

## Computing Curriculum Statement



The Golden Thread that runs through our Computing Curriculum is that we want to empower the children to participate effectively and safely in the digital world outside of our school. We aim to equip them with the skills to use computational thinking and creativity to understand the world and to enable them to pursue a wide range of interests and vocations in the next stage of their lives.

### Intent

In line with the 2014 National Curriculum for Computing, our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. We believe that computing is an essential part of the curriculum; a subject which not only stands alone but also forms an integral part of our curriculum.

Our curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers. By the time they leave Alverton, children will have gained key knowledge and skills in the three main areas of the computing curriculum: **Computer Science** (programming and understanding how digital systems work), **Information Technology** (using computer systems to store, retrieve and send information) and **Digital Literacy** (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, enabling children to participate effectively and safely in the digital world outside Alverton School.

Following Covid-19, we have increased our focus on basic skills and meeting any learning “gaps” as well as having a whole-school priority of children’s mental and physical health and wellbeing.

### Implementation

At Alverton School we follow the Teach Computing Scheme of Work which is designed for the delivery of the curriculum through the use of mobile technology, specifically iPads.

*‘The Teach Computing Curriculum has been written to support all pupils. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive. Scaffolded activities provide pupils with extra resources, such as visual prompts, to reach the same learning goals as the rest of the class. Exploratory tasks foster a deeper understanding of a concept, encouraging pupils to apply their learning in different contexts and make connections with other learning experiences.’*

Teach Computing

The children will build their own learning portfolio that develops as they progress through the school with opportunities and set assessment points planned in for children to reflect upon and

express feedback and engage in discussion about new concepts. Our curriculum provides a balanced coverage of the computing curriculum where children will have experiences of all three strands in each year group. The subject knowledge imparted becomes increasingly specific and in depth ensuring learning is built upon.

Across Key Stage 1 and Key Stage 2, each child has access to their own iPad which are used to support teaching and learning across the curriculum. In the EYFS, with the focus of the curriculum being on Communication and Language and PSED, technology is not directly taught but is accessed via whole class teaching using interactive whiteboards and own learning opportunities to access activities on IWBs.

Following Covid-19, we ensure that we regularly allow time to reinforce and develop basic skills as well as providing an increased range of interventions across the school; various Apps may be used to support this.

### **Supporting Pupils with SEND in Computing**

At Alverton, teaching and learning is structured to support all pupils, including those with SEND, to progressively build on identified core knowledge to know, do and remember more. To achieve this, we adapt our curriculum in every subject to remove barriers to learning for pupils with SEND according to their individual needs and make subject-specific adaptations as appropriate which may be through peer to peer support, changes to text type or screen colour, voice recognition or recording features as well as small group work or adult supported tasks. Specific Apps will also be downloaded and used for children with specific additional needs.

### **Impact**

Our curriculum enables teachers to deliver the curriculum in a fun, engaging and high-quality way which supports varied paces of learning and ensures all pupils make good progress. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught. Teachers are able to assess children's knowledge, understanding and skills in Computing by making observations, through conversations with the children during lessons, and the quality of the digital content they create. Built into the activities are several points where the teacher has the opportunity to assess and take stock of the children's progress, then provide feedback addressing misconceptions and gaps as each unit progresses.

Children have had the opportunity to transport themselves to other countries, and even outer space, using green-screen technology; they have used iMovie to record a film which was shared with Cornwall County Council regarding a key local issue and certain Apps such as Popplet, which provides a clear, visual planning structure for paragraph organisation in different genres, are proving invaluable when planning writing,

Much of the subject-specific knowledge developed in our computing lessons equip pupils with experiences which will benefit them in secondary school, further education and future workplaces. From research methods, use of presentation and creative tools and critical thinking, computing at Alverton gives children the building blocks that enable them to pursue a wide range of interests and vocations in the next stage of their lives.