



Heartwood Computing Curriculum 2026

'Live Life in All its Fullness' John 10:10







 <p>Learn! Do your best - make the most of your own education! Recognise how computing skills are transferrable and can support our learning.</p>	 <p>Empower You can be anything you want to be, regardless of your gender. Encourage others to follow their dreams and skills.</p>	 <p>Choose Recognise the creative opportunities within the computing industry and the infrastructure needed to power our use.</p>	 <p>Oppose If you see someone or something online that you think is not safe, know what you can do - how to report and who to speak to. Know how computing skills can overcome equality around the world.</p>	 <p>Reuse Consider how we can be responsible in our own use, and how industries can use technology to be responsible global citizens</p>	 <p>Do Stand up for what is right - if you see something online that's not right or unfair, speak up about it. Know how our computing skills can help us make a difference.</p>	 <p>Unite Work with others in a team wherever you can, you can share resources, ideas, and projects.</p>
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How the Computing Curriculum is linked to our Sustainable Development Goals.



Disciplinary Reading within the Computing Curriculum

At Heartwood, we practise disciplinary reading in computing by...









 <p>Close reading</p>	 <p>Questioning</p>	 <p>Making connections</p>	 <p>Visualising</p>	 <p>Predicting</p>	 <p>Independent reading</p>
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...when we...

















Undertake extensive, slow reading and re-reading to analyse details
Interpret flowcharts

















Add, retrieve and use topic specific terminology, acronyms and their definitions (Vocabulary box)

Retrieve key information and sequence information.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	Whole School half termly Online Safety LTP 2025 / 2026: Brief Outline we use the PSHE Association Online Safety plans (with pol-ed for some additional lessons to further develop subject)					
All	Online Safety: Managing online information	as part of Life Skills curriculum:	Privacy and Security	as part of Life Skills curriculum:	Copyright and Ownership	as part of Life Skills curriculum:
		Online Bullying		Self-image and identity		Health wellbeing and lifestyle
				Online relationships		Online Reputation
	Heartwood LTP Computing blocks 2025 / 2026 using Kapow scheme (condensed) *Units may not be taught in the order presented below					
R	Computing Systems and Networks Using a computer All 5 lessons	Programming All about instructions All 5 lessons	Computing Systems and Networks Exploring hardware Lesson 1-4	Online Safety Focus (see below)	Data Handling Introduction to Data	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE curriculum, see below)
R	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  

Y 1	Computing Systems and Networks Improving Mouse skills Lesson 1-3	Programming Commands unplugged Lessons 1,2,3 and 5 only	Creating Media Digital imagery Lessons 1-3	Online Safety Focus see below	Programming Beebots: 4 lessons Lessons 2-5, or Digital Beebots 1,2,4 and 5	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE curriculum) see below
Y1	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  
Y 2	Computing Systems and Networks What is a computer Lessons 1,2 and 5	Programming Algorithms and debugging Lessons, 1,2,4,5	Data Handling International Space Station Lessons 1,3 and 5	Online Safety Focus see below	Programming Introduction to Coding. ScratchJr Lessons 1,2,4 and 5	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE curriculum) see below
Y2	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  
Y3	Computing Systems and Networks Networks	Computing systems and networks	Creating Media Video trailers (with ipads)	Online Safety Focus see below	Programming Scratch Lessons 1,3,4 and 5 (new)	Online Safety Focus (ensure all topics covered over the

	Lessons 1, 3 and 5	Journey inside a computer Lessons 1,2, and 5	Lessons 1 - 4			year in addition to 2 within PSHE curriculum) see below
Y3	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  
Y4	Programming Further coding with Scratch Lessons 1,3,4	Computing Systems and Networks Collaborative Learning Lessons 1,3,4 and 5	Data Handling Investigating Weather Lessons 1,3 and 4	Online Safety Focus see below	Programming Computational thinking lessons 1-4	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE curriculum) see below
Y4	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  
Y5	Computing Systems and Networks Search Engines Lessons 1-4	Data Handling Mars Rover, Lessons 1,2,4	Creating Media Stop motion animation Lessons 1-4	Online Safety Focus, see below	Programming Music 4 lessons Option 1: 2-5 Option 2: 1-4	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE

