

Computing – Year 4			
Computing intent		Vocabulary	
Aims	<ul style="list-style-type: none"> 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. 	programming, sprite, blocks, code, loop, repeat, value, infinite loop, count-controlled loop, costume, repetition, forever, animate, event block, duplicate, modify, design, algorithm, debug, refine, evaluate. data, table, layout, input device, sensor, logger, logging, data point, interval, analyse, dataset, import, export, logged, collection, review, conclusion. internet, network, router, security, switch, server, wireless access point (WAP), website, web page, web address, routing, web browser, World Wide Web, content, links, files, use, download, sharing, ownership, permission, information, accurate, honest, content, adverts	
	Knowledge and skills	Useful Units	Outcomes
Digital Literacy	<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. Understand the opportunities networks offer for communication and collaboration. use search technologies effectively, appreciate how results are selected and ranked, and <u>be discerning in evaluating digital content.</u> 	Meet the Microbit (The Internet) Repetition in games (Micro Games) Data logging	Exploring a MicroBit device and loading simple programs Designing and creating a variety of games compatible with a MicroBit Create, review and analyse data collected by a data logging device
Information Technology	<ul style="list-style-type: none"> 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. <u>use search technologies effectively</u>, appreciate how results are selected and ranked, and be discerning in evaluating digital content. 	Meet the Microbit (The Internet) Repetition in games (Micro Games) Data logging	Cross-curricular links <u>Science – Lower key stage 2/Year 4</u> <ul style="list-style-type: none"> Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data. <u>Maths</u> <ul style="list-style-type: none"> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.
Computer Science	<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. 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. 	Meet the Microbit (The Internet) Repetition in games (Micro Games) Data logging	