

## Computing

### **Intent:**

We want our pupils to be motivated by and understand real world applications of technology by experiencing hands-on activities that innovate, inspire and bring learning and career opportunities to life. In taking part in these real world technology activities, children will develop their creativity, optimism and collaboration (including a 'systems thinking' mind-set) skills and therefore be equipped to manage learning tasks and be prepared for their own futures.

### **Implementation:**

We achieve this by embedding three core skills and technological knowledge. Digital literacy; Information technology and computer science:

- **Digital literacy (DL)** is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills. Children who are digitally literate know how to find and consume digital content safely. They know how to create, communicate, and share digital content. Students who are building digital literacy skills understand the basics of Internet safety such as creating strong passwords, understanding and using privacy settings, and knowing what to share or not on social media.
- **Information technology (IT)** is the use of any computers, storage, networking and other physical devices, infrastructure and processes to create, process, store, secure and exchange all forms of electronic data. Children develop a deep understanding of the technology available to create and enhance their ideas and learning using a variety of tools.
- **Computer science (CAS)** is the study of both computer hardware and software design. It encompasses both the study of theoretical algorithms and the practical problems involved in implementing them through computer hardware and software. Children learn to give and follow a set of instructions and continue to develop this further by using a range of software (input) to write algorithms for hardware to perform specific tasks (output).

### **Impact:**

Our aim is to ensure all children are prepared for a future that we are yet to know about. We want our children to talk passionately about technology and computing and how it has supported their learning across the curriculum in a safe and stimulating environment.