

Kelsey Primary School

Computing rationale

We follow the **Teach Computing** teaching scheme. *Teach Computing* is recognised by The **National Centre for Computing Education (NCCE)** and is funded by the Department for Education. Teach Computing is recognised as one of the leading support programmes in enhancing children's computing skills and therefore boosting their future career opportunities.

Implementation

Through *Teach Computing's* scheme, children develop their knowledge and skills in ten key areas:

- Algorithms
- Computer networks
- Computer systems
- Creating media
- Data and information
- Design and development
- Effective use of tools
- Impact of technology
- Programming
- Safety and security

The units for key stages 1 and 2 are based on a spiral curriculum. This means that each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme. This style of curriculum design reduces the amount of knowledge lost through forgetting, as topics are revisited yearly. It also ensures that connections are made even if different teachers are teaching the units within a theme in consecutive years.

The scheme is research-based and highlights areas for subject knowledge and pedagogy enhancement through training. It provides notes for teachers with examples to develop subject knowledge and provide ongoing CPD.

Online Safety

The unit overviews for each unit show the links between the content of the lessons and the national curriculum and *Education for a Connected World framework*. These references have been provided to show where aspects relating to online safety, or digital citizenship, are covered within the *Teach Computing Curriculum*. Not all of the objectives in the *Education for a Connected World framework* are covered in the *Teach Computing Curriculum*, as some are better suited to personal, social, health, and economic (PSHE) education; spiritual, moral, social, and cultural (SMSC) development; and citizenship. However, the coverage required for the computing national curriculum is provided.

How does the impact of following the *Teach Computing* scheme links to our Curriculum Drivers?

Globally aware:

There are clear opportunities for pupils to:

- Use physical computing and making activities that offer tactile and sensory experiences to enhance learning.
- Bring abstract concepts to life with real-world, contextual examples, and a focus on interdependencies with other curriculum subjects.

Culturally aware:

There are clear opportunities for pupils to:

- Combine electronics and programming with arts and crafts (especially through exploratory projects)

Key Stage Ready and Ambitious:

There are clear opportunities for pupils to:

- Meet the end of key stage expectations outlined in the National Curriculum for Computing.
- Use project-based learning activities to provide pupils with the opportunity to apply and consolidate their knowledge and understanding.
- Acquire knowledge, through the use of key concepts, terms, and vocabulary.