

Intent:

At Chantry Community Primary School, we want our pupils to be 'Masters of Technology' and not slaves to it. Technology is everywhere and will play a pivotal part in pupils' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly, and safely. We want our pupils to be creators not consumers and our broad curriculum encompassing computer science, information technology and digital literacy reflects this. We want our pupils to understand that there is always a choice with using technology and as a school we use technology (especially social media) to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education. We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Following the Teach Computing curriculum, our knowledge-rich curriculum is balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope by Upper Key Stage 2, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers. Across the Computing curriculum we want our children to acquire and then secure knowledge and transferable skills that are progressively embedded from early years to KS2 and beyond.

Implementation:

At Chantry Community Primary School, we follow the Teach Computing curriculum of study which covers all three areas of Computing: Computer Science, Information Technology and Digital Literacy. We have carefully selected this scheme of work that we feel more than covers the National Curriculum statements for Key Stage 1 and Key Stage 2. Computing is planned, taught, and assessed using the online scheme of work, resources, and assessment tool from Teach Computing. Teach Computing provides an innovative progression framework where computing content (concepts, knowledge, skills, and objectives) are organised into interconnected networks called learning graphs. Teachers use these learning graphs to directly inform lesson planning and to identify opportunities to assess pupil understanding at key points in a lesson or unit. These creative and exciting lessons are carefully timetabled so that each class has access to their key stage laptop or iPad trolley. Whilst we use the units provided in this scheme of work, teachers have changed their medium-term plan so that strong curriculum links can be made with subjects such as Mathematics, English, Art, and Science. Our children begin their journey with technology in Early Years, with access to iPads and 'Robot Mouse.' Teachers facilitate children's curiosity with challenge and modelling how to use the equipment carefully and safely. In KS1 children continue their journey with the 'Robot Mouse', using them more precisely. They learn how to programme a 'Robot Mouse' to reach a destination and begin to be able to debug when something does not work out the way they imagined. On the laptops they improve their mouse control and learn how to log on and off a computer using their own username and password. They learn about online safety and what to do if they encounter something which makes them feel uncomfortable as well as what personal information is and why it is important, we do not

share it with someone on the internet. Coding then progresses from 'Robot Mouse' onto a computer-based programme where children learn how to programme a variety of sprites. In KS2, children continue this coding journey, not only making the sprites move, but interact with each other. As children progress up KS2 the coding becomes more complex, and they can create basic games with code. Their digital literacy skills are combined with English, science, history and geography and work is word processed and presentations are created using PowerPoint. Children learn how to use the hardware we have in school including webcams, where they are taught how to take and manipulate pictures, showing them that what they view in the media is not always accurate. The children are also taught internet safety throughout each year of KS2. They know how to keep themselves safe online and what to do if they come across something that makes them uncomfortable. KS2 are taught the difference between being a bystander and an upstander and the importance of reporting something they experience happening to themselves or another person, as in accordance with our Anti Bullying Policy and our Online Safety Policy. Being safe online is also a component of our PSHE curriculum. Upper KS2 understand the importance of media balance and appreciate that as they get older, they are more responsible for their online presence and how often they access a variety of forms of media.

Impact:

We encourage our children to enjoy and value the curriculum we deliver. We will constantly ask the why behind their learning and not just the how. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development, and well-being. Finding the right balance with technology is key to an effective education and a healthy lifestyle. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to best embed and understand this. The way pupils' showcase, share, celebrate and publish their work will best show the impact of our curriculum, especially in their classes computing scrapbook. We also look for evidence through reviewing pupil's knowledge and skills and observing learning regularly. Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.

Useful Websites:

<https://teachcomputing.org/curriculum>

<https://www.barefootcomputing.org/>

<https://www.stem.org.uk/primary-computing-resources>

<https://www.saferinternet.org.uk/>