



Curriculum Intent

Computing

Principles

At Loughton Manor First School we believe that computing is an essential part of the national curriculum. Computing is an integral part of modern day life and therefore provides a wealth of learning opportunities that have strong links to other subjects.

We deliver a high quality computing education which gives the children the necessary experiences to become digitally literate and use their logical reasoning to solve problems. Computing allows children to explore and engage with a range of programs to express themselves.

Children will have many opportunities to create, organise and store digital content through the use of PurpleMash. Children take pride in the work that they create and also have the opportunities to share their learning with their parents at home.

By the time children leave Loughton Manor First School at the age of seven, they will:

- be confident in using technology and understand how technology can be used safely and respectfully
- understand how to tell an adult if they see something unsafe online
- know what information is appropriate to share online
- know that there are different types of technology at school and beyond
- be able to discuss differences between technologies
- be able to give simple instructions to make something move
- be able to create and debug simple programs
- use logical reasoning to predict the behaviours of programs



Progression in Computing Skills and Understanding

KEY VOCABULARY	Foundation Stage	Year 1	Year 2
	Computers technology forwards backwards turn stop go	As above + Program instructions clockwise anti-clockwise left right	As before + algorithm e-safety email software hardware reply personal information digital footprint
Computer Science	Foundation Stage	Year 1	Year 2
	Complete a simple program Shows a skill in making toys work	Predict the behaviour of simple programs Understand what algorithms are and how they are implemented on digital devices	Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs Understand that programs run by following clear instructions
Computers (Taught alongside Digital Literacy)	Foundation Stage	Year 1	Year 2
	Interacts with age-appropriate computer software Knows how to operate simple equipment Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.	Identify examples of technology in school and explain how technology helps us Can name the main parts of a computer	Identify examples of technology beyond school and explain how technology helps us Sort technology by their uses
Information Technology	Foundation Stage	Year 1	Year 2
	Interacts and shows an interest in technological toys with knobs or pulleys or real objects	Uses technology purposefully to create digital content	Uses technology purposefully to create, organise, store,

	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Able to save information to a program	manipulate and retrieve digital content Use technology purposefully to create digital content comparing the benefits of different programs Capturing a digital photography Able to save and open their own work
Digital Literacy - E-Safety	Foundation Stage	Year 1	Year 2
	Asks an adult to use technology Explain the reasons for rules, know right from wrong and try to behave accordingly.	Knows what personal information is Understands where to go for help if they are concerned about content on the internet	Knows what personal information is and is able to keep it safe Use technology safely and keep personal information private

Implementation

Further details of timetabling and organisation of the Computing Curriculum are to be found in the Computing Subject Policy

Key implementation principles are:

- Weekly Computing lessons for Yr 1 and Yr 2
- FS2 to use the iPads once a week in small teacher focus groups
- Daily opportunities to use smart board in classrooms
- iPads used in other areas of the curriculum
- AirServer used to cast children's work and demonstrate activity

Differentiation and Inclusion.

The teacher, via observation, will make opportunities for children who need additional support to be supported.

Some children with SEND will participate with the support of 1:1 adult, who gauges the appropriateness of the activity and modifies as needed.

Opportunities for children to lead and develop ideas will contribute to the extension for more able children. Teachers' should plan lessons and activities that incorporate scope for elaboration, demonstration, leading, solo work etc for children who demonstrate strength in music.

Assessment

In the Foundation Stage, although 'technology' has been removed from the EYFS curriculum we will still be teaching computing as we think it is vitally important. When assessing Computing, we will link to other areas of the curriculum where appropriate. See more details in the Computing Policy.

In Key Stage One, Computing is mostly via observation by teachers or teaching assistants. In addition, teachers can observe children's work via Purple Mash and this will support teachers' judgement for the end of the year against the KS1 Computing National Curriculum. At the end of each year teachers complete The Outcome Statements document which is passed onto class teachers as well as the Computing subject manager for monitoring and observation purposes. Teachers use this information to ensure planning meets the needs of individuals.



FS2 Assessment – Outcome Statements for Technology

FS2 Class _____ Transfer information for Yr 1 teacher

Number of SEN _____

Number of EAL _____

Number of PP _____

The majority of the class will meet the expected outcomes. See notes below for children emerging or exceeding expectations (Put in brackets if they are SEN/EAL/PP).

I am a Foundation Stage 2 child. I can...

- Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.
- Explain the reasons for rules, know right from wrong and try to behave accordingly.
- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Emerging (names and comments)

Exceeding (names and comments)



KS1 Assessment – Outcome Statements for Computing

Yr 1 Class _____

Transfer information for Yr 2 teacher

Number of SEN _____

Number of EAL _____

Number of PP _____

The majority of the class will meet the expected outcomes. See notes below for children emerging or exceeding expectations (Put in brackets if they are SEN/EAL/PP).

I am a Year 1 child. I can...

Digital Literacy and E-safety (End of year assessment)

- tell you what personal information is
- identify examples of technology in school and explain how technology helps us
- name the main parts of a computer
- tell you where to go for help if I am concerned about content on the internet

Emerging (names and comments)

Exceeding (names and comments)

Computer Science (End of year assessment)

- predict the behaviour of a programmed toy
- explain that an algorithm is a step by step set of instructions

Emerging (names and comments)

Exceeding (names and comments)

Information Technology (through observation)

- use technology purposefully to create digital content
- save information to a program

Emerging (names and comments)

Exceeding (names and comments)



KS1 Assessment – Outcome Statements for Computing

Year 2 Class _____ Transfer information to KS2

Number of SEN _____

Number of EAL _____

Number of PP _____

The majority of the class will meet the expected outcomes. See notes below for children emerging or exceeding expectations (Put in brackets if they are SEN/EAL/PP).

I am a Year 2 child. I can... Digital Literacy and E-safety <ul style="list-style-type: none">● tell you what personal information is and is able to keep it safe● use technology safely and keep personal information private● identify examples of technology beyond school and explain how technology helps us● sort technology by their uses	
Emerging (names and comments)	Exceeding (names and comments)
Computer Science <ul style="list-style-type: none">● create and debug simple programs● use logical reasoning to predict the behaviour of simple programs● understand that programs run by following clear instructions	
Emerging (names and comments)	Exceeding (names and comments)
Information Technology <ul style="list-style-type: none">● use technology purposefully to create, organise, store, manipulate and retrieve digital content● use technology purposefully to create digital content comparing the benefits of different programs● capture a digital photography● save and open my own work	
Emerging (names and comments)	Exceeding (names and comments)