

# Y1 Computing N2K

## Programming A - Moving A Robot

### Autumn 1

#### Concepts

##### **Computer Science**

Understand what algorithms are, how they are implemented as programmes on digital devices and that programmes execute by following precise instructions. Design, write and debug programmes to accomplish specific goals.

##### **Digital Literacy**

Recognise common uses of information technology beyond school. Use technology safely, respectfully and responsibly.

#### Key Skills

- Match a command to an outcome.
- Compare forwards and backwards movements.
- Sequence involving forwards and backwards commands.
- Start a sequence from the same place.
- Predict the outcome of a sequence involving up to four commands.

Try **Rodocodo** to practise using sequencing and rotation to program the cat to the finish line!



#### Enquiry Questions

What will a command do?

How can I combine commands to make a sequence?

How do I plan a program?

What is an algorithm?



#### Key Vocabulary

**Bee-Bot** – A Bee-Bot is a robot we can program to move forwards, backwards and turn.

**commands** – These are the things we can program a robot to do.

**instructions** – Lots of commands that happen one after the other make a set of instructions.

**route** – A route is a planned journey that we want a Bee-Bot to follow.

**algorithm** – A list of rules to follow in or to complete a task or solve a problem. They must be listed in the correct order!

**program** – To give a computer a set of instructions to complete a task.