## Curriculum Rationale COMPUTING



## Intent

- Enable pupils to use computational thinking and creativity to understand and potentially change the world around them.
- Teach how digital systems work and how to put this knowledge to use through programming.
- Equip pupils to use information technology to create a range of content.
- Develop digital literacy skills, enabling pupils to use and express themselves through information and communication technology.
- Grow a deep awareness and understanding of digital wellbeing and online safety, protecting themselves and others from dangers of the online world.
- Instill a sense of responsibility and duty to value and take care of their personal devices.
- Teach the importance of technology in the future workplace and the role the children will play as active participants in a
  digital world.
- Draw connections between art and other subject areas, particularly maths, science and design & technology.

## <u>Implementation</u>

- A carefully sequenced computing curriculum allows children to build on prior knowledge and skills whilst building for future projects.
- 1:1 iPad provision from Y1 to Y6, with KS2 taking home their iPads from Y3.
- · iPads are viewed as an alternative tool in their learning toolkit; they are used regularly to support teaching and learning.
- Staff use technology confidently and are good role-models for the children.
- Pupil Digital Leaders give peer tutorials and provide a child's perspective on the digital world.
- Different digital learning platforms are used throughout the curriculum; they allow children to personalise and be responsible for their own learning, online behaviours and progress.
- Online safety and digital wellbeing will be taught regularly; children will be taught how to use technology safely, respectfully and responsibly.
- Coding and programming will be taught to develop confidence in designing, writing and debugging programs that accomplish specific goals.
- Technology will be used purposefully to create, organise, store, manipulate and retrieve digital content.
- Children will develop their understanding of the internet and other computer networks, recognising the opportunities they
  offer for communication and collaboration.
- The Knowsley CLC Scheme of Work and visiting experts will support classteachers in teaching the more specialist units of the NC Computing curriculum.

## **Impact**

- Children are enthusiastic and interested in their learning.
- Children are proficient users of iPads from an early age. Skills are developed across both key stages to ensure that our children start KS3 feeling digitally aware and confident in all areas.
- Children are responsible, competent, confident and creative users of information and communication technology.
- Children can analyse problems in computational terms, can think logically and explain their ideas to others.
- Children can evaluate new or unfamiliar technologies and apply analytically to solve problems.
- Termly subject leader review meetings to evaluate teaching, monitor outcomes and plan next steps.