# Computing

At Lathom Junior School, we intend to provide all of our children with a high-quality education in computing and aim to equip pupils to use computational thinking and creativity that will enable to access the ever changing and expanding digital world.

Not only do we want them to be computer literate and confident users of technology but through our computer science lesson we want them to develop creativity, resilience and problem-solving and critical thinking skills, whilst keeping safety at the forefront of their minds.

Our scheme of work for Computing is adapted from the 'Teach Computing' Curriculum and covers all aspects of the National Curriculum. This scheme was chosen as it has been created by subject experts and based on the latest pedagogical research. It provides an innovative progression framework where computing content (concepts, knowledge, skills and objectives) has been organised into interconnected networks called learning graphs.

The curriculum aims to equip young people with the knowledge, skills and understanding they need to thrive in the digital world of today and the future. The curriculum can be broken down into 3 strands: computer science, information technology and digital literacy, with the aims of the curriculum reflecting this distinction.

The national curriculum for computing aims to ensure all pupils:
- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation (Computer science)
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems (Computer science)
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems (Information technology)
- are responsible, competent, confident and creative users of information and communication technology. (Digital literacy)
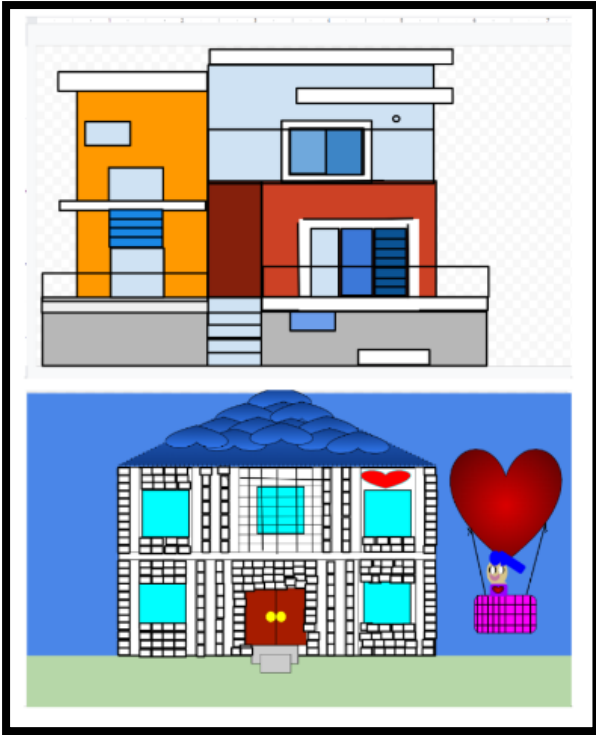
Creating complex media using vector drawing.
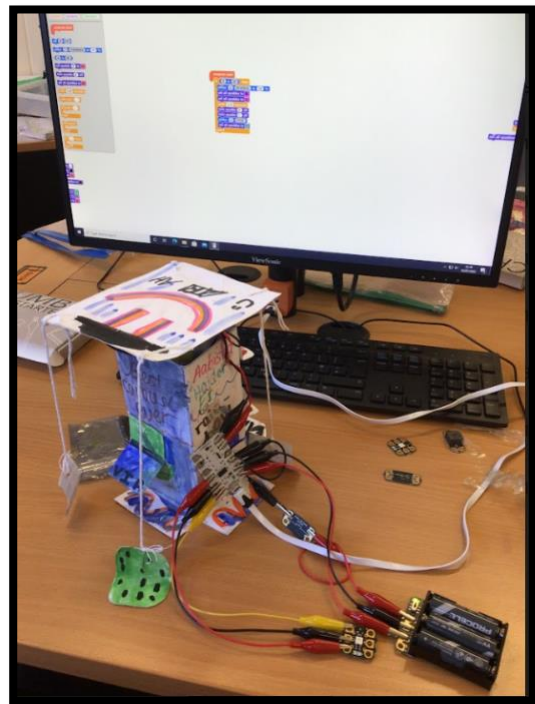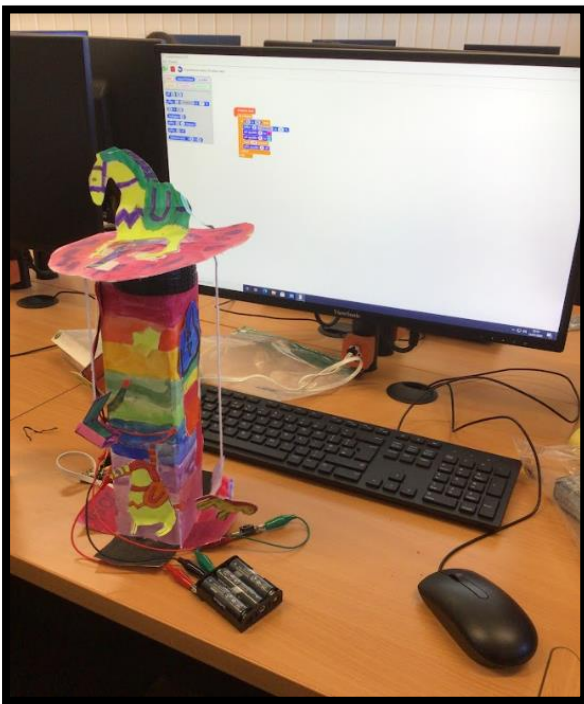


