



*Valuing Potential; Creating Opportunities*

## **HARTSHORNE PRIMARY SCHOOL**

### **COMPUTING POLICY**

This policy to be read in conjunction with Assessment Policy, Acceptable Use Policy, Child Protection Policy, Equality Policy, Health & Safety Policy, Online Safety policy, Remote Learning policy, Teaching and Learning Policy, SEND Policy

#### **POLICY REVIEW**

This policy has been agreed by staff and Governors and will be regularly reviewed:

<b>DATE OF POLICY:</b>	March 2025	<b>DATE OF NEXT REVIEW:</b>	March 2026
<b>MONITORED BY:</b>	SENIOR LEADERSHIP TEAM	TEACHING & LEARNING COMMITTEE	

#### **RATIONALE**

The confident use of computers, computer systems and related technologies is a key skill for life and an integral part of the National Curriculum. In an increasingly digital world there now exists a wealth of software, tools and technologies that can be used to communicate, collaborate, express ideas and create digital content. The school believes that IT, computer science and digital literacy skills:

- Are essential for children to fully participate in the modern digital world.
- Allows children to become creators of digital content rather than simply consumers of it.
- Provides access to a rich and varied source of information and content.
- Communicates and presents information in new ways, which helps pupils understand, access, and use it more readily.
- Can motivate and enthuse pupils.
- Offers opportunities for communication and collaboration both inside and outside of school.

#### **AIMS AND OBJECTIVES**

We want our pupils to become digitally literate and participate fully in the modern world. Hartshorne Primary School will:

- 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 for computing at Key Stage 1 and 2.
- Respond to new developments in technology as appropriate to do so.
- Equip pupils with the confidence and skills to use digital tools and technologies that may benefit them throughout their lives.
- Enhance and enrich learning in other areas of the curriculum using IT and computing.
- Develop the understanding of how to use computers and digital tools responsibly.



We will teach children to:

- Understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication
- Analyse problems in computational terms and have repeated practical experiences.
- Evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Be responsible, competent, and creative users of information and communication technology.
- Keep themselves safe when using new technology.

## **TEACHING AND LEARNING**

We use the National Centre for Computing planning to support the teaching of Computing, Computing Science, Information Technology, Digital Literacy and the safe and appropriate use of technology. We also use the Jigsaw PSHE scheme of work to further support the teaching of E-Safety.

### **Early Years**

It is important in the foundation stage to give children a broad, play-based experience of IT and computing in a range of contexts, including off-computer activities and outdoor play.

Early years learning environments will feature IT scenarios based on experience in the real world, such as in role play. We will develop children's confidence, control and language skills through opportunities to use directional language, find toys/objects, follow a laid-out path or 'map', creating artwork and using programmable toys and other equipment.

Outdoor exploration and using digital recording devices such as video recorders, cameras and microphones will support all children in developing clear, accurate communication skills.

### **By the end of key stage 1 pupils will be taught to:**

- Understand algorithms, how they are implemented as programs on digital devices, and that programmes execute by following a sequence of instructions.
- Write and test simple programmes.
- Use logical reasoning to predict the behaviour of simple programmes.
- Organise, store, manipulate and retrieve data in a range of digital formats.
- Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

### **By the end of key stage 2 pupils should be taught to:**

- Design and write programs that accomplish specific goals, including controlling or simulating physical systems and solve problems.
- Use sequence, selection, and repetition in programmes; work with variables and various forms of input and output.
- Use logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programmes.
- Understand computer networks including the internet; how they can provide multiple



- services and the opportunities they offer for research, communication and collaboration.
- Describe how internet search engines find and store data; use search engines effectively and be discerning when evaluating digital content.
  - Respect individual and intellectual property; use technology responsibly, securely and safely.
  - Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

### **Cross curricular links**

IT and computing skills will be developed through core and foundation subjects. Where appropriate, IT and computing should be used to support learning in other subjects as well as developing computing knowledge, skills and understanding. Our school provides pupils with opportunities to enrich and deepen learning using cross-curricular approaches from Year 1 to Year 6.

### **ADDITIONAL EDUCATIONAL NEEDS AND INCLUSION**

A minority of children will have particular teaching and learning requirements which go beyond the provision for that age range and if not addressed, could create barriers to learning. This could include higher ability children, those with SEND or those who have EAL. Through the teaching of computing we provide opportunities that enable all pupils to make progress. We do this by setting suitable challenges and responding to each child's individual needs.

Where appropriate IT can be used to support SEND children on a one to one basis where children have additional needs and/or receive additional support. Teachers will take account of these requirements and plan, where necessary, to support individuals or groups of pupils to enable them to participate effectively in the curriculum and assessment activities. During any teaching activities, teachers should bear in mind that special arrangements could be made available to support individual pupils. This is in accordance with the school inclusion policy. These children will be identified and discussed at pupil progress meetings to ensure that appropriate provision is made.

We will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to computing and all staff members follow the equal opportunities policy. Access to technology at home can also be offered to our children in receipt of the pupil premium grant where appropriate.

### **ASSESSMENT AND RECORD KEEPING**

Teachers regularly assess progress through observations and evidence. Key objectives to be assessed are outlined on the curriculum objectives overview and provided in more detail on individual topic rubrics and assessment documents. Assessment will include reviewing knowledge learnt as well as being process oriented - reviewing the way that techniques and skills are applied purposefully by pupils to demonstrate their understanding. This is done through:

- Formative assessments; carried out during and following short, focused tasks and



activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. Outcomes will inform planning for future activities.

