



Jerry Clay Academy  
Subject Knowledge Organiser

Subject: Computing Year Group: 4 Term: Autumn 1

**Core Learning of This Unit: We are software developers**

- Develop an educational computer game using selection and repetition
- Understand and use variables
- Start to debug computer programs
- Recognise the importance of user interface design, including consideration of input and output.

**Prior Learning:**

- Year 1/2/3 Switched on Computing curriculum

**National Curriculum Statements:**

- Design, write and debug programs that accomplish specific goals.
- Use sequence, selection and repetition in programs; work with variables and various forms on input and output.
- Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

**Key Vocabulary:**

- Algorithm
- Bug
- Debug
- Input
- Output
- Program
- Repeated loop
- Repetition
- Scratch
- Sequence
- Sprite
- Variable

**Significant People**

- Mark Zuckerberg – cofounder of Facebook
- Alexey Pajitnov – game developer of Tetris
- Shigeru Miyamoto – game developer of super Mario brothers