



Swifts and Swallows



Computing

Summer 1 — Robot Algorithms



A beebot is programmable robot that children use to practise giving instructions and programming.

Children will create algorithms to program the beebot to go from one place

to another, predict whether they will be successful and debug the algorithms when they go wrong.

Practise programming at home by playing instruction games and using obstacle courses. Take turns to give and receive the instructions to get from one place to another.



Vocabulary	
Instruction	A direction or order
Sequence	A order in which related things follows each other
Clear/unambiguous	Not open to interpretation
Algorithm	A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer
Program	To provide (a computer or other machine) with coded instructions for the automatic performance of a task
Order	Arranging instructions in a particular sequence
Commands	To tell (a computer or other machine) and instruction
Prediction	To say what you think the outcome will be, based on specific information
Artwork	A picture (which a computer programmer and then code to do something)
Design	To make a plan
Route	The path that something will take
Map	A pictorial representation of an area (real or imaginary)
Debugging	To identify and remove errors in a computer program

Before we learn our topic

1. *What is an algorithm?*

An instruction

A set of instructions

A robot

A describing word

2. *What happens when you change the order of instructions?*

3. *What do programming projects have?*

Code and artwork

instructions and algorithms

debugging and predictions

After we have learnt our topic

1. *What is an algorithm?*

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Code and artwork

instructions and algorithms

debugging and predictions