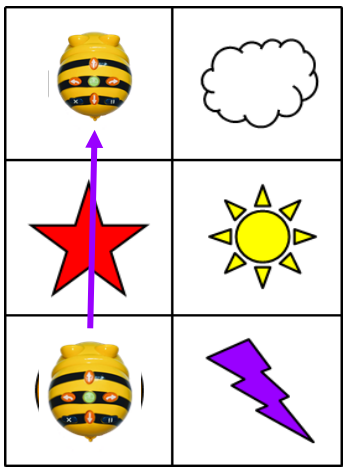
Jeavons Wood Primary School

Knowledge Organiser for Year 1
Summer 1
Big question: How do I move a robot?

British Values Link: Mutual Respect
(Working together in groups, sharing ideas and listening with respect, treating everyone fairly and respecting people and their choices)

National curriculum specification (KS1)
• Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions • Create and debug simple programs • Use logical reasoning to predict the behaviour of simple programs • Recognise common uses of information technology beyond school

Start and Finish



This **algorithm** will move the Beebot 2 squares forward.

Icon	What does it do?
	**Forwards** and **backwards** moves
	**Left** and **right** turns
	**Clears** the robot's memory so it forgets old instructions
	Makes the robot **start** the **program**
	This will make the robot **pause**

In this unit, the children will:
Explain what a given command will do.
Act out a given word.
Combine 'forwards' and 'backwards' commands to make a sequence.

Combine four direction commands to make sequences.
Plan a simple program.
Find more than one solution to a problem.

Key vocabulary:	
Algorithm	A set of clear instructions.
Computer program	Instructions for a digital device to follow.
Digital device	An object created for a purpose e.g. Beebot, Laptop.
Sequence	In order to achieve a task.
Debug	To fix an error (problem).
Predict	To have a logical guess.
Task	what is needed
Design	what it should do
Code	how it is done
Running the code	what it does

Teacher Subject Knowledge:	
Seesaw links for activities in each session	Lesson 0 – Sharing personal information (Project Evolve). https://app.seesaw.me/pages/shared_activity?prompt_id=prompt.9bb22ac1-c590-4c7a-8eff-e41bb0e56051&share_token=lQzA72-KSWK_bkVHZP-WQA Lesson 1 – Buttons https://app.seesaw.me/pages/shared_activity?prompt_id=prompt.a7aefd6e-36a0-4c19-9342-7a9785f94311&share_token=6avyw03HQie711CFi9CApQ Lesson 2 – Directions Lesson 3 – Forwards and backwards https://app.seesaw.me/pages/shared_activity?prompt_id=prompt.aeb3f1ff-102d-4aba-93b8-94d2b21f4bcc&share_token=P8izAig0Q5ijhvhPUQO_gw Lesson 4 – Four directions https://app.seesaw.me/pages/shared_activity?prompt_id=prompt.11525929-9274-4e4d-9edc-1e827b72ab39&share_token=-cB2EZEvQrqp-UmTOKJDcw Lesson 5 – Getting there https://app.seesaw.me/pages/shared_activity?prompt_id=prompt.79094b21-1c9e-4fe1-9091-ca066ac1d9d7&share_token=YK8KLJOOTA-h9HWB8HPB-w Lesson 6 – Rotes
Online training courses	If you are a teacher in England, you should access our online courses via the teachcomputing.org website: • Get Started Teaching Computing in Primary Schools: Preparing to teach 5- to 11-year-olds • Teaching Programming to 5- to 11-year-olds If you are not a teacher in England, you can access our online courses via the FutureLearn platform: • Get Started Teaching Computing in Primary Schools: Preparing to teach 5- to 11-year-olds • Teaching Programming to 5- to 11-year-olds
Prior knowledge	As this is a Year 1 unit, no prior knowledge is assumed. This unit progresses learners' knowledge and understanding of giving and following instructions. It moves from giving instructions to each other to giving instructions to a robot by programming it.