

## **Newton Leys Primary School and Nursery**

## **Subject Overview - Computing**

#### Intent

At Newton Leys Primary School and Nursery, we want pupils to be MASTERS of technology. Technology is everywhere and will play a pivotal part in students' lives. Therefore, we want to model and educate our pupils on how to use technology positively, responsibly, and safely. We want our pupils to be creators not consumers and our broad curriculum encompassing computer science, information technology and digital literacy reflects this.

We want our pupils to understand that there is always a choice with using technology and as a school we utilise technology to model positive use. We recognise that the best prevention for a lot of issues we currently see with technology/social media is through education.

Building our knowledge in this subject will allow pupils to effectively demonstrate their learning through creative use of technology. We recognise that technology can allow pupils to share their learning in creative ways. We also understand the accessibility opportunities technology can provide for our pupils. Our knowledge rich curriculum is planned to be balanced with the opportunity for pupils to apply their knowledge creatively which will in turn help our pupils become skilful computer scientists. We encourage staff to try and embed computing across the whole curriculum to make learning creative and accessible. We want our pupils to be fluent with a range of tools to best express their understanding and hope that by the end of primary school, children have the independence and confidence to choose the best tool to fulfil the task and challenge set by teachers.

We believe that being digitally literate is a fundamental life skill to succeed in the wider world.

### Implementation

Our Computing scheme of work is adapted from the 'Teach Computing' Curriculum from the NCCE and covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject matter experts and based on the latest pedagogical research, with regular updates. It provides an innovative progression framework throughout the Primary school ages, building on previously learnt skills.

The curriculum aims to equip young people with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: computer science, information technology and digital literacy, with the aims of the curriculum reflecting this distinction.

Computer Science	Information Technology	Digital Literacy
Computational Thinking	Word Processing	Self-image and Identity
Programming	Data Handling	Online Relationships
Computer Systems and Networks	Web Design	Online Reputation
	Presentations	Online Bullying
	Animation	Managing Information Online
	Video editing	Health, Wellbeing and Lifestyle
	Photography and Digital Art	Privacy and Security
	Sound	Copyright and Ownership

Staff are encouraged to embed Computing across the curriculum. We have a weekly, timetabled Computing lesson for every class. Each year group has a Computer Systems and Network unit, two programming units, a data and information unit and two creating media units. These are progressive across the school, building on prior knowledge, skills and understanding.

Key vocabulary for each lesson is identified on planning and shared with learners throughout the lesson. It is reinforced through QFT (Quality First Teaching) and reviewed throughout the unit. Children are encouraged to make links in vocabulary across the units of learning and apply their knowledge in different contexts. Learning is differentiated for SEN children through changing the demand of the task and adapting questioning. Children working at Greater Depth are challenged through exploratory tasks to deepen understanding.

# <u>Impact</u>

We encourage our children to enjoy and value the curriculum we deliver and ask questions about their learning. We will constantly ask the WHY behind their learning and not just the HOW. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development, and well-being. The way pupils showcase, share, celebrate and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil's knowledge and skills digitally through tools such as Tapestry and observing learning regularly.

Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.