



EYFS DEVELOPMENT MATTERS		
Reception		
<ul style="list-style-type: none"> • Knows how to operate simple equipment, e.g. turns on a CD player and uses remote control. • Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. • Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. • Knows that information can be retrieved from computers. • Completes a simple program on a computer. • Uses ICT hardware to interact with age-appropriate computer software. 		
<u>NATIONAL CURRICULUM PROGRAMME OF STUDY</u>	<u>SPECIFIC KNOWLEDGE AND SKILLS</u>	<u>TOPIC LINK/S</u>
Year groups 1 and 2		
Pupils should be taught to: <ul style="list-style-type: none"> • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by 	<u>Computer Science</u> <ul style="list-style-type: none"> • Introduce algorithms • Begin with following unambiguous instructions moving towards more precise instructions • Identify bugs in algorithms and debug • Be able to predict next steps based on reasoning 	<ul style="list-style-type: none"> • Beebot • Word Document • E-Safety • Research

<p>following precise and unambiguous instructions</p> <ul style="list-style-type: none"> • 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. 	<p><u>Information Technology</u></p> <ul style="list-style-type: none"> • Becoming familiar with the parts of the computer (screen, keyboard, mouse) • Become familiar and start to use word processing packages, including opening and saving work. • Be able to turn on a device, select appropriate software and retrieve saved items • Be able to log on to a device • Begin to use a range of formatting styles 	
	<p><u>Digitally Literate</u></p> <ul style="list-style-type: none"> • Identify technology they have in the home • Understand the importance of E-safety (not sharing private information) 	

Year groups 3 and 4

<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs 	<p><u>Computer Science</u></p> <ul style="list-style-type: none"> • Use program to design, write and debug • Be able to identify how to control/ simulate systems to reach a specific goal • Be able to break down set of instructions to identify bugs and debug appropriately • Begin to learn a wider range of computing language, such as variables, algorithms, debugging, coding etc. • Use variables to input data and use the output to identify bugs. Use logical reasoning to correct errors. • Use variables to sequence, select and repeat in programming. • Understand computer networks (internet) that provide a range of services such as the worldwide web and what they offer for communication and collaboration 	<ul style="list-style-type: none"> • Make a presentation about current topic • Collecting and analysing data (Science/ Maths) • Scratch Jr https://scratch.mit.edu (App Year 3 and 4) • Online quizzes – Kahoot • Beebots • Ipads • Laptops • Fake news (reliability of content)
---	---	---

<ul style="list-style-type: none"> • 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 • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a 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 • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 	<p><u>Information Technology</u></p> <ul style="list-style-type: none"> • Use devices effectively to research a range of information using preselected websites and beginning to search for appropriate content • Understand how to evaluate the reliability of digital content. • Be able to use the internet effectively and safely • Plan and design an presentation using software (Powerpoint / google slides) incorporating multi-media eg images, links, sounds and videos • Begin to become familiar with spreadsheet and data analysing/management software. Collecting data for an experiment / Maths and input into spreadsheet. • Become acquainted with data visualisation- graphs and begin to analyse 	
	<p><u>Digitally Literate</u></p> <ul style="list-style-type: none"> • E-safety • Understand the importance of not sharing your personal information online • Understand how to behave appropriately online – cyber bullying • Understand how to report concerns online and in person. 	

Year groups 5 and 6

Pupils should be taught to:

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- 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
- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting,

Computer Science

- Become confident in using programmes such as Beebots, Code 4 life and Scratch Jr to design, write and debug programmes.
- Use programming software to create sequences, repetition and be able to use variables to affect change.
- Use logical reasoning to explain simple algorithm
- Use logical reasoning to detect and correct errors in their own algorithms and others.
- Understand how search results are selected and ranked
- Understand computer networks such as the internet and how they provide multiple services.

Information Technology

- Use the internet to research using a range of provided websites and be able to find their own appropriate material.
- Understand how to evaluate the reliability of digital content. Looking at a range of sources and understanding the reliability of a site e.g. Wikipedia or a Newspaper
- Be confident in using word processing packages and be able to use a range of fonts and include a range of multi-media including URLs, images and videos.
- Create a newsletter using Microsoft Sway
- Create an information text using Microsoft Sway
- Create a website in a pair using Google Docs
- Create a questionnaire online, collecting and analysing data using a spreadsheet programme.
- Create an online quiz

- Beebot
- Google Sites
- Code 4 life
- https://beinternetawesome.withgoogle.com/en_uk/interland
- https://beinternetawesome.withgoogle.com/en_uk
- **Scratch Jr** <https://scratch.mit.edu>
- **Microsoft Sway**
- **Curriculum links to English**

<p>analysing, evaluating and presenting data and information</p> <ul style="list-style-type: none">• use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	<p><u>Digitally Literate</u></p> <ul style="list-style-type: none">• E-safety• Understand the importance of not sharing your personal information online• Understand how to behave appropriately online – cyber bullying• Understand how to report concerns online and in person.• Knowing the age limits of social media and the danger to using them underage.	
---	---	--

<https://www.computingschool.org.uk/data/uploads/CASPrimaryComputing.pdf>