		Y1	Y2	Y3	Y4	Y5	Y6
Context							
NC Objective		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.		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, 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.			
Skills		Algorithms and programming • I can create a series of instructions. • I can plan a journey for a programmable toy. Information technology • 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. Digital literacy • I can use technology safely. • I can keep personal information private.	Algorithms and programming • 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. Information technology • I can organise digital content. • I can retrieve and manipulate digital content. • I can navigate the web to complete simple searches. Digital literacy • 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.	Algorithms and programming • I can design a sequence of instructions, including directional instructions. • I can write programs that accomplish specific goals. • I can work with various forms of input. • I can work with various forms of output. Information technology • 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 digtal images. Digital literacy • 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.	Algorithms and programming • 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. Information technology • I can select and use software to accomplish given goals. • I can collect and present data. • I can produce and upload a pod cast. Digital literacy • I recognise acceptable and unacceptable behaviour using technology.	Algorithms and programming • 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. Information technology • I can analyse information. • I can evaluate information. • I understand how search results are selected and ranked. • I can edit a film. Digital literacy • I understand that you have to make choices when using technology and that not everything is true and/or safe.	Algorithms and programming • 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. Information technology • I can select, use and combine software on a range of digital devices. • I can use a range of technology for a specific project. Digital literacy • I can discuss the risks of online use of technology. • I can identify how to minimise risks.

Suggested Tasks						