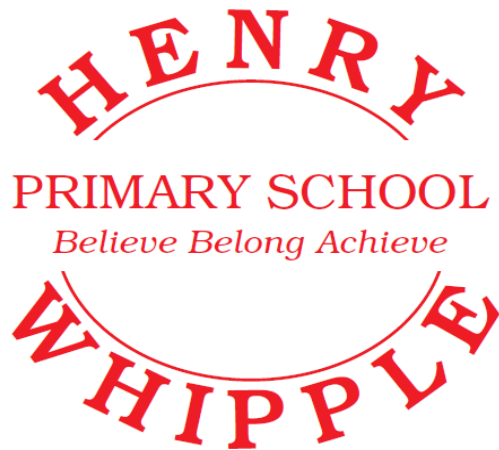
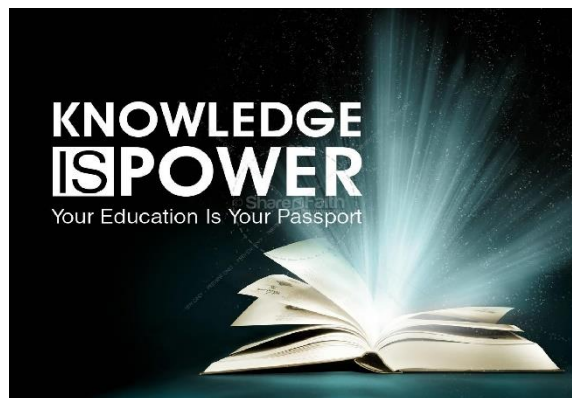


Henry Whipple Primary School



Computing



1	<i>Intent / Implementation / Impact</i> <i>Subject area statement</i>
2	<i>Curriculum on a page overview</i>

Intent / Implementation / Impact

Subject area statement

INTENT: (vision)

At Henry Whipple...

- ❖ Our mission is to offer a modern, ambitious and relevant computing education which prepares our children to be 'thinkers of the future' who can use computational thinking and creativity to understand and change our world. Our curriculum has computer science at its core, teaching the principles of information and computing, digital systems and how this can then be applied through programming. We want children to be digitally literate and have the knowledge and skills to confidently and creatively express themselves, develop ideas, show resilience and critical thinking to solve problems as active participants in the rapidly changing digital world. We intend that our curriculum prepares pupils to live in an increasingly digital society, build their cultural capital to have the ability to apply their knowledge throughout their future lives and careers.
- ❖ Our curriculum is enriched by exploring the deep links computing has with science, design technology, engineering and mathematics (STEM). This provides insights into both natural and artificial systems.

In order to achieve this, we aim for our children to:

- ❖ Understand and apply principles of computer science including abstraction, logic, algorithms and data representation
- ❖ Analyse in computational terms with repeated practical experiences
- ❖ Be responsible, competent, confident creative users of information technology
- ❖ Be engaged in teaching and learning that is based on a cognitive science pedagogy, including adaptive teaching strategies, which ensures our curriculum is accessible to all and effectively supports the wide ranging needs of our children.
- ❖ Possess the knowledge required for their next year group/key stage to be successful in their future learning

IMPLEMENTATION: (how)

- ❖ We have chosen the DFE funded Teach Computing scheme as it is based on current pedagogical research and created by subject specialists. The scheme is built around an innovative progression framework where computing content has been organised into interconnected networks.

Our curriculum vision is translated into practice by...

