



Progression in Computing

	<i>EYFS</i>	Children are introduced and able to use appropriate technology.		
	<i>Year 1/2</i>	<i>Year 3/4</i>	<i>Year 5/6</i>	
<i>Computer Science</i>	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 - recognise common uses of information - technology beyond school	Pupils should be taught to: - design write and debug programs that accomplish specific goals,.....solve problems by decomposing them in smaller parts - use sequence, selection and repetition in programs use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs - recognise common uses of information technology beyond school	Pupils should be taught to: - design, write and debug programs that accomplish specific goals; including controlling or simulating physical systems and solving 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	
	<i>Year 1</i> - I can create a series of instructions. - I can plan a journey for a programmable toy.	<i>Year 3</i> - I can design a sequence of instructions, including directional instructions. - I can write programs that accomplish	<i>Year 5</i> - I can combine sequences of instructions and procedures to turn devices on and off. - I can use technology to control an external device. - I can design algorithms that use repetition & 2-way selection.	



Progression in Computing

Year 2

- I can use a range of instructions (e.g. direction, angles, turns).
- I can test and amend a set of instructions.
- I can find errors and amend. (debug)
- I can write a simple program and test it.
- I can predict what the outcome of a simple program will be (logical reasoning).
- I understand that algorithms are used on digital devices.
- I understand that programs require precise instructions.

Year 4

- I can experiment with variables to control models.
- I can give an on-screen robot specific instructions that takes them from A to B.
- I can make an accurate prediction and explain why I believe something will happen (linked to programming).
- I can de-bug a program.

Year 6

- I can design a solution by breaking a problem up.
- I recognise that different solutions can exist for the same problem.
- I can use logical reasoning to detect errors in algorithms.
- I can use selection in programs.
- I can work with variables.
- I can explain how an algorithm works.
- I can explore 'what if' questions by planning different scenarios for controlled devices.



Progression in Computing

Digital Literacy

Pupils should be taught to:		
use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content on the internet or other online technologies	- Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact - use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content	- use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concerns about content and contact - use search technologies effectively, appreciate how results are selected and ranked and be discerning in evaluating digital content
Year 1 - I can use technology safely. - I can keep personal information private. Year 2 - I use technology respectfully. - I know where to go for help if I am concerned. - I know how technology is used in school and outside of school.	Year 3 - I use technology respectfully and responsibly. - I know different ways I can get help if I am concerned. - I understand what computer networks do and how they provide multiple services. - I can discern where it is best to use technology and where it adds little or no value. Year 4 - I recognise acceptable and unacceptable behaviour using technology.	Year 5 - I understand that you have to make choices when using technology and that not everything is true and/or safe. Year 6 - I can discuss the risks of online use of technology. - I can identify how to minimise risks.



Progression in Computing

Information Technology

Pupils should be taught to:

- use technology purposefully to create, organise, store, manipulate and retrieve digital content

Pupils should be taught to:

- 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

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Year 1

- I can create digital content.
- I can store digital content.
- I can retrieve digital content.
- I can use a web site.
- I can use a camera.
- I can record sound and play back.

Year 2

- I can organise digital content.
- I can retrieve and manipulate digital content.
- I can navigate the web to complete simple searches.

Year 3

- I can use a range of software for similar purposes.
- I can collect information.
- I can design and create content.
- I can present information.
- I can search for information on the web in different ways.
- I can manipulate and improve digital images

Year 4

- I can select and use software to accomplish given goals.
- I can collect and present data.
- I can produce and upload a pod cast.

Year 5

- I can analyse information.
- I can evaluate information.
- I understand how search results are selected and ranked.
- I can edit a film.

Year 6

- I can select, use and combine software on a range of digital devices.
- I can use a range of technology for a specific project.