

Computing and Information Technology

Becoming Future Ready

GREEN - The key knowledge and skills to be mastered, which will enable children to progress through this particular subject.

<p>Key Objectives EYFS In the Early Years Foundation Stage, Computing is taught through a variety of explicit lessons and the continuous provision in self-initiated learning.</p>	<p>Key Objectives Year One Children will learn:</p>	<p>Key Objectives Year Two Children will learn:</p>
<p>E-Safety</p> <ul style="list-style-type: none"> • Screen time • correct posture • beginning to understand who to go to for help if feeling uncomfortable • passwords and not sharing them • Adults in EYFS to ensure children are safe from the online environment • Computers - games/websites/programs to be loaded by adults; free choice games on favourites - children taught how to access. • Children taught how to access iPads • Guided Access on iPad ? <p>Taken from the EYFS Statutory Framework (2021)</p> <p>Understanding The World</p> <ul style="list-style-type: none"> • In addition, listening to a broad selection of stories, non-fiction, rhymes and poems will foster their understanding of our culturally, socially, technologically and ecologically diverse world. As well as building important knowledge, this extends their familiarity with words that support understanding across domains. Enriching and widening children's vocabulary will support later reading comprehension. <p>Expressive Arts & Design</p> <ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; 	<p>Computing - Algorithms, Coding and Programming</p> <ul style="list-style-type: none"> • 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 <p>Computing & Information Technology - Using Multimedia</p> <ul style="list-style-type: none"> • Use technology purposefully to create, organise, store, manipulate and retrieve digital content <p>Computing & Information Technology - Technology In Our Lives</p> <ul style="list-style-type: none"> • Recognise common uses of information technology beyond school <p>E-Safety</p> <ul style="list-style-type: none"> • 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. 	



E-Safety

E-safety will be taught in each half term prior to the main focus of teaching. It will be in reference to what they will be learning. This will include:

How the internet is used and how it affects us

Internet safety – advertisements and inappropriate content

Who to speak to if worried about something they have seen on the internet

Safe Screen Time

Posture and physical care when using technology

Continuous Provision throughout infants

Whenever children have access to the internet in schools for continuous provision or free play, iPads will already have apps and programs downloaded specifically by staff. Computers will have programs and already available on screen for children's use – but other games will be available via the staff created favourites list of websites for the children to access only. These will be games children have prior experience with. Children will be taught how to access this favourites list and will be able to access this, and not searching for their own online games – contributing to a safer online environment.

Early Years Foundation Stage

Our vision statement states that our Federation is striving to ensure children are future ready. Therefore, throughout Foundation, opportunities for children to develop their computing and Information Technology skills are created throughout the curriculum to begin their journey towards this. Children are taught and given opportunity to develop skills such as simple programming and coding, iPad and Computer skills such as keyboard work, mouse work, camera and video usage. As part of ongoing dialogue, teachers question children to consider success of their work and to develop children's ability to evaluate what they have done. Skills in Foundation are to be taught explicitly and through continuous provision. Teachers skilfully build upon skills observed and increased the complexity of tasks set.

The new EYFS Statutory Framework (2021) has no specific Technology section as the previous document does – this means Technology and computing curriculum will need to be embedded into other curricular areas.

Key skills to be developed in Foundation:

Basic E-Safety knowledge and skills (E-Safety)

Navigating iPads (Multimedia)

Simple operations of computers (Programming)

Developing mouse work (Multimedia)

Beginning keyboard skills (Multimedia)

Interactions with a wide range of technologies (Beebots, iPads, Talk tins, CD player, torches etc.) (Technology In Our Lives)

Performing simple functions on these technologies (programming and coding) (Programming)

Key Stage One

Both the Federation's vision statement and the purpose of study for computing in the National Curriculum for KS1 state getting children future ready. In Key stage one, good Computing and Information Technology follows a progression of teaching within the termly unit:

1.

E-Safety (based upon Terms main focus strand of teaching)

2.

Discussing Technology in our lives. (based upon Term's main focus strand of teaching)

3.

Use of Multimedia's – or – Programming and Coding skills

4.

Application in writing – Children will word process one piece of written work (cross curricular link with Literacy teaching)

5.

Application in other subject areas, and children's own self-initiated independent learning

Time spent on each stage is dependent

In Key Stage One, Computing and Information Technology is taught as a sequence of lessons, each term. Each Block focusses on either Programming and Algorithms or using multimedia according to the National Curriculum. E-Safety and Technology in Our lives are taught each Term with reference to the main teaching focus.

The key knowledge and skills to be mastered are highlighted in green, which will enable children to progress through this particular subject.