Exploring the concept of selection in programming through the use of the Crumble programming.
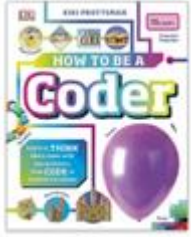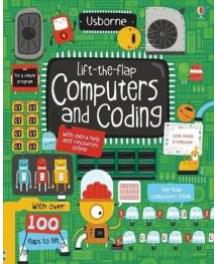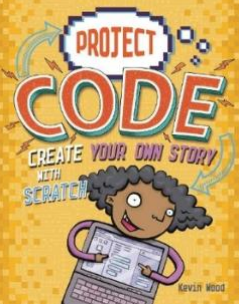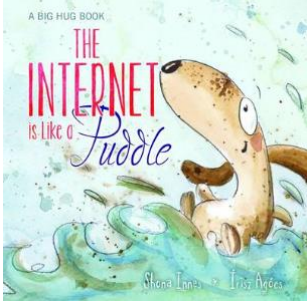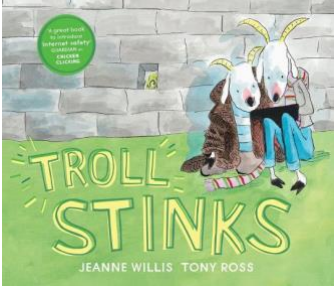
**Enrichment opportunities**

Lathom Junior is part of the Code Club UK. At the Computing club, children are taught how to code and given opportunities to explore to create games, animations, and web pages using Scratch, Python, or HTML/CSS.
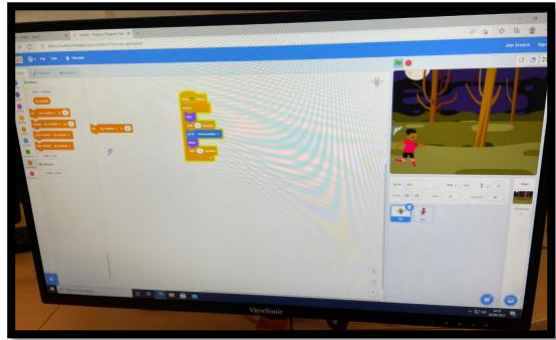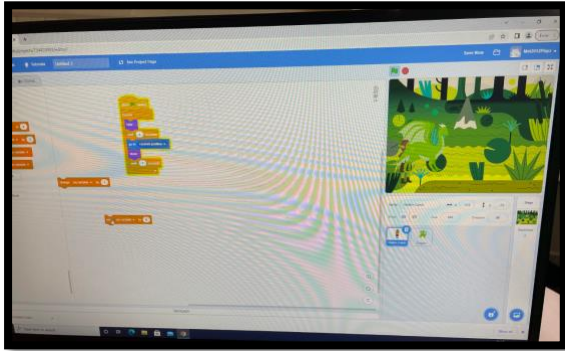


**Resources**

Every class has daily access to its own Chromebooks, iPad's, webcam, desktop computer and interactive whiteboard. Classroom also have a range of technology available to develop speaking and listening skills these include talk buttons, recordable postcards, Easi- microphones, chatterbox, movie marker.

Useful Books



How to be a coder



Computers and coding



Why are there different computer languages?



Project Code – Create your own story



The Internet is like a Puddle



Troll Stinks – Internet Safety

**Useful links:**

https://scratch.mit.edu/

https://codeweek.eu/

https://hourofcode.com/uk/learn

https://beinternetawesome.withgoogle.com/en_uk/interland