on a regular basis during lessons to ensure understanding and progression.

Assessments will take place at the end of each lesson/unit against the learning objectives provided by the Kapow assessment spreadsheet.

Teacher will establish whether children are working at an entering, developing or secure level and record this at the appropriate data points through oTrack.

### **Provision for Inclusion**

All pupils have equal rights to access the computing curriculum. To facilitate this, teachers will set suitable learning objectives, overcome any barriers to learning and respond and adapt to pupils learning needs.

#### Health and Safety/Safeguarding

Hemingbrough CP Primary School is committed to safeguarding and promoting the welfare of children and expects all staff and volunteers to share this commitment.

All North Yorkshire schools, including Hemingbrough CP School, follow the North Yorkshire Safeguarding Children Board procedures. The school will, in most circumstances, endeavour to discuss all concerns with parents about their child/ren. However, there may be exceptional circumstances when the school will discuss concerns with Social Care and/or the Police without parental knowledge (in accordance with Child Protection procedures).

The school will, of course, always aim to maintain a positive relationship with all parents. The school's Child Protection policy is available in the policies section of the web site.

## **SMSC and British Values**

SMSC and British Values in Computing at Hemingbrough, we aim to develop SMSC and British Vales through Computing by:

- Use of imagination and creativity in their learning
- Willingness to reflect on their experiences
- Ability to recognise the difference between right and wrong readily apply this understanding in their own lives and, in so doing, respect the civil and criminal law of England
- Understanding of the consequences of their behaviour and actions
- Interest in investigating and offering reasoned views about moral and ethical issues, and being able to understand and appreciate the viewpoints of others on these issues.
- Interest in exploring, improving understanding of and showing respect for different faiths and cultural diversity, and the extent to which they understand, accept, respect and celebrate diversity, as shown by their tolerance and attitudes towards different religious, ethnic and socio-economic groups in the local, national and global communities