Year   6 Unit Medium Term – Computing – Programming

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
- 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

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, structure, sequence, animate, speech, audio, repeat, command

Prior Learning: instructions as algorithms, instructional language, understanding 'debug' as correcting mistakes in programing, duplicate function, repeat and loop functions, an understanding of what variables are, coding/programming language and examples of different types

Core Knowledge- non-negotiable- specific knowledge must be identified here
- Design, plan and create complex programs.
- Test, debug and modify a program to improve it.
- Write a program using a text based programming language.
- Use logical reasoning to detect and correct errors in algorithms and programs.

Wider Influences
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Enduring Understanding
- **To be able to write commands using simple coding language.**
- **To ensure a sequence is present when coding and understand the importance of this in relation to the desired outcome.**