Utilising the Teach Computing curriculum to:

- ❖ Ensure all aspects of the National Curriculum are covered comprehensively through a spiral curriculum
- ❖ Ensure learning is centred on the knowledge, skills and vocabulary of computer science which is revisited throughout and across year groups
- ❖ Consolidate children's knowledge and build on prior learning
- ❖ Teach and give opportunities for children to retrieve and recall their prior knowledge and explicitly recognise and make connections between their learning, helping children to know more and remember more

Teaching the curriculum in 4 main taxonomy strands:

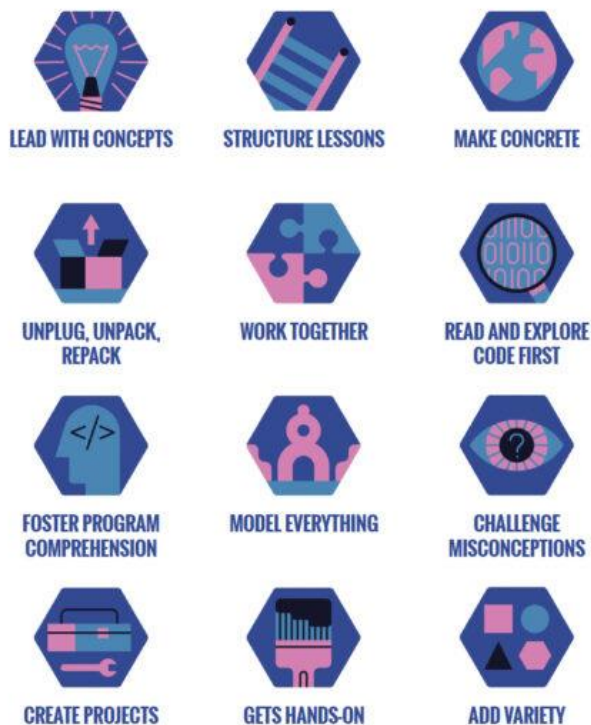
Computing systems and networks	Creating media	Programming	Data and information
E-Safety			

- ❖ Our children beginning their exploration of computing during the Early Years for example using Beebots, remote controls and exploring technology in continuous provision in readiness for Key Stage 1.
- ❖ Providing up to date technologies such as 100 iPads, Beebots and Microbits to support the Teach Computing curriculum
- ❖ An assembly program and explicit teaching in our PSHE curriculum which builds on Teach Computing's E-Safety and digital safety classroom teaching.
- ❖ Providing opportunities for children to participate in national events such as Safer Internet Day
- ❖ Involving our community through Learning Together and utilising parents STEM based careers to contextualise all children's learning and build aspirations for their future
- ❖ Broadening cultural capital and social equity for our pupils through enrichment opportunities with Nottingham University and Ignite! so that pupils' experience a breadth of opportunities which also involve explicit links to STEM learning
- ❖ Providing high quality and personalised CPD including from a computing specialist for staff to ensure they can be confident and knowledgeable in a range of strategies to deliver effective computing lessons.
- ❖ Pupil STEM leaders promoting their peers' interest and curiosity in STEM and the links to computing and digital technologies

- ❖ Opportunities for after school learning
- ❖ Utilising the National Centre for Computing's 12 key principles which contribute to effective computing teaching and builds on elements our whole school metacognitive approach to teaching and learning. These are embedded in Teach Computing lesson planning.

HOW WE TEACH COMPUTING

Much of the work of the Raspberry Pi Foundation is underpinned by our twelve principles of computing pedagogy



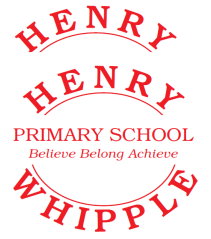
IMPACT

We know our curriculum works for our pupils through...

- ❖ Tracking of progress against core year group expectations using Teach Computing assessment rubrics with the expectation that all pupils achieve expected standards in computing
- ❖ Collecting samples of children's work which is displayed in floor books
- ❖ The deployment of STEM leaders
- ❖ The use of pupil voice which demonstrates that children are confident, enthused and excited about their computing learning and can talk about how it might help them in the future
- ❖ Learning together feedback which demonstrates that parents find information gained useful in helping them understand their child's learning

2

Curriculum on a page overview



Teach Computing Curriculum

Primary Journey

KS2
Teacher guide

