



# Sally Graham

### **Primary Computing Curriculum 2014:**



A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is 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. 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.

#### **Intent Statement**

# A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world." National Curriculum

Computing skills are essential in every aspect of our lives. It is important that children are equipped with the skills and knowledge they need to develop and maintain their understanding and use of the ever changing world of technology; preparing them with vital life skills and jobs for the future.

There are four key areas of computing: Computer Science, Digital Literacy, Use of Technology and E-Safety. The core of the computing curriculum is 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. It is important to us at Sholing Junior School that all children are taught these skills and given the opportunities to develop, build on and consolidate their learning throughout their time with us.

Computing has deep links with mathematics, science and design and technology. Through our Computing curriculum, we aim to utilise our Learning Behaviours by allowing all children to work collaboratively and independently; making links with and transferring their skills within the core and wider curriculum, as well as developing resilience through trial and error to create the desired effect (for example when programming).



#### **Our Aims**

#### **Sholing Junior School ensures that the Computing curriculum:**

- Challenges and inspires the children to achieve through creative learning opportunities.
- Promotes deep thinking within their learning so that all children are able to become competent and computational thinkers.
- Allows all pupils to become digitally literate; enabling them to express themselves and develop their ideas through information and communication.
- Ensures children know and understand how to keep themselves and others safe when using the internet and social media / communication games, devices and websites.
- Promote the use ICT to enhance children's learning in all areas of the curriculum.
- Introduce the children to a wide range of high quality hardware and software.
- Develop children's confidence and use of ICT for a variety of purposes.
- Keep up to date with current ICT developments and implement them where appropriate to reflect how ICT is also used outside of school.
- Ensure clear progression is evident and planned for, using specific software and hardware to support this outcomes.
- Meet the requirements of the National Curriculum Programmes of Study for Computing.

### **Our Strategies**

# At Sholing Junior School we seek to involve a wide range of strategies to meet the individual needs of our pupils in Computing by providing:

Access to software and hardware which meet the needs of the curriculum and enables children to apply their ICT skills to "real life" situations.

Opportunities to embed ICT as a tool to support learning and teaching across the curriculum. Providing opportunities for exploration of software and what can be achieved on different pieces of software.

Activities that support inclusion. All learners will have the opportunity to develop their ICT capability. Gifted and able learners to be provided with valuable extension opportunities that evaluate the use of ICT for different purposes and audiences.

#### **Our Resources**

### **At Sholing Junior School:**

- 90 networked chromebooks
- All classes have access to an interactive whiteboard/Interactive Panel
- A laptop for each teacher/office staff as well as some spares for part-time/cover staff and TAs
- 1 networked computers for staff use in a designated PPA room
- 1 networked computer in the Reflection Room for ELSA
- 1 networked computer for staff and child use in the library
- 1 networked computer and screen in the intervention room to be used for delivering interventions
- 30 iPad tablets in a locked trolley.
- A full wireless system allowing laptops to be networked across the school.
- A range of relevant software to support the National Curriculum for example: word processing, databases, control technology/programming, graphic modelling and sound/picture manipulation, e-mail and multimedia

- Purple Mash subscription
- Additional digital projector in the hall.
- A set of digital cameras.
- 4 networked photocopiers and a networked printer in the school office
- We have a good provision of Chromebooks, Kindles and Ipads which allow children to use hardware, software and apps that are timely and relevant.

### Our Computing Subject Leader Computing at Sholing is led by Sally Graham. She will:

- Seek to enthuse pupils and staff about ICT and promote high standards of achievement and high quality provision.
- Advise and support staff in the planning, delivery and assessment of Computing.
- Manage and develop all resources for Computing.
- Monitor and evaluate the use of ICT and the Computing curriculum throughout the school, ensuring continuity and progression.
- Keep up to date with current developments by attending courses, liaising with colleagues from other schools, and use this as a basis for staff development activities.
- Provide opportunities for our gifted and talented pupils to participate in Computing activities both in and out of school.
- Continue to promote and raise the profile of ICT throughout the school.

# Assessment, Record Keeping and Reporting: In order to ensure continuity, progression and high standards of achievement in Computing, assessment for every child will include:

- Ongoing formative assessment through observations and dialogue with children to form basis for individual targets / 'next steps'
- A summative assessment of each child's progress in ICT over the year will be provided in their end of year report.
- Summative assessments of each child at the end of each unit to ensure that planning is accessible and accurately pitched.
- A portfolio of work will be collated to see the progress of Computing over the time in school and ensure units are completed accurately.
- Pupils will save work in Purple Mash and Google Docs. Other work may be printed and displayed in topic books.
- A Computing assessment folder which will form the basis for a portfolio of work across the school.

# SEN, Pupil premium & Greater depth in Computing at SJS At Sholing Junior School we aim to:

- provide any additional resources to support children with SEN to ensure an inclusive approach to the subject;
- support and extend children through the use of technologies and adult support;
- deepen children's knowledge by asking non-routine questions within the topic of focus and providing high-level questioning for the children to explore;
- set tasks which will allow children to work at a greater depth to their peers with greater independence and ownership of tasks.

**Our Success Criteria:** We expect 90% of our children to attain standards in line with or above those stated in the NC end of key stage age related expectations