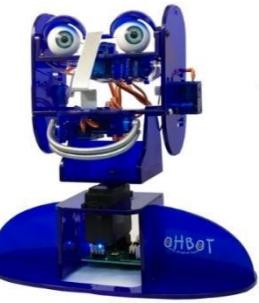


## Year 4 - Lesson 5 Two Variables



### Learning Intention

- I can work with two variables

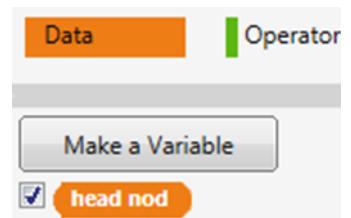
### Introduction

What did we learn to do last week? (We learnt how to use a **say** instruction to speak the variable 'Count' and we completed some additional counting challenges using variables.) Today we are going to continue with our work on variables. What is a variable?

We will be creating some new variables to count Ohbot's movements. This will link up with the movement tasks we completed in Year 3 and all the work we have covered on the variable 'Count' in Year 4.

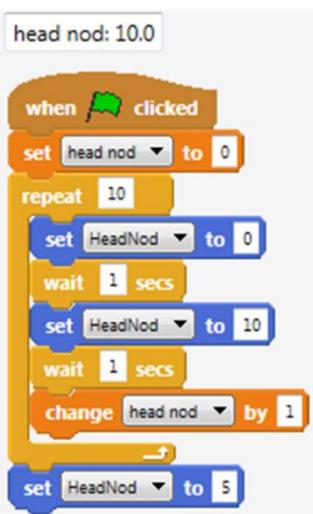
### Teacher Input 1

We are now going to use **Make a Variable** to create a variable called '*head nod*'. This variable will be used to count the number of times Ohbot moves its head up and down in a task. Remember to have the tick next to '*head nod*' on the **Data** palette to watch the counting.

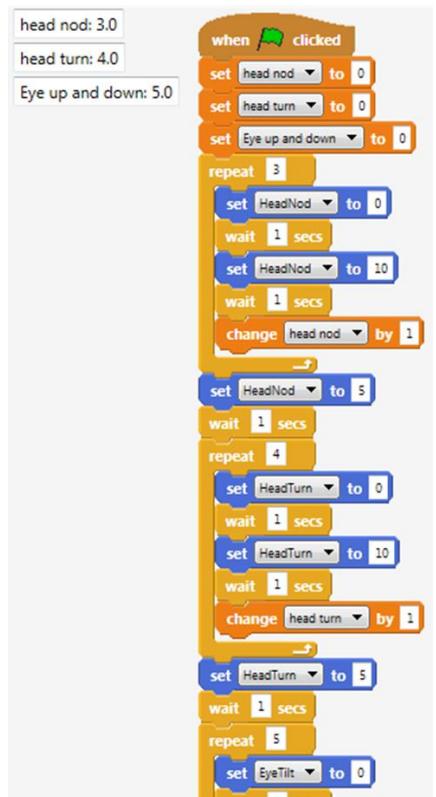


If we use a **repeat** instruction with a count of 2, how many times will Ohbot nod? (2). Therefore, the "*head nod*" count will go up to two. If we use a count of 10, how many times will Ohbot nod? (10). Therefore, the "*head nod*" count will go up to 10.

### Activities



- Can you write some code to make Ohbot count the number of times it nods his head?  
You can explore the code by changing the number of repeats.  
**File, Save As** – 'count head nod'.
- Can you write some code to make Ohbot count the number of times it blinks?  
**File, Save As** – 'count blink'.



### Extension

Can you make three variables for Ohbot's keep fit routine? Can you write a script to make Ohbot count the number of times it nods his head, shakes its head and looks up and down with its eyes?

**File, Save As** – 'count keep fit'.

### Plenary

Encourage children to share their programs with the class and discuss ones that don't work, work partially or have used a different algorithm to reach the

same outcome. Encourage children to talk through how they work block by block and work as a class to debug a program to improve it.