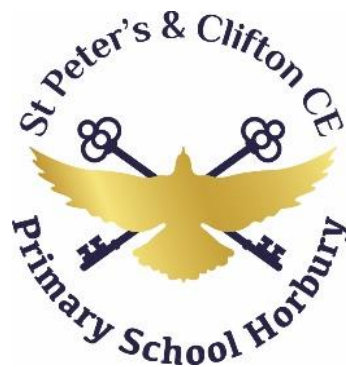
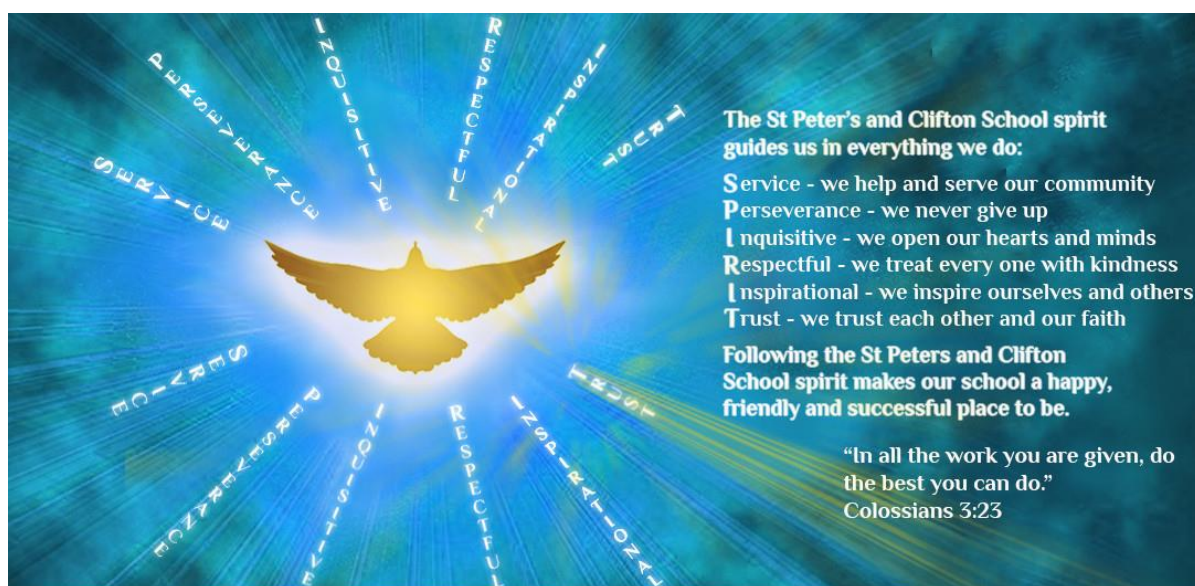




Computing Policy



Curriculum Statement

The use of Computing is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital cameras are but a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information. At Horbury St Peter's and Clifton Primary School we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to become Computing proficient.

The values of St Peter's and Clifton's SPIRIT are encompassed in the learning and teaching of Computing.

SERVICE- communication

PERSEVERANCE- debugging, editing, revisiting, saving.

INQUISITIVITY- researching, learning new skills.

RESPECT- GDPR, peer assessment,

INSPIRATIONAL- creativity, communication

TRUST- e-safety, teamwork,

Intent

It is our intent at Horbury St.Peter's and Clifton Primary School to provide all of our children with a high-quality education in computing which provides access to an ever changing and expanding digital world. We wish to develop a love of computing and provide children with the ability to enhance their knowledge, skills and understanding through different types of media whilst keeping safety at the forefront of their minds. We believe that this will give our children the tools they need to succeed in a digital world.

In regards to online safety, GDPR will play an important role in allowing children to recognise what information is personal to them and who and when it is safe to share it. To do this effectively, children must have a clear understanding of the meaning of personal information and recognise their own responsibility in safeguarding this. Children will be taught about their digital footprint and where to seek support and advice should they need it. We believe a strong understanding of these things will enable children to access modern technologies and communicate effectively whilst developing an ever increasing understanding of how to keep themselves safe from evolving dangers in the digital world.

At St Peter's and Clifton Primary school we want children to become digitally literate by developing a range of transferrable skills which can make them active participants in a digital world and prepare them for the world of work. We aim to encourage children to use, express themselves and develop their ideas through a range of information technology.

A core aspect of our computing teaching will be the teaching of 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.

