Computing Curriculum

INTENT

- **Our Vision**

At Stone CE School, it is our intent that our children will achieve their full potential and become independent, 'lifelong learners' who are prepared for the future. Our aim is for children to develop their computing skills to prepare them for a technological based world and for jobs that do not yet exist. Teaching our children to be respectful and responsible with their use of technology is at the heart of our computing curriculum and teaching about e-safety is embedded throughout our curriculum. We aim to prepare our children to be digitally literate and to be able to express themselves and develop their ideas through the use of information and communication technology. At Stone School, we believe in using technology across the curriculum and plan in meaningful opportunities for the children to transfer their computing skills to other curriculum areas.

- **The rationale**

A combination of the Rising Starts 'Switched on Computing' scheme and the Twinkl scheme of work was introduced in September 2020 to ensure that a broad and balanced curriculum was being taught to the children. The combination of both schemes ensures that, as they progress through the school, children are taught basic computing skills (e.g. typing, Microsoft Word skills, how to use Excel) as well as more advance programming and computer science skills, as we know that children will need all of these skills to prepare them for the wider world. E-safety is taught at the start of each year at an age appropriate level and builds on previous knowledge to ensure that children are aware of the dangers associated with technology, as well as teaching them how to become responsible digital citizens. It is also embedded throughout the computing curriculum so children are aware of the importance of internet safety issues. At Stone School, we also celebrate Safer Internet day each year to continuously reinforce to children and parents the importance of internet safety.

- **Meeting the needs of identified groups i.e. SEN, EAL, disadvantaged children and most able pupils**

Teachers use the progression of skills document to ensure that the computing curriculum is taught progressively and builds upon prior knowledge. Lesson plans are adapted by teachers and provision for different groups of pupils is identified on the plan to show how they will be either supported or challenged in lessons. Teachers set tasks that can be completed in mixed ability pairs or groups to ensure that less able pupils or those needing additional support can be supported by their peers. Some tasks are differentiated by outcome meaning that all children are able to achieve in a lesson and feel a sense of pride and accomplishment in their work. A subject guide for staff has been produced by the subject leader which gives examples of what a child should be achieving to be considered greater depth in computing. Teachers use this information to help set challenging tasks that would show children are working at greater depth.

- **Reading in this subject**

Children are introduced to new vocabulary when a new topic is taught as well recalling previous vocabulary from previous year groups. Vocabulary is displayed and referred to in lessons. Children carry out internet searches in computing lessons as well as across the curriculum and are required to read and understand the information they find.

IMPLEMENTATION

- **Introducing new learning**

A comprehensive progression of skills document has been drawn up and introduced to show the progression in computing from EYFS to Year 6. This clearly shows what knowledge and skills children need to have gained in previous years to ensure they are ready for the next step in their learning. Because these are passed up with children throughout their time at Stone School, teachers use this document to check for any gaps in previous learning and can address these before then moving the children on to ensure that children are developing their understanding and acquiring the skills they need. Units have been planned sequentially to ensure that the learning is building on knowledge and skills taught in previous years.

- **Teaching approach**

At Stone School, computing lessons are taught weekly and computing skills are regularly applied in other curriculum areas, ensuring a cross-curricular approach to the use of technology. In the weekly lessons, planning is taken from the scheme and adapted as necessary by teachers for their classes. A WALT for the lesson as well as S2S are identified and shared with the children at appropriate points in the lesson. A range of auditory, visual and kinaesthetic approaches are used in lessons to support children as they learn. Teacher demonstration is often used to share new skills with the children before they attempt the task set. Throughout the curriculum children complete tasks individually, in pairs or in groups depending on the skills they are learning, encouraging independent and collaborative learning. Some tasks are differentiated by outcome meaning that all children are able to achieve in a lesson and feel a sense of pride and accomplishment in their work.

- **Schemes/resources**

A combination of the Rising Stars 'Switched on Computing' scheme and the Twinkl scheme of work is used across all year groups to ensure a broad and balanced curriculum is taught and that children learn basic computer skills as well as more advanced programming and computer science skills. There are 31 laptops and 7 iPads available for use in computing lessons to support the children in developing their skills.

- **Educational visits and enrichment activities to develop cultural capital**

Each year at Stone School, we participate in Safer Internet Day to continue to develop our children's understanding and awareness of internet safety issues. The children in Year 6 undertake a 'Film making WOW day' as part of one of their topics.

- **Ensuring good progress and attainment**

Each class keeps a record of their learning in a 'Computing Evidence Book' which is monitored by the subject leader to ensure progress and progression in units of work. Photographs of outcomes and examples of work can also be included in this book to show learning and progression. Class teachers assess children half termly and say whether they are WTS, ARE or GD in computing. This data is then monitored by the subject leader and compared to progress in reading, writing and maths across the school. This is monitored by the subject leader across the year and reported to senior staff in school.

IMPACT

- **Expected outcomes**

That children have made good progress from their starting points, evidenced by teacher assessment. That assessment data shows that children are achieving to the same standards as in core subjects evidenced by teacher assessment and examples of work in books or the 'Computing Evidence Book'. Teachers will have been using the progression of skills document to track any

gaps in prior knowledge and try to address these before moving the children forward in their learning.

- **How outcomes for pupils are measured**

Outcomes are measured by the subject leader in a number of ways. 'Computing Evidence Books' are monitored to ensure learning and outcomes in lessons are in line with the progression of skills for children. Interviews with the children take place once a year to ascertain the children's thoughts and feelings about computing as well as to get their perspective on what they have learnt. Assessment data is reviewed termly to ensure progress and individual children and groups of children can be tracked as needed depending on the results of the data.

- **Other outcomes**

Through our computing curriculum, we believe we will develop independent, lifelong learners who have the knowledge and skills they need to survive in a technological based world. We hope to instil a love of computing in the children and the confidence to be able to use and apply their skills and knowledge in different curriculum areas. We aim to develop independent learners who can complete tasks and solve problems on their own as well as understand when it would be beneficial to collaborate with others. We aim for children to have an understanding of how technology can affect their wellbeing and how to use this knowledge to ensure they develop strategies to help them maintain a good mental health.