



National Curriculum Objectives	COMPUTING
EYFS:	RECEPTION
<p>To recognise that a range of technology is used in places such as home and schools.</p> <p>To select and use technology for particular purposes.</p>	<p>Computer Science</p> <ul style="list-style-type: none"> • To give and follow simple instructions in order (algorithms) • To create a short sequence of instructions (algorithms) • To change instructions to create a different outcome (algorithms) • To make a programmable toy move (programming) • To use simple software and tools to make something planned happen • To make choices on-screen about buttons and icons to select • To create, recreate and continue patterns • To sort a set of objects according to criteria • To construct simple pictograms • To know that pictures on a pictogram represent numerical values <hr/> <p>Information Technology</p> <ul style="list-style-type: none"> • To use a keyboard to make choices • To use the mouse or touch to select icons and items • To move onscreen objects • To talk about the technology used at home and in school • To operate digital equipment • To use technology and digital content to play and learn • To begin to understand that computers can be used to represent real life and imaginary situations • To explore simple computer models and talk about what happens if... <hr/> <p>Digital Literacy</p> <ul style="list-style-type: none"> • To have created shapes and text using digital tools • To use technology to show learning • To talk about different kinds of information such as pictures, words, video and sound • To create simple compositions and record/playback audio • To begin to understand that software and tools can be used to communicate through text, images and sound • To find information using a basic search <hr/> <p>E-Safety</p> <ul style="list-style-type: none"> • To know to ask an adult before going online • To know to tell an adult if they find anything worrying online • To know that they should not talk to anyone they do not know online • To be kind to friends



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	<ul style="list-style-type: none"> To be able to talk about how much time they spend using computers and devices To be careful using computers and devices To share the use of computers and devices 	
KEY STAGE 1:	YEAR 1	YEAR 2
<p>To understand what algorithms are; 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> <p>To use logical reasoning to predict the behaviour of simple programs</p> <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> <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>Computer Science</p> <ul style="list-style-type: none"> To read a set of instructions and predict the correct outcome To produce a set of instructions that others can follow 	<p>Computer Science</p> <ul style="list-style-type: none"> To know that programming applications can be given commands to produce specific effects on screen To produce a sequence of blocks that achieves a simple effect (eg. move a sprite around the screen) To plan and give direct instructions to make things happen (e.g. playing robots)
	<p>Information Technology</p> <ul style="list-style-type: none"> To enter simple sentences using a keyboard To use a mouse to point, click and drag objects around a screen To use the mouse to select icons and items To print work To save work with assistance To talk about how they have used the computer to create things 	<p>Information Technology</p> <ul style="list-style-type: none"> To navigate a document using arrow keys and a mouse To use the backspace button and the delete button to remove text To use tools to create simple presentations that communicate meaning To make choices about applications and tools to use for a particular purpose To locate, edit and save different versions of their work
	<p>Digital Literacy</p> <ul style="list-style-type: none"> To navigate a website using buttons and image links To find answers to simple questions using a website To use drawing and text tools to impart information 	<p>Digital Literacy</p> <ul style="list-style-type: none"> To choose a website based on how useful it is for a specific purpose To demonstrate how they found specific information in a website To be discerning about the information collected from websites To select appropriate applications to help them achieve a specific task To navigate around a website using hyperlinks and the back button To type web addresses into a web browser To create Internet favourites To recognise similarities between storyboards of everyday activities To identify suitable information to present

Autumn Term skills

Spring Term

Summer Term

Continuous Provision

If learning skills overlap, put an asterisk in the colour of the next term.



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	<p>E-Safety</p> <ul style="list-style-type: none"> To understand that various information is personal (Eg. Hobbies) To identify characteristics of trustworthy people To know that personal information should only be given to trusted people 	<p>E-Safety</p> <ul style="list-style-type: none"> To identify some ways they can keep themselves safe when using ICT To use ICT to communicate, identify some of the risks and act to minimise them
National Curriculum Objectives	COMPUTING	
KEY STAGE 2:	YEAR 3	YEAR 4
<p>To design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>To use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>To use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>To understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</p> <p>To use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>To select, use and combine a variety of software (including internet services) on a</p>	<p>Computer Science</p> <ul style="list-style-type: none"> To produce a sequence of instructions that result in planned outcomes. To program a short a sequence of commands that results in a planned effect To program and test a simple program To create algorithms to solve simple problems <hr/> <p>Information Technology</p> <ul style="list-style-type: none"> To combine graphics with text To use appropriate effects and re-size graphics To copy text from an internet page to a document To copy images from an internet page To save, print and retrieve work To use software, computers and devices to make simple presentations and create things <hr/> <p>Digital Literacy</p> <ul style="list-style-type: none"> To enter a URL for a website with support To identify some links within web content and navigate with purpose To begin to use a range of applications on computers and devices independently To talk about how useful particular websites and/or 	<p>Computer Science</p> <ul style="list-style-type: none"> To write an algorithm to produce a given effect using repetition To accurately predict the outcome of a range of algorithms and programs To test, debug and refine algorithms and programs To use sequence and basic selection and repetition in computer programs To explain how a programmed effect has been achieved To talk about improvements that could be made to program <hr/> <p>Information Technology</p> <ul style="list-style-type: none"> To use the more advanced features of applications (Eg. word processing or presentation software) to help them match their work to their audience To send an email. To reply to an email To use the search facility in a database to find the answer to questions To carry out searches involving more than one condition to find answers to a variety of questions sometimes with help <hr/> <p>Digital Literacy</p> <ul style="list-style-type: none"> To understand that a computer network means connected computers To understand that you can use the internet for activities other than web browsing To confidently enter URLs into an address bar of a browser To know that not all information available online is reliable

