

Computing Framework



Intent

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 new 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 new 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

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.

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.

Impact

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.

Teachers use their observations, as well as monitoring of learning objectives, to assess who has met or not met the intended outcomes of a lesson. The curriculum is designed to be sequential building on areas worked on in previous years, allowing children to build on their previous skills and allowing peer to peer support across many areas of the curriculum.

Curriculum

In Computing we do not follow a specific scheme.

At the end of Key stage 1 children should be able to,

- Give instructions to in the correct order to make something happen and talk about this as an algorithm.
- Program a robot or software to do a particular task and spot where it goes wrong so that it can be debugged.
- Use technology to organise and present ideas in different ways by collecting information, using a camera, microscope or sound recorder.
- Save and open files and understand that it is important to do this.
- Explain why we use technology in the classroom, home and community including the differences between the Internet and things in the physical world.

At the end of Key stage 2 children should be able to,

- Create an algorithm to solve a problem, continually testing the program to evaluate its effectiveness and efficiency.
- Select a particular program or online tool for a specific purpose and select the most effective tool to collect data.
- Combine a range of media to achieve a particular outcome.
- Name and describe the different parts of a computing device and explain how it connects to the Internet.

Understand how information moves around the Internet, effectively use search engines whilst acknowledging who resources belong to that have been found on the internet.

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 topic against the learning objectives.

Teacher will establish whether children are working at the expected level.

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 Values 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