

## COMPUTING

### Intent

At Grange Primary School, we want our pupils to be masters of technology. Technology is everywhere and will play a pivotal part in our 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 just 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 utilise 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.

Our knowledge-rich curriculum has to be 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 tasks 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 Grange Primary School, we follow the National Curriculum programme of study which covers all three areas of Computing: Computer Science, Information Technology and Digital Literacy. We have carefully selected a scheme of work that we feel more than adequately cover the National Curriculum statements for Key Stage 1 and Key Stage 2.

Computing is planned, taught and assessed using the **Switched-on Computing** scheme of work. Switched-on Computing provides an innovative progression framework where computing content (concepts, knowledge, skills, and objectives) are organised into units.

Teachers use units 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 at least an hour a week dedicated to Computing. Whilst we use the units provided in this scheme of work, teachers are also encouraged to make cross curriculum links with subjects such as mathematics, English, art and science.

Our children begin their journey with technology in Early Years, with access to iPads and BeeBots. 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 BeeBots, using them more precisely. They learn how to programme a BeeBot to reach a destination and begin to be able to debug when something doesn't work out the way they imagined. 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 don't share it with someone on the internet. Coding then progresses from BeeBots onto computer-based programmes / apps.

As children progress up KS2 the coding becomes more complex and they are able to 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 using iPads to take pictures, where they are taught how to take and manipulate pictures, showing them that what they view in the media isn't 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, in accordance with our Anti Bullying Policy and our Online Safety Policy. 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 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. We also look for evidence through reviewing pupil's knowledge and skills digitally through tools like Google Classroom 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.