



Jerry Clay Academy  
Subject Knowledge Organiser

Subject: Computing Year Group: 6 Term: Autumn 2

**Core Learning of This Unit: We are computational thinkers**

- Develop the ability to reason logically about algorithms
- Understand how some key algorithms can be expressed as programs
- Understand that some algorithms are more efficient than others for the same problem
- Understand common algorithms for searching and sorting a list.

**Prior Learning:**

We are toy makers

**National Curriculum Statements:**

- Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.
- Use sequence, selection, and repetition in programs; work with 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.

**Key Vocabulary:**

- Abstraction
- Algorithm
- Binary search
- Decomposition
- Dive and conquer
- Graph
- Greedy algorithm
- Linear search
- Quicksort
- Search
- Search algorithm
- Selection sort
- sort

**Significant People**

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