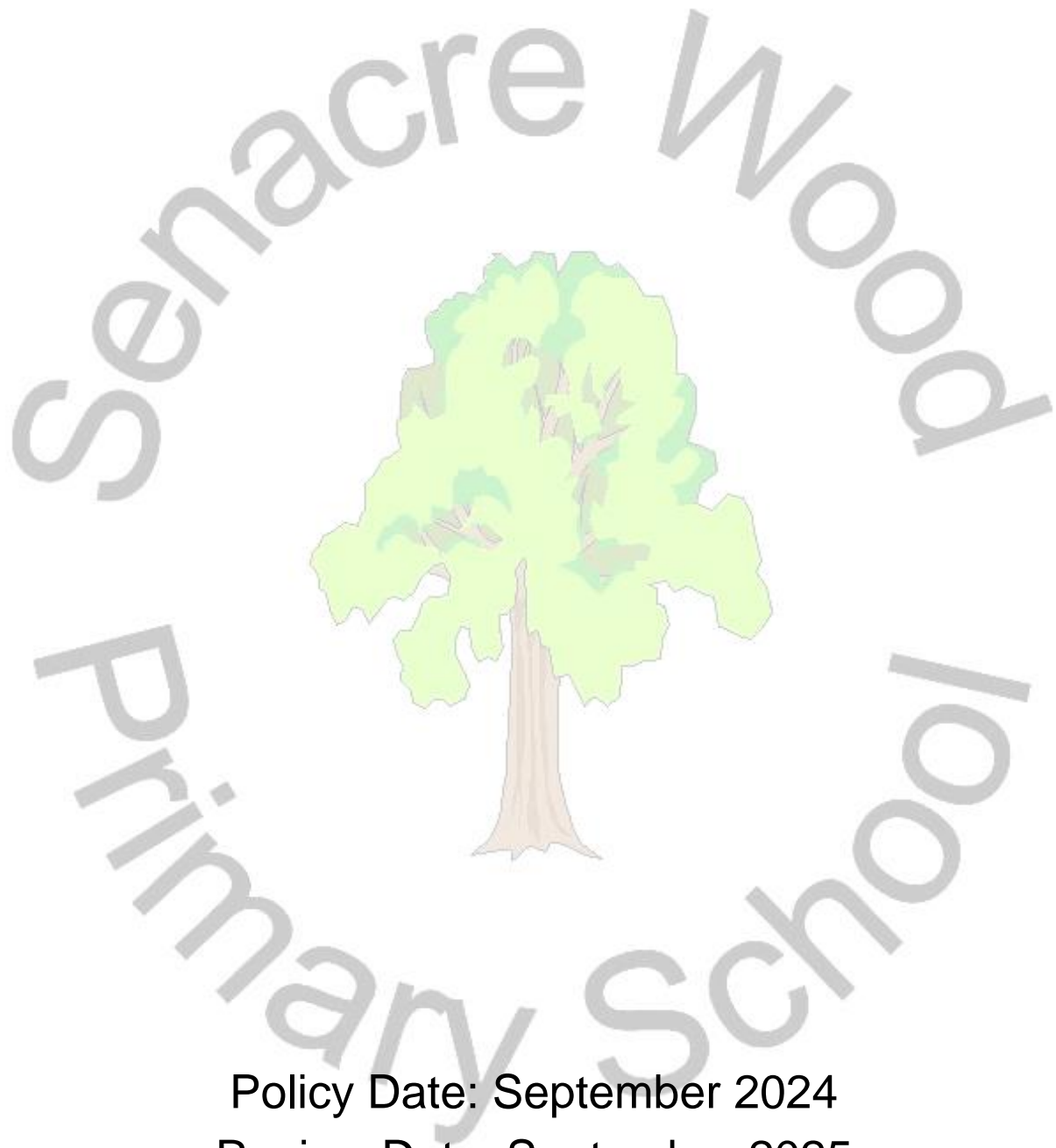


Computing Policy



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Senacre Wood Primary School Computing Policy

INTRODUCTION

The National Curriculum states that:

“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.”

At Senacre Wood Primary School, we aim to provide our pupils with the opportunity to gain fundamental life skills that will enable them to embrace, enjoy and utilise a range of technology in our modern-day world. We intend to integrate technology within all areas of the curriculum through targeted, well-planned lessons in both core and foundation subjects.

INTENT

At Senacre Wood Primary, we follow the aims of the National Curriculum 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.

National Curriculum 2014

Using the Kapow scheme of learning, computing at Senacre Wood aims to instil a sense of enjoyment around using technology and develop pupils' appreciation of its capabilities. Through the use of the scheme, we aim for pupils to be digitally competent and have a range of transferable skills as well as to be responsible online citizens.

At Senacre Wood Primary, we believe that IT, computer science and digital literacy:

- Are essential life skills necessary 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, which helps pupils understand, access and use it more readily.
- Can motivate and enthuse pupils.
- Offers opportunities for communication and collaboration through group working.
- Has the flexibility to meet the individual needs and abilities of each pupil.
- Enables children to feel competent, confident and creative when using information and communication technology.
- Enables children to become responsible users of information and communication technology, showing an understanding of how to stay safe online, including what to do if they feel something is not appropriate.
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IMPLEMENTATION

PLANNING

Our computing curriculum is taught using Kapow scheme of work which is designed with three core strands which run throughout:

- Computer Science
- Information Technology
- Digital Literacy

The scheme is then organised into five key areas, creating a cyclical route through which provides pupils with the opportunity to develop their computing knowledge and skills by revisiting and retrieving previous learning. The five key areas are:

- Computer systems and networks
- Programming
- Creating Media
- Data Handling
- Online Safety

Kapow Primary offers full coverage of the KS1 and KS2 Computing curriculum and each year group has a dedicated online safety unit to address the challenges and risks faced by primary school pupils growing up in an increasingly online world. To ensure this is revisited regularly, pupils complete an online safety lesson, from the appropriate planning, termly.

