



# Computing

## Intent:

Our computing curriculum intends to:

- Aim for children to become independent users of computing technologies both at home and in school, gaining confidence and enjoyment from their activities and projects.
- Teach children how and why they need to keep themselves responsible, safe and effective online.
- Support children to be computational thinkers and give them the opportunity to communicate, plan, create and solve problems safely using a variety of technology.
- Utilise cross-curricular links so that the children can confidently use computing vocabulary across the curriculum.
- Encourage our pupils to practise learning behaviours, such as perseverance and tinkering, which will set them up for the rest of their school education and future careers because in order to learn, we need to make mistakes.
- Stimulate interest in new technologies, so that pupils become adaptable, taking advantage of the pace of technological change.
- Create opportunities for the children to work together collaboratively, increasing their communication skills.
- Create opportunities for independent study and investigation.
- Support and motivate our children with special educational needs and disabilities, whilst extending and providing a challenge for the more able.
- Encourage children to explore and identify the uses of technology in their everyday lives, and use computers, tablets, programmable toys and familiar equipment to support their learning and communication.

## Implementation:

We follow the Teach Computing scheme of work for the majority of our computing teaching, and use units of work from the Sheffield Scheme of Work to teach programming. We have worked with our computing consultant Catherine Elliott to develop a mixed-year group curriculum to ensure that the needs of all children are met and challenged.

In our Nursery and Reception classes, the children will recognise how technology is used around homes and our school. They select and use technology for particular purposes. In Reception, they use the 'Foundation Computing toolkit' to explore technology further, including using different software and programmable toys such as the Beebots.

In Key Stage One, the children have daily access to classroom desktop computers, allowing them to practise keyboard and mouse skills independently through the use of different software. This means that it is interesting to them, and gives them the opportunity to apply taught skills and understand what software can be used for, such as typing a letter to their friend on 'Microsoft Word', or designing a card on '2Publish'.

The children are taught computing weekly, allowing them to build on their knowledge and skills regularly. The children will understand what algorithms are; how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions; create and debug simple programs, use logical reasoning to predict the behaviour of simple programs; use technology purposefully to create, organise, store, manipulate and retrieve digital content; recognise common uses of information technology beyond school; use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

'Project days' are two days which are used to give the children uninterrupted time to tinker with, learn and master a particular skill, and produce a finished piece, such as a stop-motion animation.

Online safety is taught within each unit of our 'Teach Computing' scheme of work and as part of our RSHE curriculum. We work with parents to help them to understand the importance of keeping their children safe online at home, and use our school newsletter to communicate information to support them.