Kneesall C of E Primary School
Computing Overview

Computing Intent
Why do children at Kneesall study Computing? As a school, we recognise that we have a responsibility to prepare pupils for their future, by improving their knowledge and understanding of technology within a rapidly developing technological world. It is essential that all pupils gain the confidence and ability to use technology safely and well across their whole curriculum, enriching their experiences in school. Our Computing curriculum focuses on a progression of skills in Computer Science, Information Technology and Digital literacy (including online safety) to ensure that children become competent in safely using, as well as understanding, technology.
What are the aims for the Computing curriculum? • Provide an exciting, rich, relevant and challenging Computing curriculum for all pupils. • Teach pupils to become responsible, respectful and competent users of data, information and communication technology. • Provide technology solutions for forging better home and school links. • Enthuse and equip children with the capability to use technology throughout their lives. • Teach pupils to understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated. • Utilise computational thinking beyond the Computing curriculum. • Give children access to a variety of high-quality hardware, software and unplugged resources. • Equip pupils with skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others. • Exceed the minimum government recommended/statutory guidance for programmes of study for Computing and other related legislative guidance (online safety). • Instil critical thinking, reflective learning and a 'can do' attitude for all our pupils, particularly when engaging with technology and its associated resources. • Use technology imaginatively and creatively to inspire and engage all pupils, as well as using it to be more efficient in the tasks associated with running an effective school.

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What are the local area/community links/special historical features in the area?	What links to careers can be made through the Computing curriculum?
Opportunities could be made by teachers to look at the variety of technology used within the trips they make as part of their topic learning to see technology in practice in the real world.	Computing is a part of most adults' everyday life. By embedding Computing into our curriculum we are preparing children to be competent and safe users of the technology within their workplace and home life, as well as preparing them for adapting to change in a rapidly developing technological world, preparing them for any career.

How are British Values taught through Computing?

The Computing curriculum delivers British values through having a sense of enjoyment and fascination in learning about the technological world around them and participating actively in their lessons.

Democracy- Within computing we ensure democracy by teaching children that they have the right to be safe online and teach them online safety within our curriculum to ensure this. We also teach children the importance of keeping personal information and passwords safe.

Mutual Respect and Tolerance- children work collaboratively to develop ideas, use technology and create media; through learning key digital literacy skills, pupils have the knowledge of techniques to begin deepening their understanding of the different uses of technology. By working together to problem solve, children learn to behave appropriately, allowing others the opportunity to work effectively. They can review each other's work respectfully and help and advise their peers, whilst maintaining tolerance and respect of different points of view, for example in how a task may be completed.

Individual Liberty- Throughout our computing curriculum, we ensure individual liberty through allowing children to complete their own research and develop questions within this. Through allowing children to have a say in their learning they become more confident and it helps to develop their self-esteem. They also learn how to act when they are a witness to cyber bullying and they learn about their rights and responsibilities.

Rule of Law- Within our computing lessons children are expected to follow both school and class rules. They are taught specific skills within Computing allowing them to develop their skills of following rules. Within the computing curriculum they also learn about algorithms, programming and control which again helps the children follow rules and shows them the importance of following simple instructions. Children also learn about internet safety and the rules they must follow to keep themselves and others safe.

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Computing Implementation
The Computing curriculum is taught through units of work, which cover the breadth of the knowledge and skills of the National Curriculum whilst allowing children to dig deeper, by making links to subject matter they have previously learned. Computing is taught in each class for a six or seven week block each half term, whilst in the Summer term all classes engage in a longer Computer Science unit of learning that may span a longer length of time as teachers adapt the lessons to the children's needs. Where possible, links are made to other curriculum subjects as a way to immerse the children in their learning and teacher's use their own knowledge of their children to make Computing as engaging and relevant as possible. We use a variety of resources from Teach Computing and Barefoot, as these trusted schemes provide lesson plans which enable the staff with confidence to deliver the quality of learning we desire for our pupils.
Monitoring, Progression and Assessment
Computing work is often done practically and so the evidence in children's work books is likely to be minimal. Evidence of 'unplugged learning' may be kept in topic books or may be displayed in the classroom alongside the relevant vocabulary children are learning to remind them of their building blocks as they move into the more abstract technological based lessons. Conversations with the children about what they are learning and have already learned, not just this year but in previous years is the most valuable way of monitoring progression and understanding and these are had with the subject lead wherever possible as well as the class teachers. Assessments are made at the end of each term to determine at what level of understanding each child is working towards. These cover each area of the Computing curriculum. These will include retrieval of key knowledge based facts and understanding of key vocabulary.