Computing rationale

Growing together, guided by love…

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Through our computing curriculum, we empower students to become confident digital citizens, fostering creativity and innovation in technology. By emphasising community, compassion, and courage, through the use of the Purple Mash scheme, we encourage learners to collaborate, support one another, and take risks as they explore the digital world. Our goal is to equip students with essential computing skills while instilling values that promote a positive and inclusive online environment.

Intent:

- Equip pupils with computational thinking and problem-solving skills.
- Develop digital literacy to ensure all pupils are confident and competent in using technology, preparing them for the demands of the future workplace.
- Foster creativity through technology using design, creativity and expression of ideas and collaborative projects creating a sense of community within the curriculum.
- Foster courage by encouraging pupils to confidently engage with challenges in algorithms, coding and debugging.
- Develop clear oracy skills allowing children to give clear communication, explaining their thought processes and justifying choices whilst collaborating effectively.
- Teaching respect and compassion as ethical digital citizens, showing empathy and understanding around technology and online safety.

Implementation:

At our federation, we use the *Purple Mash* platform to deliver Computing. This provides a clear, progressive set of units that build pupils' computational skills from year to year. Each unit is carefully designed to meet the National Curriculum objectives, ensuring all learners receive a broad and balanced computing education.

The topics covered include:

Coding and computational thinking, Spreadsheets, Internet and email, Art and design, Music, Databases and graphing, Writing and presenting, Communication and networks.

We are skills…creative thinkers, self-managers, independent enquirers, reflective learners, team workers and effective participators

These skills are embedded within three key strands that are woven throughout the curriculum:

1. **Digital Literacy**

	2. **Computer Science** 3. **Information Technology** Together, these strands help pupils develop essential digital skills, understand how technology works, and use it creatively and safely.
Impact Computing helps children develop important skills needed in the modern world. It teaches them how to use technology safely and confidently, how to solve problems by thinking logically, and how to be creative using digital tools. Through coding, typing, researching online, and creating digital work, children learn to think critically, work with others, and understand how technology shapes the world around them. Overall, it prepares children for the future by helping them become confident, responsible, and capable users of technology.	**<u>Oracy in Computing</u>** • Explain thinking of processes of coding – algorithms, debugging, reasoning. • Talking through problems to help explore and identify errors. • Group work to plan and build projects together. • Correct terminology used to strengthen spoken understanding. • Presenting individual and collaborative work to the class, clarifying steps taken. • Building confidence to demonstrate and model to others. • Computational discussions on topics such as online safety, artificial intelligence and data.