The implementation of Kapow Primary Computing ensures a broad and balanced coverage of the National Curriculum requirements. Where meaningful, Kapow have also created units to link with other subject areas to enable the development of transferable skills as well as opportunities for cross curricular learning; content is selected carefully to allow richer and deeper learning experiences.

LESSONS AND ENVIRONMENT

The following are included within all Computing lessons:

- Learning objectives and, where appropriate success criteria, are clearly displayed and discussed.
- Pupils clearly understand what they are learning and how it links to previous learning and knowledge.
- Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities.
- A range of questioning techniques are used throughout the lesson.
- Work is evidenced on Seesaw and this demonstrates pupils understanding as well as progression in learning.
- Opportunities are given to assess, feedback and move pupils' learning forward throughout a lesson.
- Inclusive classrooms which take into account the mainstream core standards.

Senacre Wood Primary School has a range of resources and accessible devices to support teaching and learning in all year groups, which are stored in a central area.

MARKING AND FEEDBACK

All children are entitled to regular and comprehensive feedback on their learning, to enable them to become reflective learners and help them close the gap between current and desired performance. We take a professional approach to the tasks of observing skills, monitoring or marking work (depending on the format of the computing task) and giving feedback on it. In computing, work is uploaded to class Seesaw platforms and

reflected on by teachers and students; this could be in a written or verbal form. All feedback will be given in line with the school's feedback and marking policy.

ASSESSMENT

Children will be assessed throughout a unit a work through retrieval tasks, based on previous learning. This could be through questions, quizzes or demonstrations of a skill and will include a focus on computing vocabulary. All children will be assessed using the success criteria set out by Kapow. At the end of each unit, teachers will assess a child's overall understanding of the topic based on Working Towards, Secure or Mastering by RAG rating on a spreadsheet. All assessment will be made in line with the school's assessment policy.

COMPUTING IN EARLY YEARS FOUNDATION STAGE

Whilst the technology strand is no longer a specific area in the new EYFS framework (2021), having the opportunity to develop computing skills at an early age can foster interest and confidence in technology and give pupils an advantage going into KS1.

Kapow EYFS lessons are a natural precursor to our Year 1 Computing plans. They are designed especially for the Reception classroom and are play-based, hands-on and fun.

The EYFS units focus on the same key areas and link to Primary and Specific Areas of the EYFS framework 2021 and Development Matters Guidance as detailed on individual lesson plans.

Children will learn about handling data, programming, multimedia and technology in their lives as they explore the world around them and how technology is an everyday part of their learning and understanding of the world. We aim to provide our pupils with a broad, play-based experience of computing in a range of contexts to ensure pupils can gain confidence, control and language skills through an assortment of computing opportunities.

EQUAL OPPORTUNITIES AND INCLUSION OF ALL LEARNERS

All children have equal access to the computing curriculum; to support this, staff follow the recommendations of the mainstream core standards. Positive attitudes towards computing are also encouraged, so that all children, regardless of race, gender, ability or special needs (including those for whom English is a second language) develop an enjoyment and confidence with computing.

Although the curriculum is statutory, we acknowledge that some skills or objectives may take longer to achieve than others, depending on children's varying abilities. To support this, teachers consciously and strategically plan the teaching and activities across the ability range whilst consistently monitoring pupil progress. Intervention at the point of learning ensures the pupils are learning more precisely and are continually motivated to make continued progress.

Productive repetition of some ideas will be vital for reinforcing each concept, and vocabulary used when teaching needs to be checked against understanding. We understand that practical experiences are the most valuable educational tool and are essential for pupils with special educational needs.

As part of the Kapow scheme of learning, differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils; as appropriate, this includes opportunities to stretch pupils' learning.

IMPACT

We aim to provide children with the key technology skills needed for use in the wider-world. If children are able to demonstrate an understanding of the required knowledge and skills within their year group's skills progression, they will be assessed as meeting age-related expectations.

By adopting the Kapow computing curriculum children will:

- Be critical thinkers and able to understand how to make informed and appropriate digital choices.
- Be responsible, competent, confident and creative users of information and communication technology
- Understand the importance that computing has in their educational and working life in both their social and personal futures.
- Understand how to balance time using technology in a healthy and appropriate manner.
- Show a clear progression of technical skills across all areas of the computing national curriculum.
- Be aware of online safety issues and protocols to be able to deal with any problems in a responsible and appropriate manner.
- Have an awareness of developments in technology.
- Understand and use technology to showcase their ideas and creativity; this will reflect an understanding of different software and hardware which they can use to achieve this.

ROLE OF THE COMPUTING SUBJECT LEADER

- To lead in the development of computing throughout the school.
- To monitor the planning, teaching and learning of computing throughout the school.
- To provide teachers with support in the teaching of computing with purpose.
- To help raise standards in computing.
- To moderate methods of recording progression and lesson evidencing.
- To monitor and maintain a high quality resource bank and computing equipment.
- To keep up to date with new developments in areas of computing.

