## **Implementation for Computing**



At St. George's Primary School, our computing curriculum's foundations are taken from the National Curriculum programme of study for Key Stage 1 and Key Stage 2.

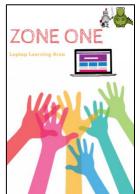
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/239033/PRIMARY\_national\_curriculum\_-\_Computing.pdf

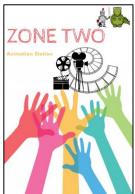
Our computing curriculum is then divided into 3 key strands, which are all essential components in preparing pupils to thrive in a digital world. These 3 strands are;

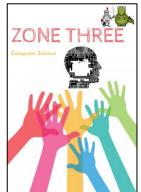
- 1. <u>Computer Science</u> which focuses on teaching pupils the principles of coding; how digital systems work and how to put this knowledge to use through programming.
- 2. <u>Information Technology</u> how digital technology works and how to use digital technology to achieve meaningful outcomes. Children are taught to understand and deploy operating systems and know how to use the applications and apps which reside in them.
- 3. <u>Digital Literacy</u> focuses on pupils being able to express themselves at a level suitable for the future and as active participants in a digital world ensuring this is done safely and responsibly. Pupils are encouraged to deploy their competency to meet a need, knowing <u>why</u> they are doing something and understanding and evaluating its fit for purpose and audience.

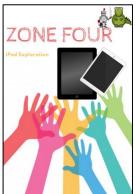
At St. George's we believe that rather than teaching these strands individually, they are intrinsically linked and our computing suite has been designed to encourage collaborative learning to develop and embed these strands within our computing learning. Project-based learning in computing helps to add real purpose to the computing learning that takes place here at St. George's Primary School.

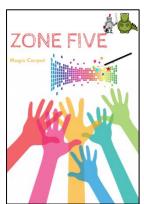
Our computing suite is divided into 5 different learning zones;











From Year 1 - 6 we cover 4 different units of work: coding, online safety, networks and creating media. These units of work have been mapped out across all year groups to ensure a variety of computing skill is taught and the active building stones of each unit of work ensures that the knowledge is embedded from one year group to the next.

## Please click here to view our long-term plan

## Please click here to view our computing progression ladders

In addition, each year group has their own medium-term plan, which breaks these units of work into 'I can statements' linking directly to our assessment system Target Tracker. Class Teachers also use resources from Teach Computing, Project Evolve and Barefoot Computing to help supplement their planning and support confidence in delivering the computing curriculum skills and knowledge. These documents aim to best embed and cover every element of the computing curriculum, and along with technology in the real world, these progression maps are also constantly evolving and being evaluated to ensure we are consistently providing our pupils with the best learning experiences possible.

## Computing in the Early Years Foundation Stage

Despite computing not being explicitly mentioned within the Early Years Foundation Stage (EYFS) statutory framework, at St. George's Primary School we still recognise the importance of creating experiences for our youngest children to engage with technology. We have identified many opportunities for our pupils to use technology to solve problems and produce creative outcomes.

- Understanding the World our classrooms contain a role play area which throughout the
  year contains technology, both functioning and model devices as part of continuous
  provision. Further technology is included in conjunction with other activities, such as
  digital cameras for pupils to photograph their own learning.
- <u>Communication and Language Unplugged activities</u>, or those away from the machine, give children an opportunity to develop their understanding of technology without the need for devices. Children are asked to give precise instructions verbally, with links made to the importance of using the correct vocabulary, along with speaking clearly and precisely.
- <u>Personal, Social and Emotional Development</u> We plan for opportunities for our EYFS children to use the microphone built into a tablet device, to record sounds, and videos. A range of age-appropriate books are available in our computing suite for young children to engage with in regards to their own online safety.
- Expressive Arts and Design The use of painting and graphics applications are used to develop pupils' keyboard and mouse skills, whilst a range of tablet-based apps are also available for our youngest children to engage with.
- <u>Mathematics Controlling devices provides an excellent opportunity to develop pupils'</u> understanding of left and right, along with directional language. Pupils actively engage with Bee-Bots which help them to develop these skills before moving into Key Stage 1.