Computing

INTENT

At Leverhulme Primary School we believe that we should prepare our children with a curriculum design that gives the children skills to succeed in later life. In our ever-changing world that we live in, technology is everywhere and will play a pivotal part in children' lives in the future. Therefore, we want educate our pupils on how to use technology safely, responsibly and respectfully. We want to ensure that the children experience a broad and ambitious curriculum and we aim to achieve this by delivering a teaching sequence in a logical and systematic order.

IMPLEMENTATION

We feel that teaching e-safety at the start of every academic year gives children the fundamental knowledge of computer safety before learning relevant typing and coding skills. When children leave Leverhulme Primary School, we want them to be creative, confident and competent users of technology.

Our computing curriculum is designed to enable clear progression in IT skills, online safety knowledge and relevant vocabulary as children progress through school. We want children to be able to build upon their skills and knowledge from when they start their Leverhulme journey, all the way to year 6. Computing lessons are delivered weekly and can last all afternoon if teachers feel this is relevant to what is being taught. There is opportunity for class teachers to book laptops and iPads, in addition to timetabled computing lessons. This is a great opportunity for children to apply their skills learnt in computing lessons. Every child is assigned a numbered device and they will use this numbered device whenever they are using technology, this is in line with the recent implementation of filtering and monitoring documentation.

Each strand of the computing curriculum is taught during different stages of the year. E-safety is taught consistently throughout the year. We feel this is important in this ever-evolving digital world.

For each lesson of the curriculum, there are unplugged resources to ensure that children have the option to learn without the need for a device.

PLANNING

As part of the planning process, teachers must do the following:

- Read the key knowledge organiser (KKO) for the lessons which outlines learning objectives (detailing relevant skills and knowledge) and vocabulary, provided by Purple Mash.
- Staff use the KKO to plan a journey of effective and well-structured lessons.
- Well-planned lessons allow children to learn skills, use these independently and have the confidence to apply in cross curricular activities.
- Staff use their planning for carry out formative and summative assessment.

LESSON STRUCTURE

The children must be clear of the purpose of each lesson. Learning must show clear progression and skills should be recapped and reinforced as the children move through school. The national curriculum for England states that:

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world".

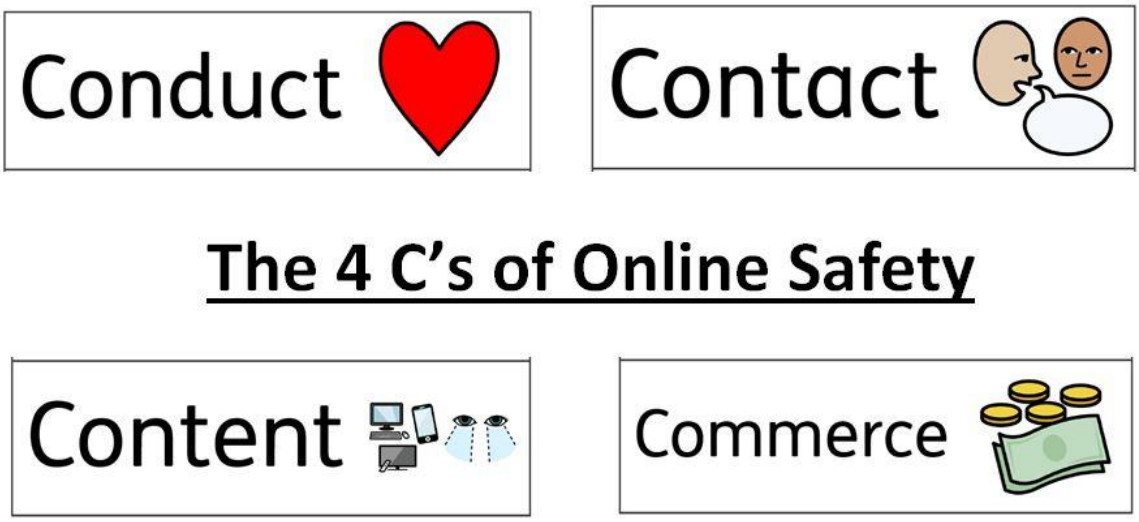
It also suggests that computing lessons should have links with mathematics, science, and design and technology. It emphasizes the importance of learning how systems work and how computer science shapes the world we live in. The second priority is digital literacy and how when taught systematically, pupils can become digitally literate from a young age. In addition to this, pupils need to be aware of the digital world and how to be safe online.

