Computing – Algorithms and Programming

Prior Learning	Concepts
What a Bee-Bot is. How to turn a Bee-Bot on and off. How to program a Bee-Bot to move in the desired direction.	Algorithms – understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Technology – use technology purposefully to create, organise, store, manipulate and retrieve digital content

Key Vocabulary	
Algorithm	Instructions split into small steps so that a computer can solve problems or get something done.
Program	Ordered sequence of instructions to solve a problem.
Robot	A machine that can be programmed to solve problems and carry out tasks.
Instruction	Detailed information about how something should be done.
Route	A way from one place to another.
Direction	Right, left, forward, backwards.

Key Facts

1) Robots are one type of machine that can follow instructions.
2) Floor robots include Bee-Bots and Blue-Bots.
3) Floor robots have buttons that help us direct them.
4) We can use algorithms to program floor robots along a route.
5) We must press clear before beginning to program the Bee-bots.

Images, icons and maps.

Buttons: Bee-bots have buttons on the top. They each make the Bee-bot 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 Bee-bot in-program).

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.