Heptonstall School

Computing Policy

Written: September 2025

Review Date: July 2026

Introduction

This document is a statement of the aims, principles and strategies for the teaching, learning and assessment of Computing at Heptonstall J and I School.

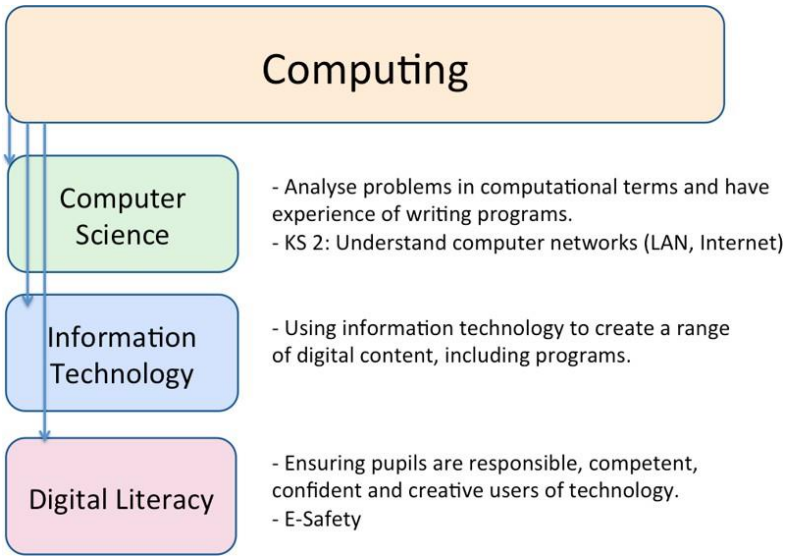
Intent

Each pupil at Heptonstall has the right to a wealth of rich, deep learning experiences within the subject area of computing. As technology plays such a significant role in society today, we believe 'Computational Thinking' is a skill that children must be taught if they are to be able to participate safely and effectively in this digital world. The core of computing is Computer Science alongside basic skills. Pupils are introduced to a wide range of technology, including desktop computers, iPads, coding toys and interactive whiteboards, allowing them to continually practise and improve the skills they learn. This ensures they become digitally literate so that they are able to express themselves and develop their ideas through information and computer technology at a level suitable for their next step into high school and the future workplace as active participants in a digital world.

We teach a curriculum that enables children to become confident users of technology who can:

- Understand and apply the fundamental principles and concepts of Computer Science, including logic, algorithms and data representation
- Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Evaluate and apply information technology analytically to solve problems
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.
- Have the basic skills needed to be computer literate in an ever developing digital world

The Computing national curriculum is made up of 3 main components and is broken down into three elements- Computer Science, Information Technology and Digital Literacy.



Children access these components by using various skills, which are outlined in the progression document. Children also need to be computational thinkers to be successful computer scientists- the skills needed to be a computational thinker are outlined below.

Our Aims

Through our teaching of computing we aim to enables the children to become confident users of technology who can:

- Understand and apply the fundamental principles and concepts of Computer Science, including logic, algorithms and data representation
- Analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- Evaluate and apply information technology analytically to solve problems
- Communicate ideas well by utilising appliances and devices throughout all areas of the curriculum.
- Have the basic skills needed to be computer literate in an ever-developing digital world

Implementation:

Planning

We use and follow the Purple Mash scheme for computing which is also supplemented with their '2BeSafe - Being safe in a digital world' scheme which covers all aspects of E-safety. The scheme has been adapted to ensure all children receive a broad and balanced computing curriculum through a 2 year rolling program.
All children have their own log ins and completed work is saved in the children's individual files on Purple Mash.

