Coley Primary School – Knowledge Organiser

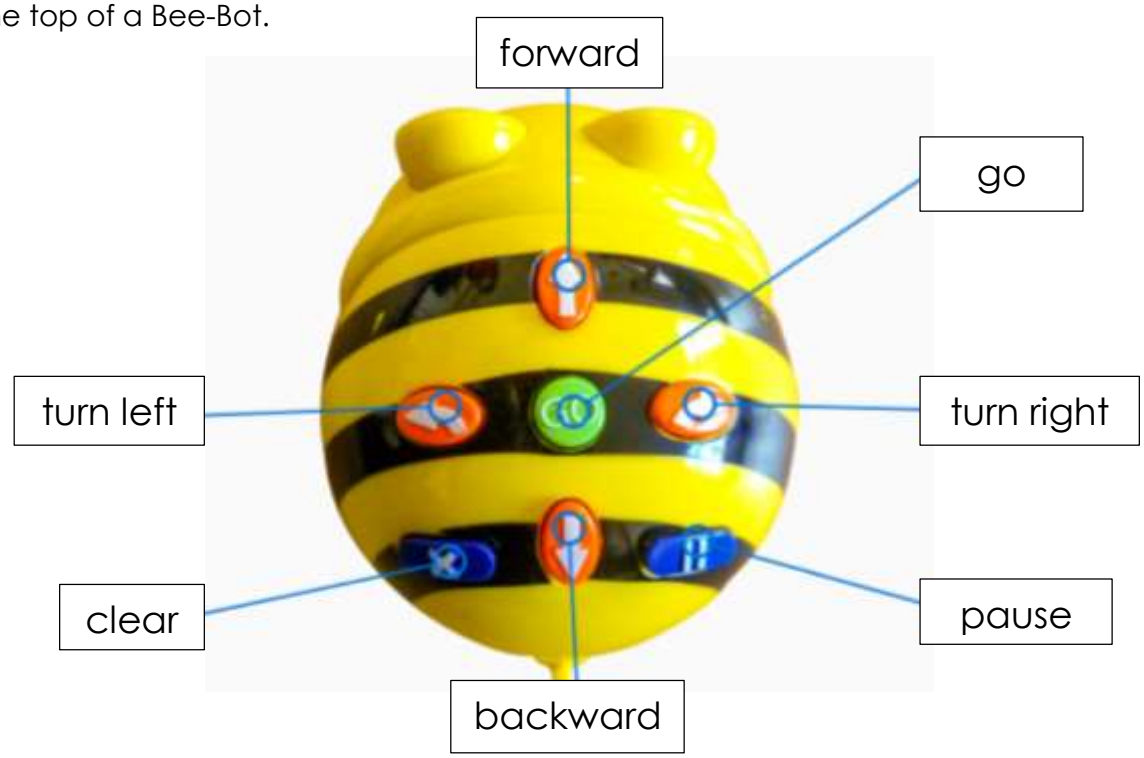
SUBJECT FOCUS:	Computing – coding	YEAR	1

Prior learning: ELG recognise that a range of technology is used at home and in school; select and use technology for particular purposes. Experience and knowledge of Beebots from FS2 at Coley.

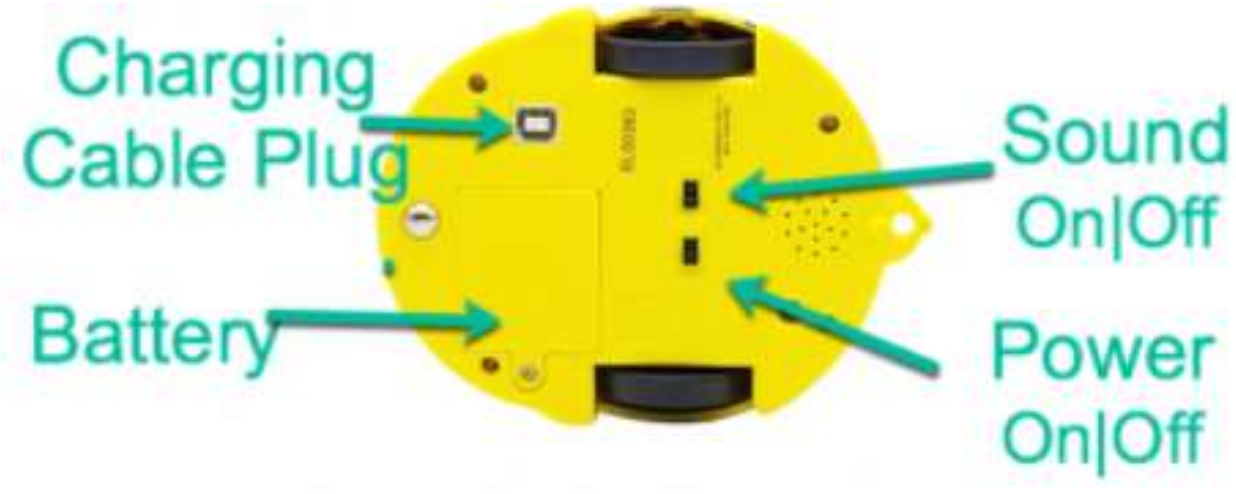
Key knowledge

Bee-Bots are **robots.** They are called Bee-Bots because they look like bees. They travel along the floor. We can **program** them to go **forward** and **backward** and to turn **left** and **right.**

This is the top of a Bee-Bot.



This is what it looks like underneath:



- The Bee-Bot moves forward and back, one step at a time. One step is the length of its body (15 cm).
- The Bee-Bot turns left and right a quarter turn (90°).
- Always press the clear button before you programme the Bee-Bot.
- Programme the Bee-Bot by pressing the buttons in the order you want the Bee-Bot to move.
- Press go.
- When the Bee-Bot has finished moving, it stops and plays a sound.
- Bee-Bots are rechargeable. This means that we can plug them in after we have used them to charge up their batteries.
- If your Bee-Bot is not used for 2 minutes it will play a sound and go to sleep.
- You can wake it up again by pressing any button. It will play a sound and flash its eyes.

Words

instructions – written for someone who needs to know how to do something.

program - set of instructions completed in order to achieve a task on a computer or toy

programmable toy – a toy we can put instructions into

debug – find and fix a problem in a program

once – do it one time

twice – do it two times

Experiences

Play with the Bee-Bots if you haven't seen them before

Design a hat or some wings for the Bee-Bot

Introduction to Bee-Bots https://www.youtube.com/watch?v=52ZuenJlFyE

Bee-Bots basics (SEND resource)
https://www.barefootcomputing.org/resources/send-bee-bot-basics-activity

Record a video to explain to reception children how to look after and program the Bee-Bots.

Design a Bee-Bot world on a large square grid

Debugging introduction
https://www.youtube.com/watch?time_continue=1&v=CGPjraqX_ac

Beebot challenge cards
http://ccc-computing.org.uk/misc/download/zyr5Y9Cgt9e7C9fE

Beebots programming (challenging – end of year extension)
https://www.barefootcomputing.org/resources/bee-bots-1-2-3-programming

Can you …?

Explain what each button does on the Bee-Bot

Explain how to look after a Bee-Bot, including recharging it

Treat the Bee-Bots with respect

Program in a route given to you by your teacher

Using squares, design a world for a Bee-Bot and it to reach different places in your world

Use symbols (and words) to record the route the Bee-Bot took

Use symbol cards to plan a route and program this into a Bee-Bot

Debug your program if it goes wrong

Keep on trying