



# Computing One Page Overview

## Intent:

**Discover:** Children will have the knowledge and understanding to go into their next stage of life appreciating the important role of computing both in our leisure and our working lives.



**Challenge:** Children will develop a love and passion for computing that will last a lifetime.



**Flourish:** Children will ask questions to understand the importance of computing; seek to use computing in their leisure time; and find ways to use computing in their everyday lives.



**Due to computing being an essential part of most jobs, including those not yet invented, we have tailored an information technology curriculum that offers high quality computing teaching plus opportunities to use a range of hardware and software in all curriculum areas to prepare our children for the future.**

- All children will have access to at least one hour (on average) of computing per week.
- Opportunities are provided for children to use a range of software and hardware in other curriculum areas.
- All children are encouraged to use desktop/laptop computers and iPads to research information in other subjects
- All children are encouraged to use computing in their homework, they will also have access to Purple Mash resources at home and Microsoft Teams.
- The curriculum overview is progressive and varied.
- Staff will be supported to develop their pedagogy and feel confident in lesson delivery.
- As a federation, we have chosen the Teach Computing Scheme of Work from Reception to Year 6 supported by Common Sense Education for our Online Safety modules. In addition to this, we use Lego WeDo (KS1 and 2) and Lego Mindstorms (KS2) planning and equipment to support the teaching of Computing. The scheme of work supports our teachers in delivering fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential. We are confident that the scheme of work more than adequately meets the national vision for Computing. It provides immense flexibility, strong cross-curricular links. Furthermore, it gives excellent supporting materials for less confident teachers.

## Implement:

### **Coverage through Computing curriculum:**

- Class teachers delivers an hour computing lesson (on average) at least a week
- All year groups to have access to computer room/laptops and set of i-pads each week.
- Reception to Year 6 will all teach online safety and coding units.
- Minimum of 3 units to be taught (1 per term) from Rec to year 6.
- Curriculum overview carefully constructed to include different areas: being a safe computer user, algorithms and programming, digital literacy, data handling and multi-media.
- Computer lead teacher is available for advice when necessary
- Curriculum planning has teaching tutorials to support class teachers
- Early years learning environments feature ICT scenarios based on experience in the real world, such as in roleplay and opportunities to 'paint' on the interactive board/devices or control remotely operated toys.
- Using Lego WeDo Mindstorms and Scratch children will experience and create algorithms, understanding how they are implemented as programs on digital devices.
- Children having access to a range of devices and internet search engines.
- Children will save their work on the shared area of the school network.

### **Assessment:**

- Ongoing assessment within lessons
- Opportunity to assess pupil progress based on Purple Mash/Twinkl activities.
- Half termly data inputted into the foundation subject assessment matrix (in house assessment system)

### **Monitoring:**

- Regular staff feedback used to establish levels of confidence
- Learning walk/drop-ins scheduled
- Pupil Voice
- Work scrutiny

## Impact:

- Children are aware of the benefits and dangers of the internet
- Children know how to use the internet safely
- Children are confident in using the internet for research
- Children are confident in producing music, films, podcasts and games
- Children understand algorithms and programming
- Children are aware of future jobs in the computing industry and that they have the skills to work in jobs that are not yet invented

### **Teacher CPD/monitoring:**

- Subject leader to provide CPD to increase staff confidence in using Purple Mash.
- Team leaders to attend training opportunities and Online Safety briefings.

### **Community/families:**

- Work created by the children can be shared on websites and other online portals.
- Online safety tips to be shared on school newsletter.

### **Current priorities/Next steps:**

- Liaise with Trust to review range of devices within school.
- Subject leader to raise profile of computing throughout the school.
- To continue to monitor and develop the use of computing within school and the most appropriate software/hardware.