

Turtle & Scratch	Computing	Years 3 & 4, Term 5	Year A
Key vocabulary: Turtle Logo, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable, pen up, pen down, calculation, Scratch, Sprite, block, command, background or backdrop, algorithm, move, turn, green flag, key press, pen, repeat			
Knowledge and skills: Recognise familiar forms of input and output devices and how they are used. (3a) Make efficient use of familiar forms of input and output devices. (3b) With support select and use a variety of software to accomplish goals. (3e) Use technology safely and recognise acceptable and unacceptable behaviour. (3g) Design, write and debug programs that control or simulate virtual events. (3i) Use logical reasoning to explain how some simple algorithms work. (3j) Use Year 3 computing vocabulary: loop, algorithm, program, debug, variable, sequence, selection, repetition. (3k) With support select, use and combine a variety of software on a range of digital devices to accomplish given goals. (4c) Decompose programs into smaller parts. (4g) Use logical reasoning to detect and correct errors in algorithms and programs. (4h) Select, use and combine a variety of software, systems and content that accomplish given goals. (4i) Use Year 4 computing vocabulary: debug, software. (4j) <i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</i> <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</i> <i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</i>		Possible activities: Turtle Logo: Create and debug an algorithm using the move, rotate and repeat commands. Create and debug algorithms using pen up and pen down. Create and debug algorithms that draw regular polygons. Scratch: Create and debug algorithms to draw shapes. Create and debug algorithms that draw regular polygons. Create and debug algorithms to draw patterns.	
Spiritual, Moral, Social and Cultural Education, and Promotion of British Values: Spiritual: Explore creativity and imagination in the design and construction of digital products. Explore how ideas in computing have inspired others. Moral: Encourage good etiquette when using digital technology including mobile devices and with due regard to e-safety. Encourage respect for other people’s views and opinions. Encourage respect for the computer room and the equipment you use and how this affects others. Encourage respect in the use of digital equipment and its impact on the environment – for example, ink and paper wastage. Explore moral issues around the use of digital technology - For example, copyright and plagiarism. Social: Encourage students to assist one another in problem solving. Encourage good practice and respect in the use of social networking. Cultural: Children will appreciate the importance of computers in the modern world. Encourage the sensible use of digital technology in the classroom and homework situations given that you are currently living in a digitally cultural environment. Encourage an awareness and appreciation of the digital divide and to be aware of differing cultural and spiritual or religious views towards the use of digital technology. British Values:			