						curriculum) see below
Y5	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  
Y6	Computing Systems and Networks Bletchley Park and the history of computers Lessons 1-3	Data Handling Big Data 1, Lessons 1,3,4,5	Computing systems and Networks Exploring AI Lessons 1,2 and 5	Online Safety Focus, see below	Programming Introduction to Python Lessons 1 to 4	Online Safety Focus (ensure all topics covered over the year in addition to 2 within PSHE curriculum, see below)
Y6	Online Safety: Managing online information 	Online Safety: Online Bullying 	Online Safety: Privacy and Security 	Online Safety: Self-image and identity Online relationships  	Online Safety: Copyright and Ownership 	Online Safety: Health wellbeing and lifestyle Online Reputation  

Intent

Computing:

With our Computing curriculum we aim to develop curious and explorative thinkers with a wide, and informed, knowledge of the digital world. Learners at Heartwood develop a range of skills and gain understanding to thrive within this ever-changing world.

Our curriculum focuses on a progression of skills in digital literacy, computer science and information technology. These strands are interwoven throughout a child's time at Heartwood, supporting the development of substantive knowledge (e.g understanding networks, algorithms and data) and disciplinary knowledge (e.g. applying skills to program, creating digital content and evaluating online information responsibly).

Online safety:

We aim to equip Heartwood pupils with the knowledge they need to make the best use of the internet and technology in safe, considered and respectful ways. Our online safety curriculum is split into eight strands: Managing online information, Online bullying, Privacy and security, Self-image and identity, Online relationships, Copyright and Ownership, Online reputation and Health, wellbeing and lifestyle.

Implementation

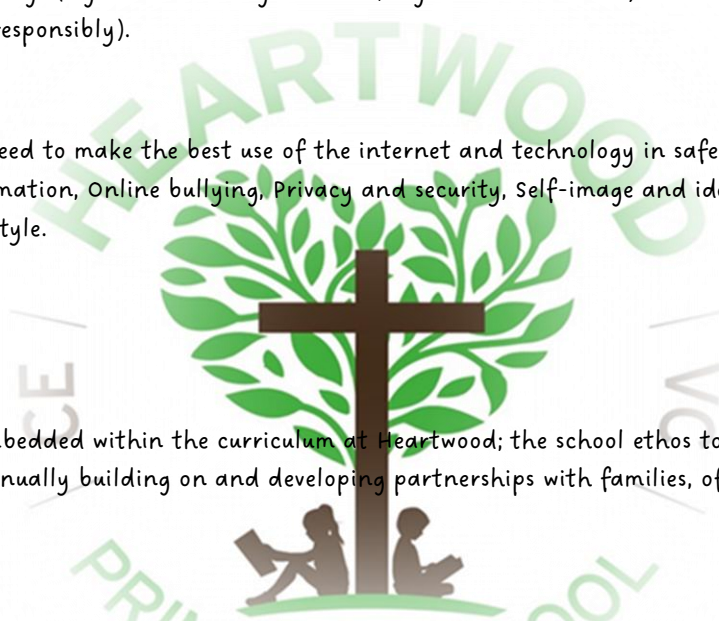
Our school vision, 'Live Life in All its Fullness' John 10:10, is embedded within the curriculum at Heartwood; the school ethos to make that difference for our pupils ensures they have every opportunity to flourish. Our school community is continually building on and developing partnerships with families, offering advice and knowledge of the computing and online safety curriculum and topical issues that arise.

Computing

We teach using a condensed scheme of work (from Kapow Primary) which offers a spiral curriculum where key concepts are revisited (and progressively developed in depth) throughout a child's education at Heartwood. The scheme is split into key areas, reflecting how technology is experienced and used in the real world. This ensures that both declarative knowledge (knowing what) and procedural knowledge (knowing how) are developed in parallel. By revisiting key concepts, the curriculum meets pupils at their current level and supports all learners.

