



Programming B – Sensing movement

The Acorn Partnership

Marston Montgomery Primary School

Long Lane C of E Primary School

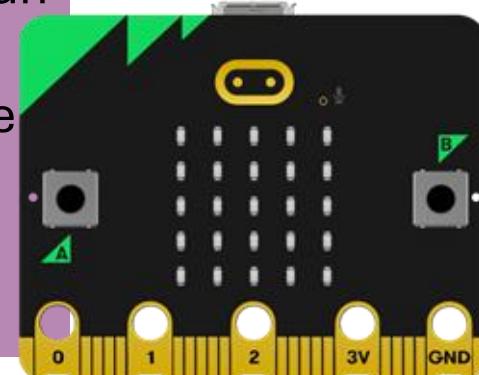
Sticky learning

Year 3/4/5

- I know how to plan a simple program by choosing the order of commands in a sequence.
- I know how to design an algorithm and can explain it.

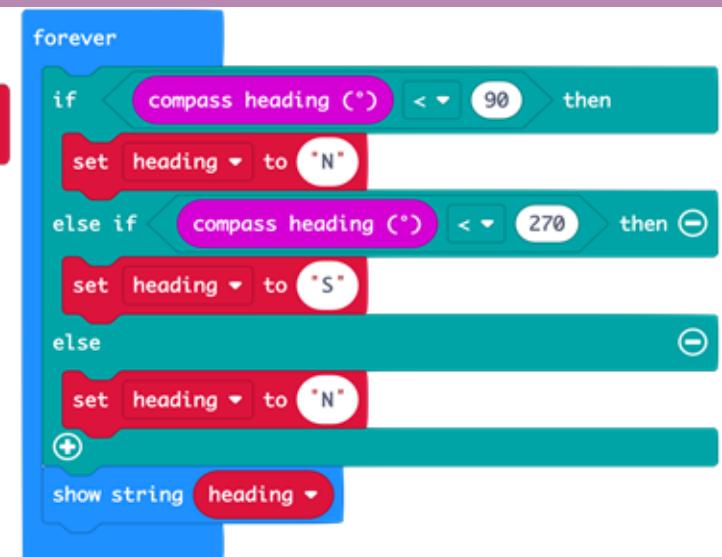
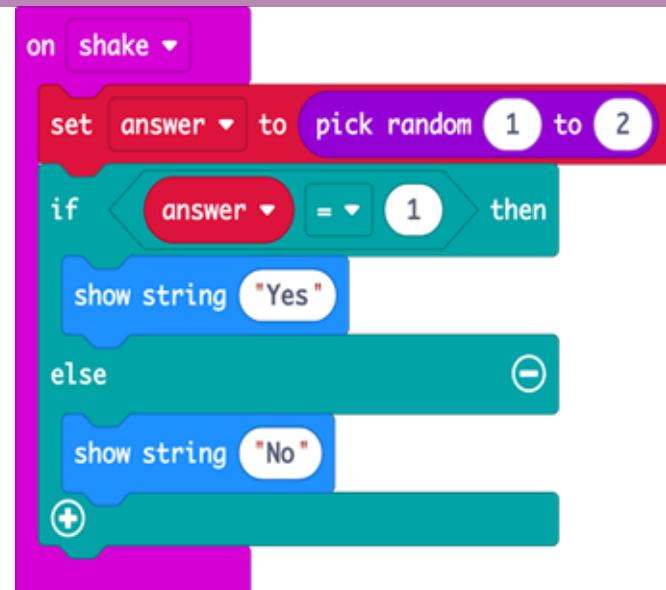
Year 6

- I know commands have an outcome
- I know sequences can be combined
- I know a program has a start



New Knowledge

- I know how to create and transfer a program to a Micro:bit.
- I know 'if, then, else' variable statements can control the flow of a program and can use these to alter the flow.
- I know a variable can be updated with user input and I can use a condition to alter the variable.
- I know a conditional statement can compare a variable to a value.
- I know to make a project with inputs and outputs I need to design the algorithm first and create a flow chart.



Key Vocabulary

Micro:bit	A small computer that you can program to do different things — like light up, play sounds, or measure movement.
MakeCode	An easy-to-use website where you can create programs for the Micro:bit by snapping colourful code blocks together.
USB	A type of cable that connects the Micro:bit to a computer, so you can send your code to it or give it power.
If... Then... Else	A coding rule that makes the computer make a choice. Example: If it's raining, then take an umbrella, else wear sunglasses.
Variable	A named box in your program that stores information — like a number, word, or score — that can change while your program runs.
Random	Something that happens by chance — you don't know what you'll get. Example: picking a random number or flipping a coin.
Sensing	When the Micro:bit notices what's happening around it — like how bright it is, how much it's moving, or if a button is pressed.
Accelerometer	A sensor inside the Micro:bit that can tell if it's being moved, tilted, or shaken.
Navigation	Finding your way or direction — the Micro:bit can help with this using its compass.
Compass	A sensor in the Micro:bit that points to North, helping it know which direction it's facing.
Algorithm	A set of clear, step-by-step instructions to solve a problem or make something happen — like a recipe for a computer.
Code	The special instructions you write to tell a computer what to do.