

KS2 Knowledge and Skills - Computing

Knowledge and Skills	Year/Topic
Aims	
Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation	
Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems	
Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems	
Are responsible, competent, confident and creative users of information and communication technology	
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	