

Fairfield Infant and Nursery School

Computing and E-Safety

Knowledge and Skills

KS1 Curriculum Aims

Pupils should be taught to:

- understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

EYFS Curriculum

Expressive Arts and Design ELG:

Creating with Materials Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;
- Share their creations, explaining the process they have used;
- Make use of props and materials when role playing characters in narratives and stories. **ELG: Being Imaginative and Expressive Children at the expected level of development will:** - Invent, adapt and recount narratives and stories with peers and their teacher;
- Sing a range of well-known nursery rhymes and songs;
- Perform songs, rhymes, poems and stories with others, and – when appropriate – try to move in time with music

EYFS	Year 1	Year 2	End of KS1
<p>Explain the reasons for rules, know right from wrong and try to behave accordingly;</p> <p>Invent, adapt and recount narratives and stories with peers and their teacher;</p> <p>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function;</p>	<p align="center">E-Safety</p> <ul style="list-style-type: none"> - Learn the SMART rules for internet safety - Open a web browser. Choose the correct safe search filter when using a search engine - Recognise which personal information they should keep safe from strangers and who to tell if asked. 	<ul style="list-style-type: none"> - Know that people can use the information they put online; - Use a website safely to search for information and identify keywords that will give appropriate search results; - Recall the SMART rules for internet safety. - Begin to identify possible dangers online; - Identify websites suitable for their age and know when to ask an adult for advice - Identify unkind online behaviour and know what to do if this happens. 	<p>To use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>
<p>Share their creations, explaining the process they have used;</p> <p>Anticipate – where appropriate – key events in stories;</p>	<p align="center">Programming</p> <ul style="list-style-type: none"> - Children know how to physically follow and give each other instructions to move around - Children can use the word debug to correct any mistakes when programming a floor robot. - Children can identify an algorithm to achieve a specific purpose. 	<ul style="list-style-type: none"> - Children can plan and enter a sequence of instructions to achieve an algorithm, with a robot specifying distance and turn and drawing a trail. - - Children can watch a program execute and debug any problems. - Children can explore outcomes when giving instructions in a simple program. 	<p>To understand what algorithms are; and how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.</p> <p>To create and debug simple programs.</p>

	<ul style="list-style-type: none"> - Children can to predict what will happen for a short sequence of instructions in a program. 	<ul style="list-style-type: none"> - Children know how to articulate an algorithm to achieve a purpose. - Children know how to predict what will happen and test results 	<p>To use logical reasoning to predict the behaviour of simple programs.</p>
<u>Multimedia</u>			
	<ul style="list-style-type: none"> - Children can record their own voices and play back to an audience. – Children can use a video or stills camera to record an activity. - Children can create sounds a using ICT tools. - Children can add text and images to a template document using an image and word bank. - Children can use a keyboard to build words and sentences. 	<ul style="list-style-type: none"> - Children can use an increasing variety of tools available in apps and talk about their choices. - Children can explore the effects of sound and music in animation and video. - Children can use keyboard to enter text. - Children can create own documents, adding text and images. 	<p>To use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>
<u>Technology in our lives</u>			
	<ul style="list-style-type: none"> - Children can recognise uses of technology in their homes and in their community. 	<ul style="list-style-type: none"> - Children can understand there are a variety of sources of information and begin to recognise the differences. - Children can understand the different types of content on websites and that some things may not be true or accurate. 	<p>To recognise common uses of information technology beyond school.</p>
<u>Data Handling</u>			
	<ul style="list-style-type: none"> - Children can take photographs, video and record sound to record learning experiences. - Children can look at how data is represented digitally. 	<ul style="list-style-type: none"> Children can take and save photographs, video and record sound to capture learning. - Children can ask questions and consider how they will collect information. - Children can collect data, generate graphs and charts to find answers. - Children can investigate different types of digital data, eg. online encyclopaedias 	<p>To use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p> <p>To recognise common uses of information technology beyond school.</p>