## **Computing**

## Empowering pupils to find creative solutions using computational thinking skills!

At NET, our Computing curriculum aims to ensure that all pupils:

- Explore the concepts of computational thinking to gain an understanding that these problem-solving skills can be used in computing, across the curriculum, and throughout their lives.
- •Understand what algorithms are and how they can be implemented as programs on digital devices.
- •Use computational thinking skills to design, write and debug programs that accomplish specific goals.
- •Develop knowledge in Digital literacy to use technology safely, respectfully and responsibly (linked with RSE)
- •Develop the ability to become digital creators, learning about the design and development of digital media in different forms.
- Develop an understanding and curiosity about digital technology around them.

The curriculum follows the Teach Computing scheme of work, with Online Safety further embedded within the RSE curriculum. The units for key stages 1 and 2 are based on a spiral curriculum. This means that each of the strands are revisited regularly, through a new unit that consolidates and builds on prior learning. Pupils draw conclusions and use computational vocabulary to discuss and present their findings in a range of different ways.

## **Long Term Plan**

Non-rolling	Autumn	Spring	Summer
EYFS	Unplugged sessions. Exploring technology within the environment.		
Year 1	Digital Painting  Creating Media	Moving a Robot  Programming A	Digital Writing Creating Media
Year 2	Technology all around us  Computing Systems and  Networks  IT around us  Computing Systems and  Networks	Digital Photography  Creating Media	An Introduction to Quizzes  Programming B
Year 3	Animation Creating Media	Sequence in Music  Programming A  Events and Actions in Programs  Programming B	Desktop Publishing Creating Media
Year 4	The Internet Computing Systems and Networks	Audio Editing  Creating Media  Data logging  Data and Information	Repetition in Shapes  Programming A  Photo Editing  Creating Media  Selection in Quizzes  Programming B  Repetition in Games
Year 5	Video Production Creating Media	Flat-File Databases  Data and Information	Selection in Physical Computing  Programming A  Selection in Quizzes  Programming B
Year 6	Communication and Collaboration Computing Systems and Networks	Web Page Development  Creating Media	Sensing Movement  Programming B