

# Year 1 Computing – Moving a Robot

## What I should already know

- To know how to follow simple instructions.
- To put pictorial instructions into sequential order.

### Robots and Floor Robots

- Robots: Robots are machines that we can program to do human jobs.
- Robots help us to do things, for example to help us clean, mow and learn!
- Robots in factories make things, and in hospitals they help make us better.



- Bee-bots:** Bee-bots are a type of floor robot.
- We can programme Bee-bots to move around.



-Turning on a Bee-bot: Before we use a Beebot, we need to make sure it is charged.



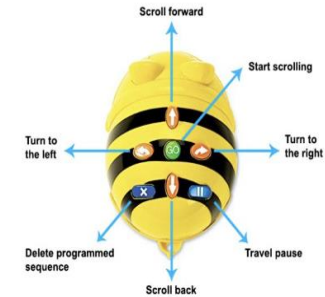
To turn it on, using the switch underneath. You can tell that the Bee-bot is on because its eyes light up. Switch it back off again after you have finished using it.



Bee-bots should only be used on the floor, and not tables etc. They can be damaged if they fall from high surfaces.

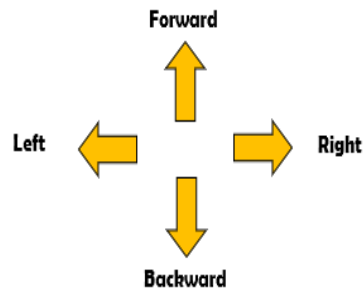
### Buttons and Programs

- Buttons:** Bee-bots have buttons on the top. They each make the Beebot do something different (see picture).
- The **arrows** move the Bee-bot in different directions.
- The **GO** button makes the Bee-bot start its program. (on some models, it also pauses the Beebot in-program).
- Programs:** A program is a series of instructions. We can program the Bee-bot by pressing the direction buttons (in order) that we want it to move in, followed by GO.
- The **X button** makes the Bee-bot delete the program and make a new program. Switching the Bee-bot off and on again also deletes the program.



### Directions

-In order create clear routes for our Bee-bots, we need to be sure of our directions.



Make sure that you stand behind Bee-bot.

### Routes and Algorithms

-A route is the course that we travel to get somewhere. We use algorithms (a set of guidelines to complete a task) to program our floor robot to take a route to where we want it to go.

-We should think carefully about how to avoid obstacles. We should also consider how many times we need to press each button to travel the correct distance.



### Key Vocabulary

- |         |           |              |            |
|---------|-----------|--------------|------------|
| bee-bot | forwards  | backwards    | turn       |
| clear   | commands  | instructions | directions |
| plan    | algorithm | program      | route      |
| go      |           |              |            |