



'God's love shines through us by the work of our hands'

let your light shine before others, so that they may see your good works and give glory to your Father in heaven.
(Matt. 5:14-16)

We are a church school where education is nourished through the teachings of Jesus Christ, enabling each child to fulfil their potential and which reflects our commitment to academic excellence.

Computing

Intent:

Our aim is to provide a high-quality computing education which enables children to develop and progress their skills. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. 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).

Implementation:

Computing is taught weekly and where possible using a cross curricular approach. This ensures children are able to develop depth in their knowledge and skills within their computing lessons and apply these within other subjects. Teachers use 'Teach Computing', as a starting point for the planning of their computing lessons. It can be adapted to best suit the children and the needs of the class. Knowledge and skills are mapped across each topic and year group to ensure systematic progression.

We have access to a class set of iPads, and the use of laptops 1 between 2. Microbits and LegoWeDo are other resources the children have access to within their computing lessons. This ensures that all year groups have the opportunity to use a range of devices and programs for many purposes across the wider curriculum, as well as in discrete computing lessons. Employing cross-curricular links motivates pupils and supports them to make connections and remember the steps they have been taught.

The implementation of the curriculum also ensures a balanced coverage of computer science, information technology and digital literacy. The children will have experiences of all three strands in each year group, but the subject knowledge imparted becomes increasingly specific and in depth, with more complex skills being taught, thus ensuring that learning is built upon.

Impact:

Our approach to the curriculum results in a fun, engaging, and high-quality computing education. Children will more often than not work in partners for computing to enable them to collaborate and challenge each other's thinking. This supports varied paces of learning and ensures all pupils make progress. 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.

Long Term Planning

Cycle A	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Class 1-Reception	Early learning goals Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. Offer explanations to why things might happen, making use of recently introduced vocabulary. Express their ideas and feelings about their experiences.		Early learning goals Set and work towards simple goals, being able to wait for what they want and control immediate impulses when appropriate. Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.		Early learning goals Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas and actions. Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	
Class 2 Yr 1/2	E-safety basic rules Computing systems and networks – technology around us (yr1) Creating media – digital painting (yr1)		Typing skills Programming A – robot algorithms (yr2) Data and information – grouping data (yr1)		Creating media – digital music (yr2) Programming B – programming quizzes (yr2)	
Class 3 Yr 3/4	Computing systems and networks – connecting computers (yr3) Creating media – stop frame animations (yr3) E-safety – child friendly websites		Programming A – sequencing sounds (yr3) Data and information – data logging (yr4)		Creating media – audio production (yr4) Programming B – repetition in games (yr4) E-safety – gaming safely	
Class 4 Yr 5/6	Computing systems and networks – communication and collaboration (yr6) Creating media – video production (yr5) E-safety – messaging, digital footprint, sharing safely		Programming A – selection in physical computing (yr5) Data and information – fact file databases (yr5)		Programming A – variables in games (yr6) Creating media – 3D modelling (yr6) E-safety – concept cartoons	
Cycle B	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Class 1-Reception	Early learning goals Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.		Early learning goals Set and work towards simple goals, being able to wait for what they want and control immediate impulses when appropriate.		Early learning goals Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to	

	Offer explanations to why things might happen, making use of recently introduced vocabulary. Express their ideas and feelings about their experiences.	Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	follow instructions involving several ideas and actions. Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.
Class 2 Yr 1/2	E-safety basic rules Computing systems and networks – IT around us (yr2) Creating media – digital photography (yr2)	Typing skills Programming A – moving a robot (yr1) Data and information – pictograms (yr2)	Creating media – digital writing (yr1) Programming B – programming animations (yr2)
Class 3 Yr 3/4	Computing systems and networks – the internet (yr4) Creating media – photo editing (yr4) E-safety passwords	Programming B – events and actions in programs (yr3) LOGO programming (DT) Data and information – branching databases (yr3)	Creating media – desktop publishing (yr3) Programming A – repetition in shape (yr4) E-safety -message sharing
Class 4 Yr 5/6	Computing systems and networks – systems and searching (yr5) Creating media – web page creation (yr6) E-safety – vlogging, comments, social media	Programming B – selection in quizzes (yr5) Data and information – introduction to spreadsheets (yr6)	Programming B – sensing movement (yr6) Creating media – introduction to vector graphics (yr5) E-safety digital citizen behaviours