Computing Curriculum - Whole school LTP

		Computer science	Information technology	Digital literacy
Year 1 & 2 (taught in individual year groups)	Cycle A Yr 2 online safety	Introduction to Purple Mash 1 3 weeks; Creative computing 1 4 weeks; Data explorers 1 6 weeks; Creating & following instructions 1 3 weeks; Animated stories 1 6 weeks; Coding 1 6 weeks; Technology around us 1 4 weeks; Making beats 1 4 weeks		
	Cycle B Yr 1 online safety	Introduction to Purple Mash 2 2 weeks; Route Explorers 2 4 weeks; The Internet 2 4 weeks; Creating Pictures 2 5 weeks; Spreadsheets 2 6 weeks; Questioning 2 4 weeks; Coding 6 6 weeks; Presenting Ideas 2 4 weeks; Making Music 2 3 weeks		
	Online safety	Delivered throughout the year using 2BeSafe – being safe in a digital world		
Year 3 & 4 (mixed age)	Cycle A Yr 4 online safety	Email 3 6 weeks; Unpacking hardware & software 4 4 weeks; Route planners 3 5 weeks; Sound stories 4 4 weeks; Coding 3 6 weeks; Presentations 3 5 weeks; Coding 4 6 weeks		
	Cycle B Yr 3 online safety	Animation 4 6 weeks; Logo 4 4 weeks; Branching databases 3 4 weeks; Effective searching 4 4 weeks; Spreadsheets 3 6 weeks; Composing beats 4 4 weeks; Touch typing 3 4 weeks; Introduction to AI 4 4 weeks		
	Online safety	Delivered throughout the year using 2BeSafe – being safe in a digital world		
Year 5 & 6 (mixed age)	Cycle A Yr 6 online safety	Quizzing 5 5 weeks; Game creator 5 5 weeks; Graphing 6 Week 4; Coding 5 6 weeks; 3D modelling 6 4 weeks; Coding 6 6 weeks; Word processing 5 6 weeks		
	Cycle B Yr 5 online safety	Networks 6 4 weeks; Databases 5 4 weeks; Blogging 6 4 weeks; Micro:bit 5 & 6 4 weeks; Spreadsheets 5 6 weeks; Introduction to python 6 4 weeks; Spreadsheets 6 6 weeks; Data detectives 6 4 weeks		
	Online safety	Delivered throughout the year using 2BeSafe – being safe in a digital world		

Teaching and learning

Computing is taught mainly as a standalone subject however links are made with other curriculum areas where possible.

Children's work is evidenced and saved in one of 2 places-

- Purple Mash- children have their own accounts and their work on Purple Mash is saved in there
- In their own file in their year group file on the school server

Resources

All computing resources are stored centrally in the ICT suite.

Computing curriculum planning

To support our computing teaching in school, we use 'knowledge organisers to help children understand key facts about their computing topic. These are shared with children at the beginning of the unit, post on dojo for parents and displayed in the ICT suite

Inclusion

Each child will be given the same opportunities regardless of ethnic group, age, gender, ability, social circumstances or SEND in the development of their computing education. Lessons are differentiated to extend children who are working at a greater depth or higher ability in computing. There is also a coding club, which will be aimed at children in KS2 who are high attaining in programming. Teachers are able to look at Crash Courses on Purple Mash to give to children who have missed previous teaching in particular units or need extra support. Lessons are adaptable and can be changed to suit the ability of the children in the classes. Lessons can be differentiated by outcome, support or with crash courses. The progression document can also be used to help differentiate- lessons can be adapted to teach the skills relevant to the specific children that require differentiation.

Assessment for learning

Children demonstrate their ability in computing in a variety of different ways and teachers assess accordingly. Teachers will assess children's work by making informal judgements during lessons to move forward each individual child's learning. On completion of a piece of work, the teacher assesses the saved work on purple mash and uses this to inform future planning. Written or verbal feedback is given to the child to help guide their progress. All children are encouraged to make judgements about how they can improve their own work. Once the children complete a whole unit of work, the teacher makes a summary judgement of work for each child in relation to the National curriculum objectives.

The progression document in computing is used as a tool for teaching and assessment. The progression document ensures that teachers are able to understand what has been previously been taught, what they need to teach in their year group and what will be taught next. It is also a tool for identifying any gaps in pupils' learning and allows teachers to plan for this effectively.

Monitoring and reviewing

The subject leader is responsible for monitoring the standard of the children's work and quality of teaching in computing, developing the assessment and ensuring progression and continuity within the subject. This is carried out through a combination of deep dives with SLT, monitoring of online folders and folders on the drive, learning walks, lesson visits and speaking to children and teachers.
Additionally, the subject leader will support colleagues in their teaching, inform staff of any current developments in the subject and provide lead and direction for computing across school. The subject leader updates resources which are needed to deliver the computing curriculum, within budget restraints. There will be at least one deep dive per year in computing, where children's work is looked at in depth and some lessons will be observed.

Impact

Assessment and Feedback

Children are assessed against the bespoke statements from our computing progression document. Assessment is ongoing and is completed after each unit is c