

## Computing Curriculum 2021-2022

### Curriculum Intent

#### What is the intent of the Computing curriculum?

- In line with the National Curriculum Programme of Study for Computing (2014), our aim is to provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world through digital means. This will prepare the children for future digital employment.
- Our curriculum is designed to revisit, remember, build upon and apply previous skills and learn new skills to achieve the objectives set by the National Curriculum (2014).
- The curriculum is designed to promote new skills and challenge the children to have **high aspirations**. The children will apply, remember and build upon those skills in order to progress and develop new knowledge.
- The sequence of planned lessons are built upon skills and knowledge learnt in previous years and these skills progress through the curriculum.
- It is vital that our children are equipped for the real world in a digital medium; therefore, it is our role to develop a broad curriculum that gives them a range of skills to access digital devices efficiently and effectively.
- Teachers ensure that our children are equipped with the **moral values and understanding** of how to keep safe on the internet and how to be a responsible member of society when using online forums. This is in line with current expectations of *Keeping Children Safe in Education*. This is taught as an integral part of the computing curriculum.

## Curriculum Implementation

### How does the curriculum overview allow all children to achieve?

- Our computing curriculum is taught using Purple Mash. Purple Mash has a sequence of detailed lesson plans and assessment tools to support the delivery of the computing curriculum. The lessons cover a range of skills and knowledge so that children are exposed to all areas of the computing curriculum and have a broad understanding. The assessment tools track the children's individual progress.
- The success criteria is clearly linked to the National Curriculum (2014) via the Purple Mash schemes of work.
- Lessons are delivered weekly in the ICT suite but children also have access to iPads and Kindles. We encourage children to embed their skills and knowledge of ICT in other areas of the curriculum. Purple Mash has links to all subject areas and children are encouraged to make purposeful links where possible.
- Tutorial videos are accessible for children to work more independently and progress quickly.
- The Purple Mash programme is accessible from home so children can be independent in their computing development from home as well as in discrete lessons in school.
- Teachers are able to set 'to do' tasks for children to complete as homework, this enables children to enhance their learning.
- Age-appropriate lessons on online safety are implemented across the Key Stages and are interwoven through other areas of the curriculum.
- Teachers have **high aspirations** for our children and lessons are consistently delivered with clear expectations so children are able to achieve to their full their potential.
- Teachers are upskilled with regular tailored CPD sessions.
- Parents have access to regular online safety training delivered by a professional body.
- Our aim is to make our SEND and Disadvantaged children to feel valued and included, and to have high aspirations. Inclusion is embedded in our practice and teachers regularly review and reflect upon their own practice to ensure progress is made. Teaching is adapted and responds to the strengths and needs of all learners.

### How is prior knowledge revisited?

- The sequence of lessons from Foundation Stage through to Year 6 enable interleaving between units; this allows children the opportunities to revisit and embed key knowledge and skills from previous units and apply them to new units. This will ensure that key skills and knowledge are embedded in the children's long term memory.
- The skills and knowledge ladders are used to aid planning, ensuring that all children revisit and revise prior knowledge.

### How is assessment used effectively?

- Assessment spreadsheet on Purple Mash will track progress, skills and knowledge taught through each unit.

- Formative assessment is used throughout the term to track progress on a particular unit of work and identify any gaps of knowledge. This will enable teachers to adapt and meet the needs of each learner.
- Summative assessment will assess the overall effectiveness of the learner.
- Verbal feedback is provided consistently through each unit of work to ensure progress is made.
- End of year reports inform parents of their child's attainment.
- Assessment is used consistently and strategically to evaluate children's progress, knowledge and understanding. It is a valuable tool used by teachers to be able to identify individual strengths and areas for development to inform next steps in planning and teaching. Teacher, peer and self-assessment, oral and written feedback and formative and summative assessments inform next steps, interventions, amendments and provision to ensure children are supported and extended.

#### How is cultural capital developed through the curriculum?

- Children have the skills and knowledge and understand how technologies are being applied in the workplace, and the wider world.
- Children are equipped with **moral values** when working online and understand how to keep their online identity secure and professional in the wider world.

#### Curriculum Impact

##### What does impact look like?

- Children will demonstrate knowledge and understanding from their relevant starting points.
- Children have a range of skills and knowledge that meet the requirements of the National Curriculum (2014).
- Children are confident and competent, and can skilfully use their knowledge to navigate themselves around digital devices to support them in other areas of the curriculum.
- Children are self-aware when using the internet and have the knowledge to conduct themselves in an appropriate manner – resulting in them being a responsible user of the internet and respecting **moral values**.
- Children have an age-appropriate awareness of how to keep safe online.
- Teachers are knowledgeable and skilled to deliver the computing curriculum.
- Our computing curriculum ensures that children become digitally literate. That all children are able to use, express themselves and develop their ideas through, information and communication technology. This will enable them to enter the future workplace as a competent and active participant in a digital world.