



HORSLEY C of E PRIMARY SCHOOL

Together, we can

Jesus said, 'Love one another as I have loved you' (John, 13)



Our Computing Policy

INTENT

At Horsley, we see Computing as an integral part of teaching and learning and play a significant role in the education of all children in our school. Computing underpins today's changing technological world, and we feel it is necessary to prepare children for the future they create.

Our school believes that every child should have the right to a curriculum that enriches children's experience. We understand the immense value technology plays, not only in supporting the Computing and whole school curriculum but also, in the day-to-day life of our school. We believe that technology can provide enhanced collaborative learning opportunities, better engagement of pupils, more accessible access to rich content, support conceptual understanding of new concepts, and support all our pupils' needs.

Our Computing Curriculum can be divided into three interrelated strands:

1. Computer Science

The understanding of algorithms, sequence, variables, programming, coding and how computer networks work

2. Information Technology

The use of computers for functional purposes, such as collecting and presenting information or using search technology

3. Digital Literacy

The safe and responsible use of technology, including recognising its advantages for collaboration or communication

At Horsley, we want to:

- Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils.
- Enthuse and equip children to use technology throughout their lives.
- Give children access to a variety of high-quality hardware, software and unplugged resources.
- Instil critical thinking, reflective learning and a 'can-do' attitude for all our pupils, particularly when engaging with technology and its associated resources.
- Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world whilst minimising risk to themselves or others.
- Use technology imaginatively and creatively to inspire and engage all pupils and use it to be more efficient in the tasks associated with running an effective school.
- Utilise computational thinking beyond the Computing curriculum.
- Provide technology solutions for forging better home and school links.
- Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety).

IMPLEMENTATION

We have chosen the Purple Mash Computing Scheme of Work from Reception to Year 6. The scheme of work supports our teachers in delivering fun and engaging lessons that help raise standards and allow all pupils to achieve their full potential. It provides immense flexibility, strong cross-curricular links and integrates perfectly with the 2Simple Computing Assessment Tool.

Early Years

- Provide our pupils with a broad, play-based computing experience in various contexts.
- The pupils learning environment will feature computing scenarios based on experience in the real world, such as in role-play.
- Give pupils the confidence, control and language skills through opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Pupils have access to outdoor exploration, supported by COMPUTING toys such as metal detectors, controllable traffic lights and walkie-talkie sets.
- Pupils use recording devices to develop their communication skills, beneficial for children who use English as an additional language.

Key Stage 1

- Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- Write and test simple programs.
- Organise, store, manipulate and retrieve data in various digital formats.
- Communicate safely and respectfully online, keep personal information private, and recognise common uses of information technology beyond school.

Key Stage 2

- Pupils will design and write 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; generate appropriate inputs and predicted outputs to test programs.
- Use logical reasoning to explain how a simple algorithm works and detect and correct errors in algorithms and programs.
- Understand computer networks, including the internet; how they can provide multiple services, such as the worldwide web; and their opportunities for communication and collaboration.
- Describe how Internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
- Select, use, and combine various software (including internet services) on different digital devices to accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.

As well as the creation of digital materials, pupils should have experience of manipulating and editing their work and resources from elsewhere. They need to know how to use the available tools and have an element of digital literacy – awareness of the audience and sound design principles. Pupils should experience a range of different applications and software. Initially, the teacher will select the programs they use, but pupils should be encouraged to make decisions themselves over time.

Pupils also need to know how to store and organise their files to be found again easily. Finally, they need an understanding of the devices they can use, including hard drives, USB sticks, school network servers, and cloud storage on the internet.

The safe use of Computing will also enhance and extend children's learning across the whole curriculum whilst contributing to motivation and the development of social skills. We aim to provide appropriate, fully integrated and supported computing resources to offer the highest level of education to all pupils. It is of great importance that we equip children with the skills to stay safe in the ever-changing online world.

IMPACT

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the computing programme of study and scheme of work. Pupils will learn how to use technology safely and respectfully, keep personal information private, identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Pupils will recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and who to contact.

Assessment for Learning

At Horsley, we believe that feedback should be immediate, and assessment for learning is key to planning and delivering quality first teaching. Therefore, at Horsley, we assess using a holistic approach that includes:

- Pupil attainment will be assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify pupils' attainment through the detailed exemplification for each key learning intention.
- Teachers will keep records of pupil attainment by entering data using the 2Simple Computing Assessment Tool, and tracking of attainment is used to inform future planning.
- Formative assessment will be undertaken during each session/interaction in Computing, and pupils are encouraged to be involved in that process.
- Summative assessment will be undertaken in line with the assessment cycle. The school's proforma is used to record outcomes and performance once a 'big' term.

This assessment process is used to inform parents of their child's progress and attainment across the year through Parent's Evening Meetings and their annual report.