

Year 1 Unit Medium Term – Computing - Programming Toys

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 of Computing in this Unit: Computer Science

Key Vocabulary: instructions, algorithm, debug, programming, sequence

Prior Learning: explain an algorithm as instructions, explain sequencing, give instructions to a programmable toy.

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

- Discuss everyday sequences in the correct order.
- Create step-by-step instructions using pictures.
- Write and follow step-by-step instructions.
- Program a Bee-Bot, one instruction at a time using the arrow buttons.
- Direct a Bee-Bot to a toy.
- Say what an algorithm is.

Wider Influences

Enduring Understanding

- **To begin to understand the principles of programming.**
- **To understand an algorithm as a set of step-by-step instructions.**
- **To begin to understand why it is important to be precise when writing an algorithm.**