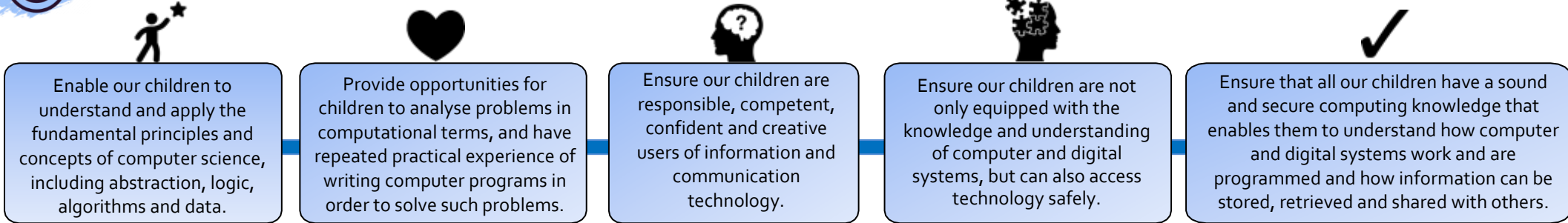


At Edward Pauling Primary School, we aim for our children to become digitally literate, computational thinkers and creators preparing them for the modern world.

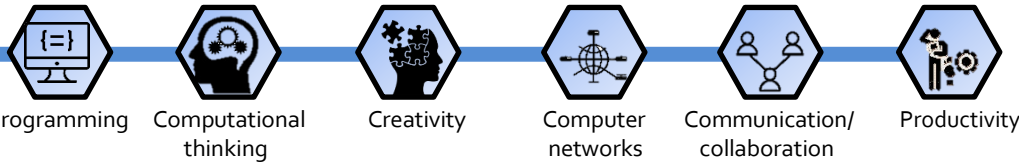
Intent - We aim to...



Implementation - How do we achieve our aims?

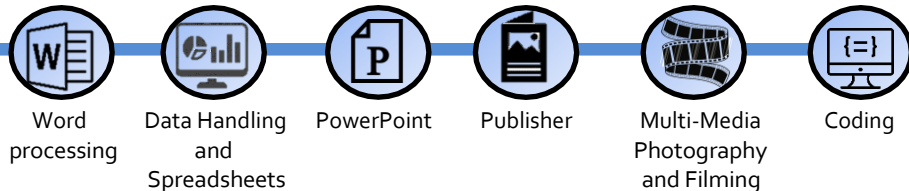
Our Curriculum

In Key Stage One and Two, the Computing programme of Study is implemented using **Purple Mash**. Our curriculum design helps ensure that all children develop their computing skills **progressively**. To support **assessment** and future planning, all children submit their work to build a collection of their achievement, and to support teacher's future planning.



A Consistent Approach

Teachers adapt unit plans as outlined in Purple Mash to meet the needs of their children. Sessions are delivered weekly, and units alternate between computing skills and online safety. Our curriculum design ensures that our children are consistently exposed to aspects of online safety alongside their consistently developing skills, as exemplified below:



Strong Foundations



Computing in the Early Years is centered around **play-based activities** that focus on building children's **listening skills, creativity, problem solving** and **understanding of the world**. Children in the Early Years learn how to use different devices in a safe way as part of their learning, for example: children take photographs using a camera or tablet; play games on the interactive board; watch video clips or search for information about different topics on the internet. We believe that all children should be exposed to a high quality computing education in an **age appropriate way**.

Development of Key Skills



In the EYFS, children explore different types of technology through their everyday learning. As part of the strand **Understanding the World**, children learn how technology is used in different jobs. Additionally, the use of technology is modeled by the teacher, such as using videos to support learning or capturing events using cameras. Throughout Key Stage One, children learn the fundamental skills of computing, such as: mouse and keyboard control and navigating simple programs. Children learn to create and debug simple codes, and to interpret and manipulate data. These fundamental skills lay the foundation to the skills and knowledge underpinning the Key Stage Two curriculum.



Implementation (continued)

Purple Mash Drivers

The following areas are used to drive our 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.



Computing Networks



Communication, Collaboration and Creativity



Computational Thinking



Productivity



Programming

Vocabulary Development



Computing vocabulary is displayed in the ICT Suite and in classrooms to enable vocabulary to be developed over time and enables our children to **communicate** to other people. Adults act as role models and introduce key vocabulary at specific parts of learning to enable children to learn terms in context.



Impact - How will we know we achieved our aims?



Children confidently code and debug for a purpose.



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 the impact of computing on the world and demonstrate how they can keep themselves and others safe on-line..



Our children are confident to use technology to support learning and are prepared for Key Stage Three.

Lifelong Learning



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. Children are taught how to use technology **safely** and **responsibly**. Teachers explicitly teach children 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 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. As part of our wider safeguarding curriculum, we build opportunities to revisit and discuss how to keep safe online as part of our Safe and Sound Assemblies or themed weeks. Half termly Hands Up Surveys supports children to share concerns that can be addressed.