# Our Curriculum Computing

### **British Values**

At Hayfield Cross, these values are regularly promoted through high quality teaching, a rounded programme of assemblies and a positive behaviour policy as well as through SMSC development through relationship and health education. This gives pupils opportunities to develop and demonstrate skills and attitudes that will allow them to participate fully in and contribute positively to life in modern Britain.

#### Specifically in Computing...

**Democracy:** In Computing are learning to understand and be considerate to the views of other internet users. We understand that we are each part of the democracy of the internet and that we can each, in our own small way, affect the way the internet exists.

**The Rule of Law:** In Computing we understand the use of rules on computers and the internet, such as when we are allowed to use social media and what we are allowed to post and share. We understand that rules are to keep others and ourselves safe and to help the internet to be an enjoyable and engaging place.

**Individual Liberty:** In Computing we understand how to use our right to freedom of speech in a respectable and thoughtful way, being considerate of how this speech will affect others. We understand the freedom the internet and computers offer us in discovering information and connecting us with the world.

**Mutual Respect:** In Computing we appreciate and understand the views of others, our right to challenge, question and discuss opinions and views, and to do this in a respectable and thoughtful way. We understand that as we are connected with the world while accessing the internet, we are exposed to the widest range of views, and we are learning to respect them.

**Tolerance:** In Computing we understand that we are connected to people across the whole world. We understand that these are people from different communities, cultures, faiths and beliefs. We use the opportunities offered in computing to question, challenge and understand people with these different characteristics to support and develop our tolerance of them.

### **BE BRAVE**

At Hayfield Cross, we intend to prepare our children to be confident and competent within a world that is heavily shaped by technology. We plan and deliver **engaging** lessons with regular opportunities for children to showcase their learning through **buzz** points planned into the curriculum. Our aim is to develop the children's **prior knowledge**, understanding and courage in their computing skills to be able to apply this throughout their inevitable and increasingly regular use of technology, in school and at home.

We aim for children to independently take and **build upon skills** throughout their time in education and also in their future careers. These skills include being able to design, create and evaluate their work, use a range of different software and find, analyse and present information in a variety of different formats. In this rapidly changing digital world, it is vital the children are able to develop their ideas through information and communication technology and are able to access all aspects of the computing curriculum using computing specific vocabulary. Inspired by our school vision (Joshua 1:9), we aim for them to leave our school with confidence in Computing, so that they have the **relevant**, transferable skills that can be further developed later on in life.

## **Reading, Writing & Maths**

The children will take part in discussing and taking part in conversations about a range of Computing topics appropriately as well as develop an understanding of topic specific vocabulary. Our children will build range of rich vocabulary that reflects their experiences and they will be given an opportunity to use, develop and embed new words, and utilise these in a range of contexts.

Reading and writing are not explicitly taught through computing but they are both skills that are further consolidated and required within computing. Whilst in computing lessons, children are able expected to read onscreen information and type/write up the required information.

There are strong parallels between mathematical reasoning and computational thinking: logical reasoning, algorithms, abstraction, generalisation, decomposition and evaluation play a central role in both computer science and mathematical problem solving.

EYFS Computing		
Reception	Personal, Social and Emotional Development	<ul> <li>Show resilience and perseverance in the face of a challenge.</li> <li>Know and talk about the different factors that support their overall health and wellbeing: -sensible amounts of 'screen time'.</li> </ul>
	Physical Development.	<ul> <li>Develop their small motor skills so that they can use a range of tools competently, safely and confidently</li> </ul>
	Expressive Arts and Design	<ul> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings</li> </ul>
ELG	Personal, Social and Emotional Development Managing Self	<ul> <li>Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.</li> <li>Explain the reasons for rules, know right from wrong and try to</li> <li>behave accordingly</li> </ul>
	Expressive Arts and Design Creating with Materials	<ul> <li>Safely use and explore a variety of materials, tools and</li> <li>techniques, experimenting with colour, design, texture, form</li> <li>and function.</li> </ul>