



# Langton Primary School

## Computing Curriculum



## Intent

At Langton school, we understand the immense value technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school, serving as a foundation for lifelong education.

We aim to provide all of our children with an exciting, rich, relevant and challenging Computing curriculum which will give children:

- The opportunity to become responsible, respectful and competent users of data, information and communication technology.
- Technology solutions for forging better home and school links.
- Enthusiasm for and the capability to use technology throughout their lives.
- An understanding of how information is used, stored, created, retrieved, shared and manipulated.
- The ability to use technology imaginatively, as well as using it to be more efficient and effective learners.
- The skills, strategies and knowledge that will enable them to reap the benefits of the online world, whilst being able to minimise risk to themselves or others.
- More than the government recommended/statutory guidance for the programmes of study for Computing and Online safety.
- Regardless of their ability, social and cultural backgrounds, those with disabilities, EAL speakers and SEN statement the chance to reach their full potential, through the delivery of an inclusive and aspirational curriculum that enables all pupils to access relevant learning through targeted support, resources used, materials and approaches. This may be part of an S.E.N.D provision or for the wider school as part of our practice of assess, plan, do & review.

## Implementation

Our curriculum will be experienced through:

- Fun and engaging lessons which help to raise standards and allow all pupils to achieve to their full potential.
- Planning, based on the Purple Mash scheme of work and resources, which is differentiated by class groupings (two-year groups).
- Strong cross-curricular links with other subjects.

- Relevant up-to-date online safety which is progressive from Early Years to the end of Year 6.
- ICT scenarios based on experience in the real world.
- A range of technological resources, which successfully support the delivery of our curriculum.
- Our long-term plan, which is based on the Purple Mash programme, and enables us over a two-year cycle to cover all National Curriculum objectives.
- Specific language and vocabulary taught and fully exploited.
- Teachers and support staff having a sound subject knowledge of the curriculum.
- Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.

## Impact

Our curriculum will give the pupils:

- An understanding of what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
- The ability to write and test simple programs.
- Ways to organise, store, manipulate and retrieve data in a range of digital formats.
- Methods to communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.
- The knowledge and skills to design and write programs that accomplish specific goals, including controlling or simulating physical systems.
- The ability to use search engines effectively; be discerning in evaluating digital content; respect individuals and property; use technology responsibly, securely and safely.
- The opportunity to select, use and combine a variety of software (including internet services) on a range of digital devices.
- The use of logical reasoning to explain how a simple algorithm works and to detect and correct errors in algorithms and programs.
- An understanding of computer networks including the internet; how they can provide multiple services, such as the worldwide web; and the opportunities they offer for communication and collaboration.