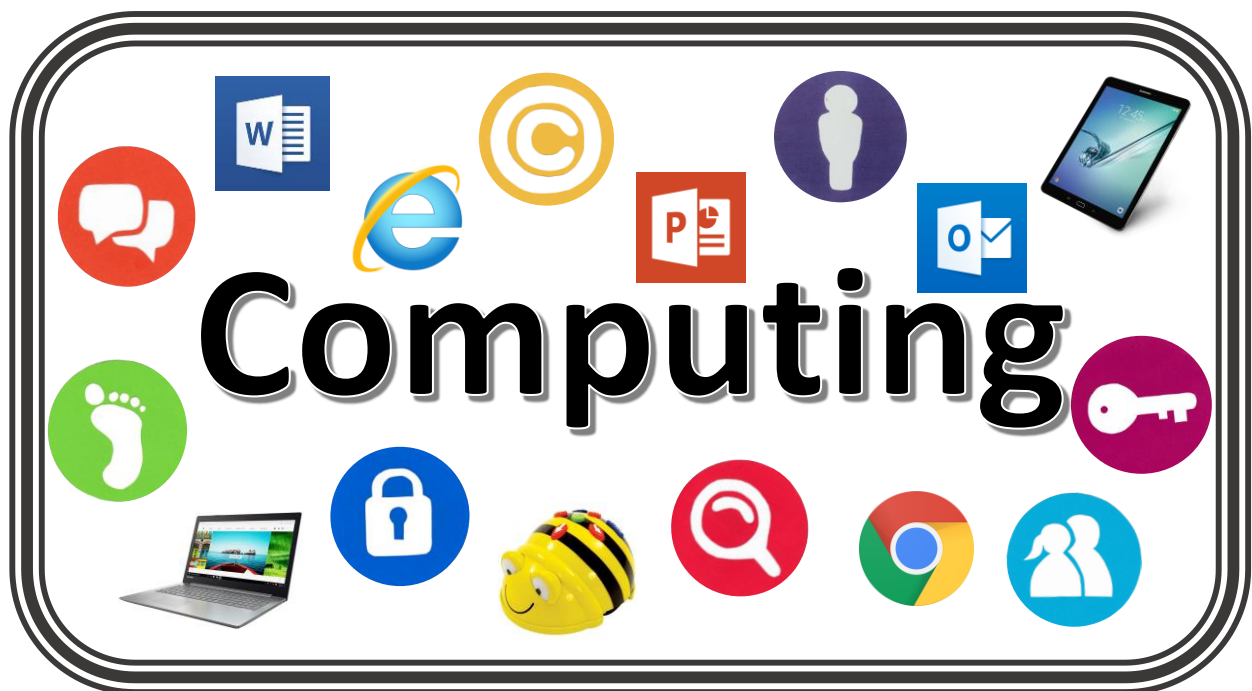




TEACHING COMPUTING AT HOPPING HILL PRIMARY SCHOOL



“Our computers have become windows through which we can gaze upon a world that is virtually without horizons or boundaries.”

Joseph B. Wirthlin

INTENT

Golden Threads

Digital Citizen

Being safe and responsible in the digital world

Investigator

Explore and solve problems as a computational thinker

Vocabulary and Knowledge

Speaking and understanding computing language and key terms

Creator

Approach and develop tasks logically and creatively

At Hopping Hill Primary School, our pupils will be delivered a Computing curriculum that develops children's confidence to investigate and create; preparing them for a rapidly developing and changing technological world. Our school community is one where a significant number of children have limited experience of a range of devices which will likely limit their ICT skills using various software.

Our curriculum aims to encourage children to **investigate** problems and explore how they can be solved as well as using technology as a tool for finding information. Children are provided with the **knowledge and language of computing terminology** to help them understand, explain and communicate their findings. They learn the skills needed to be **creators** by logically approaching and developing tasks and discovering ways in which we can control and understand our environment.

We endeavour to keep children safe online and provide them with the knowledge and tools to be safe and responsible **digital citizens**.

IMPLEMENTATION

The direct teaching of Computing

Computing is taught throughout the school year in all year groups. It is taught every week for an hour as a discrete subject. The skills within Computing can be applied through other curriculum areas and opportunities for this are created wherever possible.

Access the link to find out more about the National Curriculum programme of study for Computing:

