

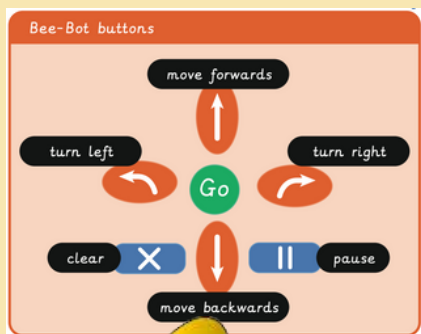


CAROLINE HASLETT KNOWLEDGE ORGANISER

COMPUTING

YEAR 1 AUTUMN 2

PROGRAMMABLE TOYS



VOCABULARY

algorithm	A clear set of instructions to carry out a task.
Bee-Bot	A small programmable floor robot with seven buttons (forwards, backwards, turn right, turn left, go, pause and clear).
code	Words, numbers and symbols that make a computer language.
program	A series of instructions that are written for a computer to follow.
explain	Give clear information about something to someone.
explore	Look at something new to learn more about it.
instructions	A list of commands and directions on how to do something.
predict	To make a guess.
tinker	To explore and play with something to discover what it can do.
video	Moving pictures that make up a film or cartoon.

SKILLS

- explore how hardware works.
- press buttons to make a floor robot move
- program a floor robot to move to a specific space e.g. Beebots
- Use logical reasoning to predict the behaviour of simple programs.
- Create and debug simple programs.

KEY FACTS

An algorithm is a set of step-by step instructions to carry out a task in a specific order.

When you create an algorithm, it is important to test it to see if it works. If there is an error in the code, the algorithm will not work correctly.

A computer does something when it is following a code.

Programmable toys, such as Bee-Bots, are robots that can be programmed to follow a set of instructions. They usually have buttons that can be pressed in a sequence to give a command.

You can predict what an algorithm is going to do before testing it. Predicting allows you to look carefully at the written code and debug any errors that you spot.

A bee bot can remember up to 30 steps!