- Summative assessment; which should review pupils' ability and provide a best fit towards age-related expectations. This includes short written assessments in the form of quizzes and assessment of final projects which are saved to the school drive. By ensuring work is regularly recorded and saved using various software, teachers are able to see children's progress and capability within the given objectives. Summative assessment is recorded via Arbor- showing whether the pupils have met, exceeded, or not achieved the learning objectives.

## **MONITORING AND EVALUATION**

Two staff members are responsible for monitoring the standard of the children's work and the quality of teaching in line with the schools monitoring cycle. This may be through lesson observations, pupil discussion and evaluating recorded and/or saved work. Outcomes of evaluations will be addressed through the subject leader action plan.

## **ROLES AND RESPONSIBILITIES**

### **Role of the Subject Leader is to:**

- Offer help and support to all members of staff (including teaching assistants) in their teaching, planning and assessment of computing.
- Provide colleagues with opportunities to observe good practice in the teaching of computing.
- Maintain resources and advise staff on the use of digital tools, technologies and resources.
- Monitor classroom teaching or planning following the schools monitoring programme.
- Monitor the children's progression in computing, looking at examples of work of different abilities.
- Manage the computing budget.
- Keep up-to-date with new technological developments.
- Lead staff training on new initiatives and attend appropriate in-service training.
- Have enthusiasm for computing and encourage staff to share this enthusiasm.
- Keep parents and governors informed on the implementation of computing in the school.

### **Role of the Class Teacher**

Individual teachers will be responsible for ensuring that pupils in their classes have opportunities for learning computing and using their knowledge, skills and understanding of computing across the curriculum.

They will plan and deliver the requirements of the National Curriculum for Computing to the best of their ability and set high expectations for all our pupils, regardless of gender, ethnicity, or abilities.

The class teacher will ensure continued progression in learning and understanding, and create effective learning environments by:

- Securing pupil motivation and engagement.
- Providing equality of opportunity using a range of teaching approaches and techniques.
- Using appropriate assessment techniques and approaches and maintaining accurate, safe records.

**The role of the Head and/or SLT is to:**

- Support the Subject Leader to achieve targets and participate in appropriate CPD to develop their own skills and subject knowledge through performance management.
- Participate with the subject leader in monitoring and evaluation of teaching and learning in the subject.
- Organise regular subject leadership time so they can undertake their duties as outlined above.
- Share information and advice about online and e-safety through the school Newsletter.

**Role of Parents and Carers**

Parents are encouraged to support the implementation of IT and computing where possible by encouraging use of IT and computing skills at home for pleasure, through home-learning tasks, the Google classroom and appropriate websites including the school's own website.

We strongly advise parents to follow age-related guidelines for games, social media and other online activities that children participate in.

**CONTINUING PROFESSIONAL DEVELOPMENT**

The computing subject leaders will assess and address staff training needs as part of the annual development plan process or in response to individual needs and requests throughout the year.

Individual teachers should attempt to continually develop their own skills and knowledge, identify their own needs, and notify the subject leader.

Teachers will keep their own skills sharp and use IT and computing to produce plans, reports, spreadsheets, data, communications, and teaching resources.

**HEALTH AND SAFETY AND SECURITY**

All fixed electrical appliances in school are tested by a Local Authority approved contractor every five years and all portable electrical equipment in school is tested by an external contractor every twelve months.

Staff should not bring their own electrical equipment into school but, if this is necessary, equipment must be PAT tested before being used. This also applies to any equipment brought into school by staff from other schools, visitors running workshops or other activities. It is the responsibility of the member of staff organising the workshop or event to advise those people.

All staff should visually check electrical equipment before they use it and take any damaged equipment out of use. Damaged equipment should then be reported to a computer technician and/or Head teacher who will arrange for repair or disposal.

**In addition:**

- Children should not put plugs into sockets or switch the sockets on.
- Carry mobile devices from the storage cabinets without adult supervision.
- Trailing leads should be made safe behind the equipment and covered with mats.



- Food and drink or other liquids must not be taken near the computers or other devices.
- Magnets must be kept away from all equipment.
- All safety guidelines for IWBs, printers etc must be followed.
- E-safety guidelines will be set out in the E-safety Policy & Acceptable Use Policy.

### **Security, Access and GDPR**

Hartsbourne Primary School buys a service level agreement with the Bushey St James Trust and services are provided by the IT Department at Bushey Meads Secondary School. The Computing technician(s) can be contacted via the BSJT helpdesk and will be responsible for:

- Regularly updating anti-virus software.
- Visiting the school once per week to address any technical issues or problems.
- Setting up new equipment and devices.
- Advising the school on the purchase of new equipment.

Use of IT and computing will be in line with the school's 'acceptable use policy' and all staff and volunteers must sign that they have read and understand the policy.

- Parents and children sign a whole-school agreement when they join the school that they will follow our policies and procedures and understand there may be consequences for misuse.
- All our policies are available on the school website and the school intranet.
- Rules for safe and responsible use of IT and computing and the internet will be displayed in computing areas.

### **RESOURCES AND ACCESS**

The school acknowledges the need to continually maintain, update and develop its resources and to make progress towards consistent, compatible computer systems by investing in resources that will effectively deliver the objectives of this policy and support the use of IT, computer science and digital literacy across the school.

The computing network infrastructure and equipment has been sited so that:

- Every classroom from Reception to Y6 has a computer connected to the school network and an interactive whiteboard with sound and video facilities.
- Internet access across the school.
- I-pads, chrome books and laptops are available, generally 1 between 2.
- Class visualisers
- Data Loggers
- Recording devices and microphones
- Programmable devices (cars, Lego models, toys, beebots)
- All class teachers have a laptop and an I-pad for work related school and home use.
- Office staff have individual Chromebooks to aid working from home.