

At Spring Grove Primary School, we aim for our children to become digitally literate, computational thinkers and creators preparing them for the modern world.



Intent - We aim to...



Enable our children to understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data.

Provide opportunities for children to analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.

Ensure our children are responsible, competent, confident and creative users of information and communication technology.

Ensure our children are not only equipped with the knowledge and understanding of computer and digital systems, but can also access technology safely.

Ensure that all our children have a sound and secure computing knowledge that enables them to understand how computer and digital systems work and are programmed and how information can be stored, retrieved and shared with others.



Implementation - How do we achieve our aims?

Our Curriculum

In **Key Stage One and Two**, the Computing Programmes of Study are implemented using the **Rising Stars Switched onto Computing Scheme of Work**. In addition to this, **Skills Ladders** have been produced to develop our children's competency in: word processing, data handling and spreadsheets, information presentation using PowerPoint, desktop publisher and multi-media. Our skills ladders ensure that all children develop their computing skills progressively and a breadth and depth of curriculum is achieved. To support **assessment** and **inform** future planning, teachers in KS1 and KS2 create a class profile sampling a range of children's work to demonstrate the achievements of the children for each unit of work.



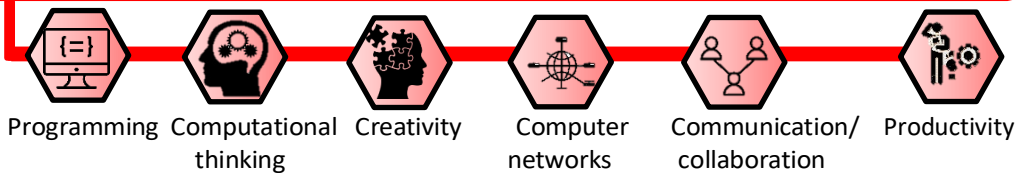
Strong Foundations

Computing in the Early Years is centered around **play-based activities** that focus on building children's **listening skills, curiosity and creativity and problem solving**. For example: taking a photograph using a camera or tablet; playing games on the interactive board; using a Beebot; watching a video clip or searching for information on the internet. We believe that all children should be exposed to high quality computing education in an **age appropriate way**. Reception children will begin to use the computer suite, as is appropriate, alongside the class resources.

Development of Key Skills

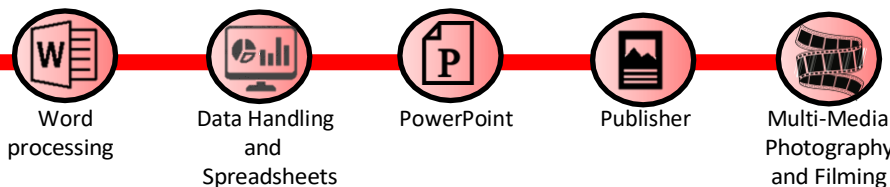


In Key Stage One and Two, using **Rising Stars Switched On Computing scheme of Work**, ensures that children develop the knowledge, skills and understanding required throughout the primary years, with digital literacy elements integrated fully into computer science and IT-based units. Each unit enables children to complete a project, either as part of a collaborative group or individually, to produce tangible outcomes using digital technology. Our **Skill Ladders** map the progression of skills in computing to develop competency in specific areas from Year One to Year Six. Where appropriate, teachers incorporate the teaching of computing skills within other subject areas to provide a real **life context** and offer a **wider breadth and depth** for the computing curriculum.



A consistent approach

There are two computing units taught each half term in Key Stage One and Two. One unit uses the **Rising Stars Switched onto Computing Scheme of Work** to ensure consistency, continuity and progression in skills. The second unit is guided by our **skills ladders**, to further enhance and develop our children's computing abilities and skills, as shown below:





Implementation (continued)

Switched On Computing Drivers

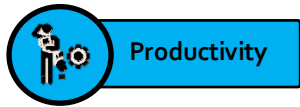
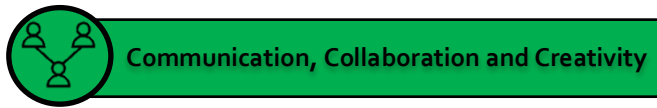
The following areas are used to drive the switched on computing curriculum so that our children can:

Computational Thinking and Productivity: understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

Programming: analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

Computing Networks: evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

Communication and Collaboration and Creativity: be responsible, competent, confident and creative users of information and communication technology.



Vocabulary Development

To understand **key vocabulary** and the manner in which technology is embedded in, and has, does and will continue to shape and influence everyday life. Computing vocabulary is displayed in the ICT Suite to enable vocabulary to be developed over time and enables our children to **communicate** to other people.



Skills Ladders Drivers

The following areas are used to drive our Skills Ladders computing curriculum, so that our children can be prepared for further education and lifelong learning in the place of education, life and work.
Using Word: to type fluently to produce reports and letters and create posters.

Using Publisher: to present news reports, brochures and leaflets.

Using Powerpoint: to present information to different audiences.

Using Excel: to create and analyse data and spreadsheets, and to present data for a specified audience.

Using Multi-Media: to manipulate creatively and to present to an audience.

E-safety

In the **EYFS** and **Key Stage One** we want children to be **confident** and to **explore** novel technologies. They are taught how to know how to use technology **safely** and **responsibly** to understand and demonstrate key computational thinking concepts. Children are taught what to do and where to go if they feel unsafe, or uncomfortable and begin to develop simple strategies for identifying trusted sources of information. In **Key Stage Two** children are taught how to know how to use technology **safely** and **responsibly** and **develop autonomy** and **self-discipline** within their technology use, using critical thinking skills to be discerning in evaluating digital information.



Impact - How will we know we achieved our aims?



Children enjoy Computing lessons and demonstrate this by confidently talking about their learning.



Children demonstrate an enjoyment of Computing lessons and choose to further their understanding through wider reading and experimenting.



Children experience all enquiry types throughout the key stages and demonstrate confidence in presenting information and data.



Children know about impact of computing on the world and how we must keep ourselves and others safe.



The majority of children at the end of Key Stage Two leave Spring Grove at the expected standard.