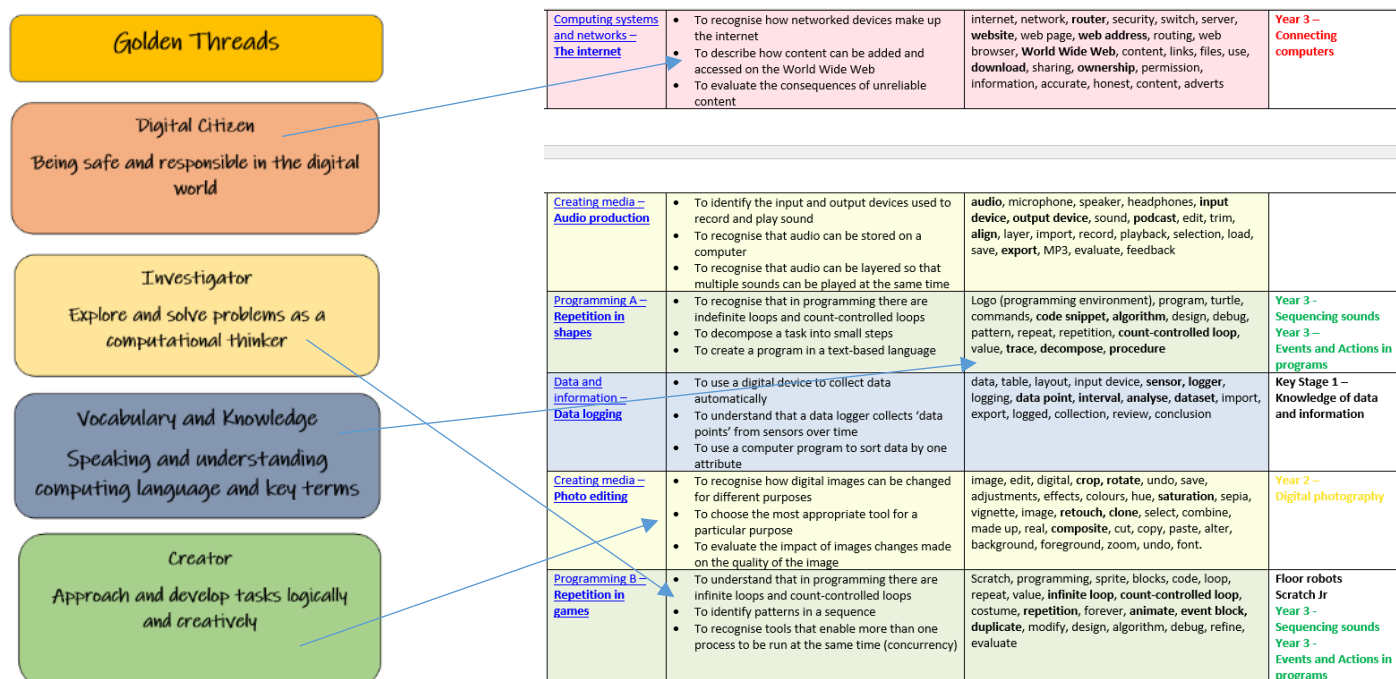
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239033/PRIMARY_national_curriculum_-_Computing.pdf

The curriculum is made up of 3 areas which include **Computer science**; provides opportunities for understanding how computers and computer systems work, how they are designed and programmed, **Digital Literacy**; develops computational thinking skills to become problem solvers by thinking critically about online and digital worlds using existing programs and **Digital Citizenship**; equips pupils with the skills, knowledge and understanding required for them to participate fully and safely in an increasingly digital world.

In Early Years, Computing is part of the continuous provision that is offered throughout the year and reflects learning laid out in the Birth to 5 document. In line with this documentation, and the ethos of in the moment planning and being led by the children's interests, specific topics and vocabulary are not prescribed. The golden threads are reflected in the EYFS curriculum, within 'Understanding the World' and this assists the teachers in planning provision to reflect their role in the beginning of the children's computational thinking.

When planning for learning using the school's medium term plans or EYFS overview, teachers will ensure they have knowledge of the learning in a particular strand in the previous years and where this will progress to (being aware that a particular linked topic might not appear in the next chronological year). This includes EYFS who will be aware of the vocabulary and knowledge expected in year 1 when planning provision.

The development of the curriculum in Years 1-6 used the national curriculum expectations – this ensures progression in the golden threads of Digital Citizen; encouraging children to engage in conversation about scenarios that they may face through their online experiences and looking at acceptable and unacceptable behaviours. It offers children the opportunity to reflect on various situations and make them aware of options and support available and how to report their concerns. Vocabulary and knowledge is an integral part of all lessons delivered. The language of computing is developed across the year groups and encouraged during lessons. The development of investigator and creator runs through all units where a number of different concepts and applications are introduced, such as computer control, design and modelling, music composition, digital imaging and video editing. Skills develop throughout the curriculum which put an emphasis on computational thinking for problem solving in general and to enable the children to plan increasingly complex computer programs in a variety of different languages such as Scratch.



Other experiences and/or opportunities

Safer Internet Day is recognised by the school community and children take part in workshops and listening to stories which address many of the issues commonly related to this area.

External providers are used at times to deliver a different viewpoint on online safety issues, particularly with Year 6.

Assessment

Every year group has an assessment overview for the year which looks at the skills covered and achieved for each unit. Formative assessment opportunities are included in weekly lessons as either teacher observations, questioning or marked activities. In Key Stage 2, some units will also be assessed by a multiple choice quiz at the end of the unit. A traffic light system, providing an overview of the unit, is used to communicate achievement and inform the next teacher as to which areas of learning may need to be adapted in the following year.

The impact of online safety teaching and learning will be monitored with the Safeguarding lead, with records of incidents identifying areas for concern which can then be addressed through the curriculum. Parents are informed when issues relating to online safety arise and further information/support is provided if required.

INTENDED IMPACT

- ✓ Pupils will develop an understanding and value online safety and respect when communicating with one another.
- ✓ Pupils will develop their ability to analyse problems in computational terms and have repeated practical experience to explore and write computer programs in order to solve such problems.
- ✓ Pupils will develop computational language they can use to understand and explain processes in computing which will support them as they leave Hopping Hill and continue their education career.
- ✓ Pupils will have a secure and comprehensive knowledge of the implications of technology and digital systems. This is important in a society where technologies and trends are rapidly evolving.
- ✓ Pupils will become familiar with, and able to use, a wide range of hardware and software.
- ✓ Pupils will develop an understanding of how to approach tasks across the computing curriculum which they can tackle logically and develop their own versions of a task creatively.