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<p>range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</p> <p>To use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>applications have been to their work</p>	<p>and needs to be checked</p> <ul style="list-style-type: none"> To Understand that you can use the internet for activities other than web browsing To find information by navigating around a number of websites using hyperlinks and buttons To know that internet search engines give a list of websites based on search terms
	<p>E-Safety</p> <ul style="list-style-type: none"> To understand that a wider range of information is personal (Eg. regular attendance at a specific place) To identify some of the ways to use computers safely To know the need for passwords and that they should be kept safe. To follow e-safety guidelines 	<p>E-Safety</p> <ul style="list-style-type: none"> To cross-check information provided on one website against that provided on another To demonstrate the use of basic safety measures when using technology and working online (Eg. logging out) To use appropriate search criteria to find relevant information and check its usefulness To Know the need to use secure passwords and to keep them private To Use ICT to communicate and collaborate, identify some of the risks and act to minimise them To know that not all information provided on the world wide web is correct and that it needs to be checked
YEAR 5		YEAR 6
	<p>Computer Science</p> <ul style="list-style-type: none"> To explain how a programmed effect has been achieved To write and amend computer programs To use repetition, variables and conditional statements in computer programs To test, debug and refine algorithms and programs To identify some common internet services that use the internet (e.g. online gaming or voice over internet) To know that a computer takes input, processes it and produces output To identify a variety of computing devices and a number of inputs and outputs (e.g. touch, sound) To know that computers store and manipulate data as a series of ones and zeros and that this is called binary 	<p>Computer Science</p> <ul style="list-style-type: none"> To write and amend more complex computer programs to create a variety of outcomes To decompose 'problems' by splitting them into smaller 'problems' and designing solutions for each part To use iteration (repeats and loops), variables and conditional statements (if..then..else) in computer programs To test computer programs and correct most errors



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	<p>Information Technology</p> <ul style="list-style-type: none"> To understand that information in the form of text, sound and pictures can be combined to create digital content and communicate with an audience To recognise the audience when designing and creating digital content To create digital content that incorporates text and image To choose and use the appropriate advanced features of word processing or presentation software to increase their efficiency when matching their work to their audience To carry out multi-conditioned searches in databases to find answers to a variety of questions with assistance To use the sort facility of a database to answer questions To create own questions to be answered by searching a database 	<p>Information Technology</p> <ul style="list-style-type: none"> To plan, design and create digital content that incorporates text, images and sound and communicates with an audience To be able to discuss the rationale behind their designs To develop and refine digital content
	<p>Digital Literacy</p> <ul style="list-style-type: none"> To know that a computer network consists of a number of computers and devices that are connected To suggest a range of activities you can do using the internet, including web browsing To find information by navigating around a number of websites using hyperlinks and buttons To question the credibility of information given on websites To know that internet search engines give a list of websites based on key words To cross-check information provided on one website against that provided on another To use search technology to find things out To suggest a number of activities that you can use the internet for (e.g. online gaming, voice over internet, email etc.) 	<p>Digital Literacy</p> <ul style="list-style-type: none"> To communicate and collaborate using technology and online services To create simple web content using basic HTML To know that internet search engines use algorithms to find web content (e.g. web crawling) To know that search results are organised in order of popularity To use search technology and clear search terms to view web pages and obtain data To use a number of internet services (e.g. voice over internet, email etc.) To create digital content for specific purposes and audiences To use feedback to improve digital content
	<p>E-Safety</p> <ul style="list-style-type: none"> To cross-check information provided on one website against that provided on another To create digital content for specific purposes To demonstrate the use of basic safety measures when using technology and working online (eg. logging out of devices after use) To use appropriate search criteria to find relevant information 	<p>E-Safety</p> <ul style="list-style-type: none"> To use digital tools to communicate and collaborate effectively online To identify some of the risks associated with work and leisure in a digital society and act to minimise them To find information online and check it for accuracy and reliability

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- and check its plausibility and usefulness
- To check information provided on the world wide web for accuracy
- To know that personal information should only be given to trusted sources
- To know that some information on the internet may be misleading or inaccurate and that it needs to be checked
- To use technology and online services to communicate and collaborate, identify some of the risks and act to minimise them