Implementation

At St Peter's and Clifton Primary School we use computing as an additional tool within our lessons to help children become creative thinkers and access learning in a variety of ways. Lessons are planned to maximize learning potential and a variety digital

devices will be used to support this when appropriate. The range of programs and apps children access throughout their time in the school allow them to build a bank of resources to support them in developing their learning and expressing their creativity. Children become digitally literate. To enable all children to access the range of digital devices we have, children all have core skills lessons in line with the progression in core skills and programs documents. This is to enable children to become effective users of not just the software but also the hardware through the development of mouse and keyboard skills and ensure increasing challenge for children as they progress through school.

During the autumn term, specific lessons relating to online safety, GDPR and personal information are taught to the children. GDPR is a key priority with children being taught what we mean by personal information, who should have access to it and how to keep it safe. Children are introduced to safe passwords, safe communication and what to do if they get that 'uh oh' feeling. In addition to discreet teaching, this continues to be implemented through other linked lessons and each time children access digital devices.

Children are encouraged to be creative thinkers and designers by first accessing step by step guides of key program building in a range of programs/apps before creating their own designs in a variety of areas.

Impact

Children will have developed the knowledge, skills and understanding to help them access and use a range of technology in a safe and creative way. Children will have developed skills that equip them to use computational thinking and creativity to understand and change the world.

Children's skills will have progressed to enable them to not only have met the requirements of the National Curriculum but to also enjoy using technology to develop knowledge and ideas as well as express themselves safely and creatively as responsible citizens

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Teaching and Learning

'Computers are now part of everyday life. For most of us, technology is essential to our lives, at home and at work. 'Computational thinking' is a skill children must be taught If they are to be ready for the workplace and able to participate effectively in this digital world'.

(Simon Peyton-Jones, Chairman, Computing At School)

The Computing Curriculum (National Curriculum 2014) is split into three areas; Computing Science, Information Technology and Digital Literacy.

Long Term plans in each year group ensure coverage and progression within the three elements. Discreet skills lessons are taught and opportunities for cross curricula activities are encouraged.

Medium term planning demonstrates how the units are broken down into individual lessons and looks at specific objectives and skills covered in each.

Our curriculum aims to ensure that all pupils:

- 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 and have a sound understanding of what personal information they are responsible for to do this

Early Years and Foundation Stage

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

Key Stage 1

Pupils should be taught to:

- use technology safely and respectfully, keeping personal information private.
- where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
- create and debug simple programs.
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- recognise common uses of information technology beyond school.

Key Stage 2

Pupils should be taught to:

- use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Assessment

Teachers regularly assess progress through observations and children's independent evidence.

Assessment should be process orientated - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding of the concepts. As assessment is part of the learning process, it is essential that pupils are closely involved. Assessment is broken down into;

1) Formative assessments, which are carried out during and following short focused tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning and how it is progressing towards the learning objective. This feeds into planning for the next lesson or activity.

2) Summative assessments, which review pupils' ability and provide a best fit 'level'. Independent tasks provide a number of opportunities and scope for pupils to demonstrate their capability throughout the term. Summative assessment should be recorded for all pupils through regular feedback.

Overall achievement within the unit is recorded on our subject assessment pro-forma.

Entitlement and Equal Opportunities

At Horbury St Peters and Clifton Primary School all of our children are entitled to a continuous and progressive computing curriculum, which meets their individual needs. The computing curriculum has been planned using national curriculum guidance. Teachers are encouraged to make cross-curricular links especially in the teaching of IT. However, many aspects of computer science need to be taught discretely.

We are committed to promoting equal opportunities irrespective of socio-economic background, gender, disability and ethnicity in all areas of the curriculum.

Special Needs and Inclusion

Pupils with special educational needs have the same computing entitlement as all other pupils and are offered the same curriculum. However, particular application/tools are used for:

- Pupils with learning difficulties need to be motivated to practice basic skills regularly.
- Pupils with physical disabilities and communication difficulties
- Pupils of high ability who may be extended through the use of programs which offer challenge and opportunities for investigation.

Role of the Subject Leader

- Provide support and training for staff in-house, including the planning, teaching, assessing, and evaluating of the Computing. curriculum.
- Seek further training and support from specialist teachers.
- Liaise with technician
- Complete the Curriculum Map annually.

- Support planning and activities are appropriately challenging and
- Ensure resources available to teachers are of a good standard and a quantity.
- Timetabling to ensure effective deployment of equipment and work spaces
- Complete school action plans
- Update policies

Policy Agreed: December 2020

Policy Review Date: December 2022

Debbie Sadiq- Computing Co-ordinator