



**Shining Together Through Courage, Connection and Curiosity.**

***Guided by Christian values, we inspire every child to let their light shine through a love of learning.***

***'Let your light shine for all to see' Matthew 5:16***

## **Computing**

### **Intent**

At Huby, we believe that every child should become a confident, creative and responsible user and creator of technology. Computing is an essential part of modern life and provides children with the knowledge, skills and understanding they need to participate successfully in an increasingly digital world.

Our computing curriculum is designed to develop pupils' knowledge and skills across **computer science, information technology and digital literacy**. Children learn how computers and digital systems work, how technology can be used creatively and purposefully, and how computational thinking can help them solve problems.

We want every child to shine as a digital learner. Through computing, children develop the **courage** to experiment, make mistakes and persevere; the **curiosity** to ask questions and explore how things work; and the **connection** to communicate, collaborate and understand the impact technology can have on themselves, others and the wider world.

Our curriculum is ambitious for all pupils. We recognise that children come to computing with different levels of experience and confidence. Through careful teaching, modelling, scaffolding and appropriate challenge, we ensure that every child can develop their knowledge, skills and independence.

We want pupils to understand that technology is not simply something to consume, but something they can understand, create with and use responsibly. As a Christian school, we encourage children to consider not only what technology can do, but how and why it should be used. We want them to use their talents to communicate, create, solve problems and make a positive contribution to the world.

Ultimately, we want our pupils to leave Year 6 with the confidence, knowledge and character to navigate the digital world safely and thoughtfully, using their skills to let their light shine.

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## **Implementation**

Our computing curriculum is carefully sequenced from EYFS to Year 6 so that children progressively develop the knowledge, vocabulary, skills and independence required to become confident digital learners.

We use **Kapow Primary Computing** as the foundation for our computing curriculum. The scheme provides a structured progression across computer science, information technology and digital literacy, while allowing teachers to make meaningful links to pupils' experiences and the wider curriculum.

## **The Computing Curriculum**

Across school, pupils develop knowledge and skills through three interconnected areas:

- **Computer Science** – understanding how computers and digital systems work, developing computational thinking, programming and problem-solving skills.
- **Information Technology** – using digital tools to create, manipulate, store, retrieve and communicate information.
- **Digital Literacy** – developing the knowledge and understanding required to use technology safely, responsibly, respectfully and purposefully.

Lessons provide opportunities for pupils to:

- develop and use computing vocabulary
- explore how technology works
- develop computational thinking and problem-solving skills
- learn through teacher modelling and demonstration
- practise and apply new skills
- create and evaluate digital content
- solve problems and debug errors
- collaborate and communicate using technology
- use technology safely and responsibly.

## **EYFS**

In EYFS, children begin to develop the foundations for computing through opportunities to explore technology and develop early problem-solving, sequencing and communication skills.

Adults model purposeful and safe use of technology and encourage children to talk about the technology they encounter in everyday life.

### **Key Stage 1**

In KS1, children develop an understanding of technology and how it can be used purposefully. They begin to develop programming and computational thinking skills, including creating and following algorithms, sequencing instructions and identifying errors.

Children use a range of digital tools to create and communicate information and develop age-appropriate understanding of online safety.

### **Key Stage 2**

In KS2, pupils build increasing independence and sophistication in their use of technology. They develop their understanding of programming, algorithms, networks, data and digital systems.

Children learn to create, test, debug and refine programs and use digital tools to create, present, manipulate and communicate information for different purposes and audiences.

They also develop their understanding of online safety, privacy, digital footprints, reliable information and responsible participation in digital communities.

## **Vocabulary**

Vocabulary development is integral to computing. Teachers explicitly introduce and revisit subject-specific vocabulary so that children can explain computing concepts accurately and communicate their thinking confidently.

## **Inclusion and Adaptation**

We recognise that pupils may have different levels of prior experience, confidence and access to technology. Teachers adapt teaching appropriately while maintaining high expectations. This may include:

- explicit modelling and demonstration
- visual prompts and worked examples
- vocabulary banks and step-by-step instructions

- paired or collaborative activities
- scaffolded tasks and additional practice
- assistive technology where appropriate
- targeted support and appropriate challenge.

The aim is to enable every child to participate, experience success and develop increasing independence.

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## **Spiritual Development Through Computing**

Spiritual development is deliberately woven through our computing curriculum. We use the **Mirrors, Doors, Windows and Candles** model to help teachers identify meaningful opportunities for pupils to reflect, question and consider the wider significance of their learning.

### **Mirrors – Looking at ourselves**

Pupils are encouraged to reflect on their own experiences, choices and responsibilities as digital citizens. They may consider their digital habits, online behaviour, strengths as problem-solvers and how they respond when things go wrong.

Children develop the courage to experiment, make mistakes and persevere.

### **Doors – Looking at others**

Technology provides opportunities to connect with people, communities and perspectives beyond our immediate experience.

Pupils may explore how technology brings people together, consider fairness and accessibility, develop empathy and reflect on how their digital choices affect others.

### **Windows – Looking at beauty, creativity and wonder**

Computing provides opportunities to appreciate and create digital art, animation, music and other forms of creative expression.

Pupils can explore patterns, systems, design and the ingenuity of technology, developing curiosity and a sense of wonder about the world around them.

### **Candles – Looking beyond ourselves**

Pupils are encouraged to consider deeper questions about the purpose and responsible use of technology.

They may explore questions of responsibility, justice, compassion, stewardship and the impact of technological choices on people and the wider world. Where appropriate, children consider Christian values and how their talents can be used to serve and support others.

These opportunities are not added artificially. Teachers identify where the content naturally provides an opportunity to pause, reflect and consider something beyond the immediate task.

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## **Impact**

The impact of our computing curriculum is seen in pupils who:

- understand how digital technology works and how it is used in everyday life
- demonstrate increasing confidence and independence when using technology
- apply computational thinking to solve problems
- create, test, debug and refine programs
- use digital tools creatively and purposefully
- use appropriate computing vocabulary
- demonstrate resilience and perseverance when solving problems
- use technology safely, respectfully and responsibly
- recognise online risks and know how to seek help
- understand the importance of privacy and digital footprints
- consider the impact of technology on themselves, others and the wider world
- appreciate the creativity, beauty and ingenuity of technology
- show curiosity about how technology works and what it makes possible
- have the courage to experiment, take risks and develop their ideas
- recognise that their technological skills can be used to make a positive difference.

Assessment is used to identify what pupils know, understand and can apply, and to inform subsequent teaching. Teachers use formative assessment, pupil work, digital outcomes, pupil voice and lesson visits to evaluate progress and the effectiveness of the curriculum.

By the end of Year 6, we want every child to leave Huby as a confident, curious and responsible digital learner. We want them to have the **courage to explore and create, the curiosity to question and discover, and the connection to use technology positively with and for others.**

Above all, we want our pupils to recognise that their knowledge, creativity and talents can make a difference, enabling them to **let their light shine for all to see.**