

Computing



Learning happily together

Subject Intent

At Lowe's Wong Infant School we want children to develop inquiring minds, ask questions and learn skills which will enable them to be successful, surrounded by technology in modern society.

We aim to model and educate our children on how to use technology positively, responsibly and safely. Children will have the opportunity to explore a variety of different types of technical devices including Chromebooks, iPads, and programmable toys.

The National Curriculum requirements of Computing are taught using Purple Mash. Whilst learning about computing children will learn about three main elements: Information Technology, Computer Science and Digital Technology.

Children become confident and effective users of Information Technology, where they learn to word process and handle data. They have the opportunity to use equipment to take photos and create simple animations and presentations.

Children become confident and effective users of Computer Science by using apps and programmable toys. They understand that an algorithm is a set of precise and accurate instructions that solve a problem. Children recognise the term Debug and have the skills to correct errors in a simple algorithm.

Children become confident and effective users of Digital Literacy by recognising a variety of different sources of technology in school and at home. They will recognise how to use technology safely and respectfully and who to ask for help. Children will be taught how to log onto their Purple Mash account and the importance of privacy and understand why passwords are kept private.

Subject Implementation Plan

Timetabling

At Lowe's Wong Infant School computing is timetabled on each Year group's long-term plans.

In EYFS, Computing opportunities are continually provided during 'Explore and Investigate' activities (child-initiated time). Purple Mash units and activities are provided on the classroom computers.

In KS1, Computing lessons are taught discrete, in one-hour slots throughout the academic year. They follow the Computing Scheme of learning units from Purple Mash, with at least one unit being taught each term.

Home learning

On a half termly basis a class '2Do' activity should be set for the children in KS1 to complete at home.

On a half termly basis a class 'Topic' should be set for the children in EYFS to complete at home.

How Computing is taught

In EYFS Computing is delivered through planned, purposeful play and through a mix of adult-led and child-initiated activity. Purple Mash is set on 'Mini Mash' for children to explore the foundation curriculum, linked to the Early Learning Goals.

In KS1, Computing is delivered through the Computing Schemes of Learning units each term, which aligns with the National Curriculum. Computing will follow three different

strands.

-Computer Science (including Online Safety)

-Information Technology

-Digital Literacy

In both the Computing progression document and the Purple Mash unit plans key skills and knowledge are clearly set out, enabling teachers to understand the precise requirements of each strand within their year group. The units from Purple Mash also highlight the vocabulary needing to be taught for each unit, very clearly, in order to fully immerse children in the subject.

Teaching different units to different year groups ensures progression and allows knowledge and skills to be built on prior learning.

Classes within year groups follow parallel activities and study to ensure equal opportunities and consistency. This can be flexible if a teacher feels a lesson objective has not been met by the majority, another lesson maybe needed to address this.

Although where specific gaps or needs have been identified then some adaptations will be made.

Within PSHE/ RSE lessons there are opportunities for children to recap and recall learning and prior knowledge.

Home learning

On a half termly basis a class '2Do' activity should be set for the children in KS1 to complete at home.

On a half termly basis a class 'Topic' should be set for the children in EYFS to complete at home.

Resources

Children have the opportunity to use a class set of Chromebooks, a small set of iPads and programmable toys.

Resources are based in the technology cupboard located in the Gallery.

Marking, feedback and assessment

Teachers acknowledge work with a tick or an emoji on Purple Mash. Comments may also be used to provide feedback.

All work on paper should be RAG rated. Teachers should mark according to the Feedback and Marking Policy.

In EYFS observations are made informally throughout the year.

In KS1 teachers use their marking, informal observations, and discussions with the children to support with assessments. Specific learning objectives are identified on our medium term plans which will assess the children's understanding in Computing. This information is collated on the Excel Assessment tracker. This data is analysed by the Computing Lead and any patterns or anomalies are discussed with staff.

Recording work

Work completed will usually be on Purple Mash via 2Dos or in the 2Work folders. Work to be saved in children's individual folders.

Any work completed on paper should be stuck in the children's Learning Journey books (in EYFS) or English/ Enquiry theme book (in KS1).

A clear Learning Objective and date (this can be the short date) should be on each piece of work that is recorded in books.

Work can be evidenced using display, photos, and in floor books.

Learning Environment

Purple Mash provides all the resources needed for lessons; including powerpoints, knowledge organisers and any activities are needed for that lesson. These resources may be either online or will need to be printed off.

When Computing is a driver or enhancer subject key vocabulary and knowledge will be shared with parents/carers through our sticky knowledge sheets that are sent home at the start of each half term.

Equality and Diversity

Through the use of a range of equipment and appropriately adapted resources all children have equal access to the Computing Curriculum. The images on Purple Mash used to support Computing teaching depict a diverse representation of children and adults.

Curriculum Enrichment

There are opportunities for Computing to be used across all other curriculum subjects, this is strongly encouraged. Purple Mash offers an extensive range of activities and units for all subjects which create excellent opportunities to supplement the learning happening in other lessons.

SEND

All children have equal access to the Computing Curriculum through quality first teaching. Support is given where required to ensure all children can participate in a broad and varied curriculum as part of an adaptive teaching strategy.

Some examples of this are:

Allow sufficient time for the children to talk through and share their ideas (with an adult when available or through talk-partners)

Discuss and display key vocabulary together with its meaning in the classroom - practise saying it together and refer to it regularly during the lessons.

Use visual aids where appropriate to help learners to identify equipment, materials and products. Introduce each piece of equipment – name it, explain what it does, and model how it can be used or applied.

Take time to model and demonstrate each element of a process to allow learners to develop their understanding through a step-by-step approach. Repetition of the process is required to maximise the capacity to build up conceptual understanding.

Allow for movement breaks for those who have additional sensory needs or struggle with attention to give them time to self-regulate. These learners could be given jobs such as handing out resources.

Use alternative methods to record children's knowledge.

Additional adults may be used to provide scaffolding if appropriate.

Behaviour

All children to demonstrate good sitting during Computing lessons by sitting on their chair and not touching the equipment, until asked, or the carpet if appropriate. All children to demonstrate good looking by looking at the member of staff, rather than their equipment. All children to demonstrate good listening by sitting quietly, not talking to others and listening to the exposition and instructions. During working with the Chromebooks and iPads at tables, teachers will use the visual prompt cards – Talking Turtles, Whispering Whales or Silent Snails to determine the level of noise for the activity. Children will be taught how to use the Chromebooks and iPads sensibly and how to look after the equipment.

Good behaviour will be rewarded in line with the school's behaviour policy.

It is expected that teachers will respond to any misbehaviour promptly during Computing lessons by following the school's agreed behaviour policy of warnings, reflection and time outs.