The skills pupils use and develop within the computing curriculum are:

- to become digitally literate citizens: developing skills to navigate, evaluate and use technology safely, responsibly and effectively.
- to use oracy to explain using subject-specific vocabulary, problem-solve collaboratively, justify decisions and reflect.
- to develop transferable skills and knowledge that they can apply in different contexts, for example linking the Sustainable Development Goals with the use of digital technology and the computing industry:



- to develop critical thinking skills to question assumptions, make informed decisions and form reasoned conclusions about how technology is used and its impact on the world.

Pupils at Heartwood have the opportunity to: use a range of good-quality resources; take part in cross-curricular opportunities to apply their knowledge and skills; experience enrichment days to engage outside the classroom and create lasting memories to embed and hook learning.

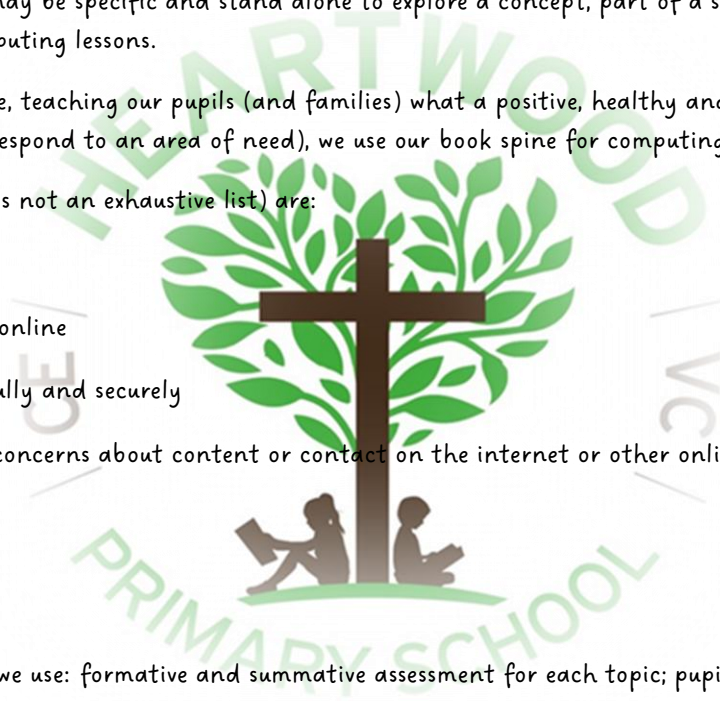
Online Safety

Our online safety curriculum is mapped within a long-term plan between two subjects, Computing and Life Skills (RSHE). We use the National College scheme to cover the eight strands of the online safety curriculum, lessons may be specific and stand alone to explore a concept, part of a school-wide theme (possibly covering something topical or necessary for a class / key stage) or linked to ongoing computing lessons.

Our nurturing culture at Heartwood means we are proactive, teaching our pupils (and families) what a positive, healthy and respectful online relationship looks like. In addition to the National College scheme and proactive lessons (which respond to an area of need), we use our book spine for computing and online safety to embed themes and revisit topics.

Examples of areas covered within the curriculum (and this is not an exhaustive list) are:

- the effects of their online actions on others
- how to recognise and display respectful behaviour online
- how to use technology safely, responsibly, respectfully and securely
- where to go for help and support when they have concerns about content or contact on the internet or other online technologies



Impact

Computing

To ensure we meet our intent for every pupil at Heartwood we use: formative and summative assessment for each topic; pupil voice, (oracy and collaboration are important skills developed within the curriculum); and written evidence (where appropriate). Progression is monitored across the school with discussions with all stakeholders and summative assessment tracked. We are flexible (in the knowledge that this subject is ever-changing) and the curriculum is adapted to meet the needs of our cohort, address any gaps that may have arisen or to cover new concepts.

Online Safety

We use a range of assessment to explore the impact of our online safety curriculum, examples include social story scenarios, formative assessment, debates and enabling pupils to lead and reflect within discussions.

At Heartwood, we are open and available to pupils and recognise that for some, the digital world is an important part of their life. Where issues arise, we are sensitive, respectful and give time to consider the implications with the relevant cohort.