

**COMPUTING**

**INTENT**

Computing is taught in Cranham C of E Primary to enable pupils to thrive in a world that is becoming ever more reliant on the use of technology. We aim to ensure that pupils become digitally literate. They should be able to use, express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace. We want Cranham children to be safe and active participants in a digital world.

Our Computing curriculum uses the National Centre for Computing Education’s computing taxonomy to ensure comprehensive coverage of the subject. All learning outcomes can be described through a high-level taxonomy of ten strands, ordered alphabetically as follows: Algorithms, computer networks, computer systems, creating media, data and information, design and development, effective use of tools, impact of technology, programming and safety and security. The taxonomy provides categories and an organised view of content to encapsulate the discipline of computing. Whilst all strands are present at all phases, they are not always taught explicitly.

**IMPLEMENTATION**

Our curriculum is structured in units. For these units to be coherent, the lessons within a unit must be taught in order. However, across a phase, the units themselves do not need to be taught in order, with the exception of ‘Programming’ units, where concepts and skills rely on prior learning and experiences.

The units 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.

Our 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. As well as scaffolded activities, embedded within the lessons are a range of pedagogical strategies, which support making computing topics more accessible.

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The most relevant statements for computing are within the following areas of learning:

- Personal, Social and Emotional Development

- Physical Development

- Understanding the World

- Expressive Arts and Design

**IMPACT**

Every lesson includes formative assessment opportunities for teachers to use. These opportunities are listed in the lesson plan and are included to ensure that misconceptions are recognised and addressed if they occur. They vary from teacher observation or questioning, to marked activities. These assessments are vital to ensure that teachers are adapting their teaching to suit the needs of the pupils that they are working with, and staff are encouraged to change parts of the lesson, such as how much time spent on a specific activity, in response to these assessments. The learning objective and success criteria are introduced in the slides at the beginning of every lesson. At the end of every lesson, pupils are invited to assess how well they feel they have met the learning objective. This gives pupils a reminder of the content that has been covered, as well as a chance to reflect. It is also a chance for teachers to see how confident the class is feeling so that they can make changes to subsequent lessons accordingly.