

Year 3 Unit Medium Term – Programming using Scratch

N.C POS

- 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
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behavior; identify a range of ways to report concerns about content and contact

Strand/s of Computing in this Unit: Computer Science & Digital Literacy

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

Key Vocabulary: algorithm, decomposition, sequence, input, selection, simple program, output, variable, debug, bug, predict

Prior Learning: instructions as algorithms, instructional language, understanding ‘debug’ as correcting mistakes in programming, computing/technology over time

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

- recognise, use and understand directional language, abbreviations and sequence instructions
- recognise that a string of instructions or commands placed together can create a program.
- Use logical reasoning to predict and debug errors within algorithms and programs.
- Use decomposition to break down a problem in smaller parts.
- Use sequence, selection, repetition and variables in programs.
- Work with various forms of input and output.
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Wider Influences

- position and direction
- algorithms in everyday life

Enduring Understanding

- **The benefit of being able to identify problems in an algorithm and being able to ‘debug’ them.**
- **Decomposing problems will make them easier to solve.**