	Computing Subject Knowledge Organiser		
	Autumn Term	Year 1	Strands covered: Computer Science -
			Programming

#### What Prior Knowledge should students have?

- Experience exploring programmable toys.
- Using technology for a variety of purposes to support

discovery and learning.

Key Vocabulary	Definition	
Algorithm	A sequence of instructions that can be followed to solve a problem.	
Programming	The process of writing instructions for a computer to follow.	
Beebot	A programmable toy that can be used to learn about algorithms and programming.	
Direction	A course along which something or someone moves.	

### What Skills will students learn (Disciplinary Knowledge)

- Create simple directional algorithms for a programmable toy.
- Apply Computational Thinking skills to evaluate a debug simple faulty algorithms.
- Think creatively to create and solve problems related to programmable toys.

### 5.

# What key knowledge will be taught (Substantive Knowledge)

- Understand the concept of algorithms and programming.
- Give instructions that can be followed by a computer or a programmable toy.
- Predict the outcome of a program based on a set of instructions.

## **Online Safety**

- Children learn what to do if they find or experience something inappropriate online. They learn about the importance of reporting problems to a trusted adult.
- Children learn about different types of personal information and the importance of not sharing it online.