

Year 2 Unit Medium Term – Computing - Algorithms

N.C POS

- Understand what algorithm are; how they are implemented as programs on digital devices; and that programs execute by following precise unambiguous instructions
- Create and debug simple programs
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Use logical reasoning to predict the behavior of simple programs

Concept: cause and effect, change, information, communication, technology, patterns

Strand/s covered in unit: Computer Science

Key Vocabulary: instructions, algorithm, debug, error, accurately, 90 degrees, quarter, route

Prior Learning: understand that an algorithm is a set of step-by-step instructions, beginning to check work for mistakes and understand this is known as 'debugging', direct and program a Bee-Bot, using different end blocks on Scratch JR such as repeat forever, change the size of character, add characters and backgrounds

Core Knowledge- non-negotiable- specific knowledge must be identified here

- Explain what an algorithm is and give examples of everyday algorithms.
- Create a basic set of instructions (written and using pictorial representations) to carry out a specific task.
- Give instructions to others to get them from point A to B using forward and backward turn and 90 degree turns.
- Follow instructions given by others.
- Program a robot to travel from point A to point B.
- Begin to identify 'bugs' (errors) in an algorithm and debug (fix) them.

Wider Influences

Enduring Understanding

- **To be able to create, test and debug algorithms.**
- **To begin to use directional language (forwards, backwards, quarter turn).**