

# Haselbury Plucknett Computing Overview

## Computing Intent, implementation and impact statement

### **Computing Intent:**

At Haselbury Plucknett School, we understand the immense value that technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for Computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting the whole of the curriculum.

Technology is ever evolving and we aim to develop pupils who can use and express themselves, develop their ideas through information and communication technology for the future workplace and as active participants in a digital world.

The aims of our Computing curriculum are to develop pupils who:

- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Become digitally literate and are active participants in a digital world.
- Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.
- Understand the E-Safety messages can keep them safe online and know who to contact if they have concerns.
- Apply their learning in a range of contexts, e.g. at school and at home.

Special Educational Needs Disability (SEND) / Pupil Premium / Higher Attainers All children will have Quality First Teaching. Any children with identified SEND or in receipt of pupil premium funding may have work additional to and different from their peers in order to access the curriculum dependent upon their needs.

### **Implementation:**

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Computing teaching at Haselbury Plucknett School will deliver the requirements of the National Curriculum through units of work taken from Kapow Primary schemes of work.

The Kapow Primary scheme is organised into five key areas, creating a cyclical route through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning:

- Computer systems and networks
- Programming
- Creating media
- Data handling
- Online safety

The implementation of Kapow Primary Computing ensures a broad and balanced coverage of the National curriculum requirements, and the 'Skills showcase' units provide pupils with the opportunity to learn and apply transferable skills. Where meaningful, units have been created to link to other subjects such as science, art, and music to enable the development of further transferable skills and genuine cross-curricular learning.

Lessons incorporate a range of teaching strategies from independent tasks, paired and group work as well as unplugged and digital activities. This variety means that lessons are engaging and appeal to those with a variety of learning styles. Differentiated guidance is available for every lesson to ensure that lessons can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust computing curriculum. Each of the units of lessons include teacher videos to develop subject knowledge and support ongoing CPD. Further CPD opportunities can also be found via the webinars with Computing subject specialists. Kapow has been created with the understanding that many teachers do not feel confident delivering the computing curriculum and every effort has been made to ensure that they feel supported to deliver lessons of a high standard that ensure pupil progression.

Finally, at Haselbury Plucknett School we actively encourage parent partnership within the computing curriculum and outside of school. Parents are made aware of e-safety issues through the school website, Facebook page, links, letters, information newsletters, parent presentations, shared activities and guidance and regular subscriptions to e-safety magazines.

### **Impact:**

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components. They will be equipped, not only with the skills and knowledge to use technology effectively and for their own benefit, but more importantly – safely. The biggest impact we want on our children is that they understand the consequences of using the internet and that they are also aware of how to keep themselves safe online.

As children become more confident in their abilities in Computing, they will become more independent and key life skills such as problem-solving, logical thinking and self-evaluation become second nature.

**Overview of computing for Haselbury Plucknett – split year groups.**

Key Stage 1							
	Autumn		Spring		Summer		When suitable
Cycle A	<b>Programming</b> Bee-bots Option 1: Bee-Bots Option 2: Virtual Bee-bots (from year 1)	<b>Creating media</b> Digital imagery Option 1: Google Option 2: Microsoft Office 365 (From year 1)	<b>Data handling</b> Introduction to Data	<b>Programming 2</b> Programming ScratchJr	<b>Creating media</b> Stop Motion Option 1: Using tablet devices Option 2: Using cameras Option 3: Devices without cameras	<b>Data handling</b> International Space Station	<b>Online safety</b> Online safety Y2 (5 lessons)
Cycle B	<b>Computing systems and networks</b> Improving mouse skills (from year 1)	<b>Programming 1</b> Algorithms unplugged (from year 1)	<b>Skills Showcase</b> Rocket to the moon (from year 1)	<b>Computing systems and networks</b> What is a computer? (from year 2)	<b>Programming</b> Algorithms and debugging (from year 2)	<b>Computing systems and networks</b> Word processing Option 1: Google Option 2: Microsoft Office 365	<b>Online safety</b> Online safety Y1 (4 lessons)

Lower Key Stage 2							
	Autumn		Spring		Summer		When suitable
Cycle A	<b>Computing systems and networks</b> Networks and the internet Option 1: Google Option 2: Microsoft Office 365 (from year 3)	<b>Data handling</b> Comparison cards databases Option 1: Google Option 2: Microsoft Office 365 (from year 3)	<b>Computing systems and networks</b> Journey inside a computer (from year 3)	<b>Computing systems and networks</b> Collaborative Learning Option 1: Google Option 2: Microsoft Office 365 (from year 4)	<b>Data handling</b> Investigating weather Option 1: Google Option 2: Microsoft Office 365 (from year 4)	<b>Skills Showcase</b> HTML (from year 4)	<b>Online safety</b> Online safety Y4 (6 lessons)
Cycle B	<b>Computing systems and networks</b> Emailing Option 1: Google Option 2: Microsoft Office 365 (from year 3)	<b>Programming</b> Programming: Scratch (from year 3)	<b>Creating media</b> Video trailers Option 1: Using devices other than iPads, Option 2: Using iPads (from year 3)	<b>Creating media</b> Website design Option 1: Google Option 2: Microsoft Office 365 (from year 4)	<b>Programming</b> Further coding with Scratch Option 1: Google Option 2: Microsoft Office 365 (from year 4)	<b>Programming</b> Computational thinking (from year 4)	<b>Online safety</b> Online safety Y3 (4 lessons)

## Upper Key Stage 2

	Autumn		Spring		Summer		When suitable
Cycle A	<b>Programming 1</b> Programming music Option 1: Sonic Pi , Option 2: Scratch (from year 5)	<b>Creating media</b> Stop motion animation Option 1: Stop motion studio Option 2: Using cameras (from year 5)	<b>Computing systems            and networks</b> Search engines Option 1: Google Option 2: Microsoft Office 365 (from year 5)	<b>Data handling</b> Big data 1 (from year 6)	<b>Data handling</b> Big data 2 (from year 6)	<b>Programming</b> Intro to Python (from year 6)	<b>Online safety</b> Online safety Y6 (6 lessons)
Cycle B	<b>Programming</b> Micro:bit (from year 5)	<b>Data handling</b> Mars Rover 1 (from year 5)	<b>Skills Showcase</b> Mars Rover 2 (from year 5)	<b>Computing systems            and networks</b> Bletchley Park Option 1: Google Option 2: Microsoft Office 365 (from year 6)	<b>Creating media</b> History of computers Option 1: Google Option 2: Microsoft Office 365 (from year 6)	<b>Skills Showcase</b> Inventing a product Option 1: Google Option 2: Microsoft Office 365 (from year 6)	<b>Online safety</b> Online safety Y5