<u>Year 1</u>	<u>1 Term</u>	<u>1 Term</u>	<u>1 Term</u>
E-Safety	<ul style="list-style-type: none"> Create Computing e-safety charter Children taught how to log on to computers and how to access favourite bar websites for continuous provision Children taught how to access iPad App and Internet safety - screen-time/good posture 	<ul style="list-style-type: none"> Describe the people I can trust and share information with. Know that some information can be seen by others. Identify what things count as personal information. (Logging in with a password and these are to keep you safe) 	<ul style="list-style-type: none"> Identify devices that can be used to search the Internet. Identify when inappropriate content is accessed and act appropriately. Identify who to tell when inappropriate content is accessed or feel unsafe online App and Internet safety - adverts/inappropriate content
Technology In Our Lives INTERCHANGEABLE BETWEEN TERMS	<ul style="list-style-type: none"> Know the difference between technology and not Name simple creative technology 	<ul style="list-style-type: none"> Talk about websites and games they have been on. Name ICT games and apps 	<ul style="list-style-type: none"> Use ICT to generate ideas for their work. Capture video.
Multimedia INTERCHANGEABLE BETWEEN TERMS	<ul style="list-style-type: none"> Begin to use programs, apps, iPad cameras and videos, app games, information collecting programs e.g. picollage, Navigate an iPad 	<ul style="list-style-type: none"> Continue to use programs, apps, iPad cameras and videos, app games, information collecting programs e.g. Picollage. Explore a website by clicking on the arrows, menus and hyperlinks. 	
Programming INTERCHANGEABLE BETWEEN TERMS			<ul style="list-style-type: none"> Give a set of simple instructions to follow out a task. Explore what happens when a sequence of instructions is given. Give commands including straight forwards / backwards / turn one at a time. Begin to use simple technological programming apps. Improve/change their sequence of commands.
Application of Skills Cross Curricular within writing lessons and other foundation subjects	Word process short texts: <ul style="list-style-type: none"> Start to use one hand when typing. 	Word process short texts: <ul style="list-style-type: none"> Save, retrieve and print work. return. 	Word process short texts: <ul style="list-style-type: none"> Use spacebar, backspace, and delete, arrow keys,

<u>Year 2</u>	<u>1 Term</u>	<u>1 Term</u>	<u>1 Term</u>
E-Safety	<ul style="list-style-type: none"> Create Computing e-safety charter Recap: Children taught how to log on to computers and how to access favourite bar websites for continuous provision Recap: Children taught how to access iPad App/website safety - screen-time/good posture/in-app purchases 	<ul style="list-style-type: none"> Make decisions about whether or not statements found on the internet are true or not Identify who to tell when inappropriate content is accessed or feel unsafe online Identify when inappropriate content is accessed and act appropriately. 	<ul style="list-style-type: none"> Recognise an email address. (related to safety) Find the @ key on the keyboard. Contribute to a class email. (related to safety) Open and select to reply to an email as a class. (related to safety) - someone I know (a hero?) (Cross Curricular?)
Technology In Our Lives INTERCHANGEABLE BETWEEN TERMS	<ul style="list-style-type: none"> Explain the types of Multimedia technology used outside of the classroom and why/how we use them. Discuss which videos and pictures to keep and which to delete. Simply evaluate apps/programs used 	<ul style="list-style-type: none"> Discuss which videos and pictures to keep and which to delete. Simply evaluate apps/programs used 	<ul style="list-style-type: none"> Explain the types of programmed technology used outside of the classroom and why/how we use them.
Multimedia INTERCHANGEABLE BETWEEN TERMS	<p>Build upon skills from Year 1:</p> <ul style="list-style-type: none"> Continue to use programs, apps, iPad cameras and videos, app games, information collecting programs e.g. picollage, Microsoft publisher, Navigate a computer Explore a website by clicking on the arrows, menus and hyperlinks. Statistic apps and programs for teaching in maths 	<p>Build upon skills from Year 1:</p> <ul style="list-style-type: none"> Continue to use programs, apps, iPad cameras and videos, app games, information collecting programs e.g. picollage, Continue to navigate a computer Explore a website by clicking on the arrows, menus and hyperlinks. Statistic apps and programs for teaching in maths 	
Programming INTERCHANGEABLE BETWEEN TERMS			<p>Build upon Yr 1 Skills:</p> <p>Use a variety of programs to improve and broaden programming skills - focussing on debugging incorrect algorithms or own mistakes.</p>
Application of Skills Cross Curricular within writing lessons and other foundation subjects	<p>Word process short texts to present.</p> <p>Build upon Yr 1 Skills:</p> <ul style="list-style-type: none"> Continue to use spacebar Begin to use caps lock, symbols and punctuation. Start to use two hands when typing. 	<p>Word process short texts to present.</p> <p>Build upon Yr 1 Skills:</p> <ul style="list-style-type: none"> Begin to use caps lock, symbols and punctuation. Start to use two hands when typing. 	<p>Word process short texts to present.</p> <p>Build upon Yr. 1 Skills:</p> <ul style="list-style-type: none"> Begin to use caps lock, symbols and punctuation. Start to use two hands when typing.