LEARNING ENVIRONMENT

We aim for all classrooms to display key online safety messages. These messages should be consistent across school and year group specific to ensure language and vocabulary is appropriate for the age of the children. Staff can display pictures of the children's work in the classroom and any work that has been completed at home using technology.

The 4 C's

KCSIE groups online safety into four areas: conduct, contact, content and commerce. These are known as the 4 C's of online safety. Throughout the year, all children are taught how to stay safe online, in school and at home. Staff in school use Project Evolve to support the teaching of this, with an underling theme of the 4C's.



Conduct- this is how people behave online. Some online behaviors can increase the likelihood or even cause harm.
Content this is anything posted online, it might be words or it could be images/videos. Children and young people may see illegal, inappropriate or harmful content when online.
Contact- this is about the risk of harm young people may face when interacting with other users when online.
Commerce- this is about the risks from things like online gambling, inappropriate advertising, phishing or financial scams.

RESOURCES

We have a wide range of resources to support the teaching of Computing across the school. The main ones being Purple Mash and Project Evolve. These learning platforms can be used to support the teaching of online safety, typing skills and cross-curricular lessons. In order to keep up with the ever changing world of computer science, a new platform, CS First is being launched in Spring term in 2025.

ASSESSMENT & TRACKING

Assessment is an important tool used in all subjects across the curriculum. Like reading, writing and maths, pre and post assessments are used to find gaps before children start a unit of work and to look at how much they know at the end of the unit. From this, any gaps are identified and these would be plugged through starter activities, during teaching, in additional sessions or when a subject is closely linked somewhere else in the curriculum.

Foundation subjects are assessed through post-assessments throughout the year (see details of how this is specifically done in Art below) and a final teacher assessment/judgement at the end of Summer 2, where the subject is assessed as a whole using information collated throughout the year to make an overall judgement. This is done for every non-core assessment. Children are recorded as 'JA' or 'At' for their year group.

- **JA** – demonstrating that they have been taught the curriculum and have demonstrated some of the features of this year group's expectations, including some, skills, knowledge and vocabulary.
- **At** - demonstrating most (or indeed all) of the features of this year group's expectations for the subject, including, skills, knowledge and vocabulary.

The assessment for non-core is recorded on Sonar, following the steps below.

- Log into Sonar
- Select 'assessments'
- Select 'primary summative'
- Select Year Group and Class
- Change 'core subjects' to 'foundation subjects'
- Select subject and choose JA (Just At) Or At (Securely At)

Furthermore, an analysis form is completed for non-core subjects (see Teaching and Learning Handbook). Staff complete the % of children working at '**JA**' and at '**At**', as well as, notes on strengths and next steps. This information can be related to individuals, groups of pupils or whole class themes. The analysis form is passed up to the next teacher to inform future planning and to build on prior knowledge.

Specifically to Computing, Purple Mash has a built-in assessment tool which allows staff to plan appropriately for children working at various abilities. Staff are able to set different tasks, at appropriate abilities, for different groups of children.

ONLINE SAFETY

As online safety should form a fundamental part of schools' safeguarding and child protection measures, Leverhulme Primary School take on a whole school approach to online safety, whereby all staff, governors and parents are educated and kept up to date with information about how to keep children safe online.
All children are taught how to stay safe online throughout the academic year in the 2beSafe unit of work. Each year we also celebrate Safer Internet Day.

We believe that prioritising online safety in the computing curriculum, will enable children to access the internet in a positive way and develop an understanding of how to keep themselves safe from evolving dangers in the digital world.

E-Safety Champions

As part of our connections with Bolton SICT, a selection of our Year 6 pupils are trained to become Leverhulme E-Safety Champions. Our champions support our students in offering support and guidance in regard to staying safe online, running school competitions and writing regular newsletters allowing pupils, parents/carers and staff to become aware of a specific online safety issues that are current within the wider world.

IMPACT

Much of the sticky knowledge developed in our computing lessons is aimed to equip pupils with appropriate vocabulary that can be used in school and at home. In addition to this, Computing at Leverhulme gives children confidence to access a range of STEM activities in later life.

At Leverhulme, we encourage our children to enjoy and value the curriculum we deliver. We will constantly ask the WHY behind the learning and not just the HOW. Children need to know why they are being taught certain skills and understand when these can be utilised.