Teachers guide - Scratch

Introduction to Variables

Code Playground

BARCLAYS

Introduction to Variables
Scratch project

The variables tab in Scratch 3.0 has a preset variable set up called 'my variable', along with all of the associated blocks.

You can create as many variables as you like in Scratch, and each block can be amended using its drop down menu depending on which variable you want to use.

You can delete the variable that Scratch has created, or you can rename it. We recommend using two main variables for this activity – 'heads' and 'tails'.

Checking the box next to each variable as shown below will keep track of and display its current value on the game screen. This may no always be relevant or necessary, depending on the programme being created.

Code Playground
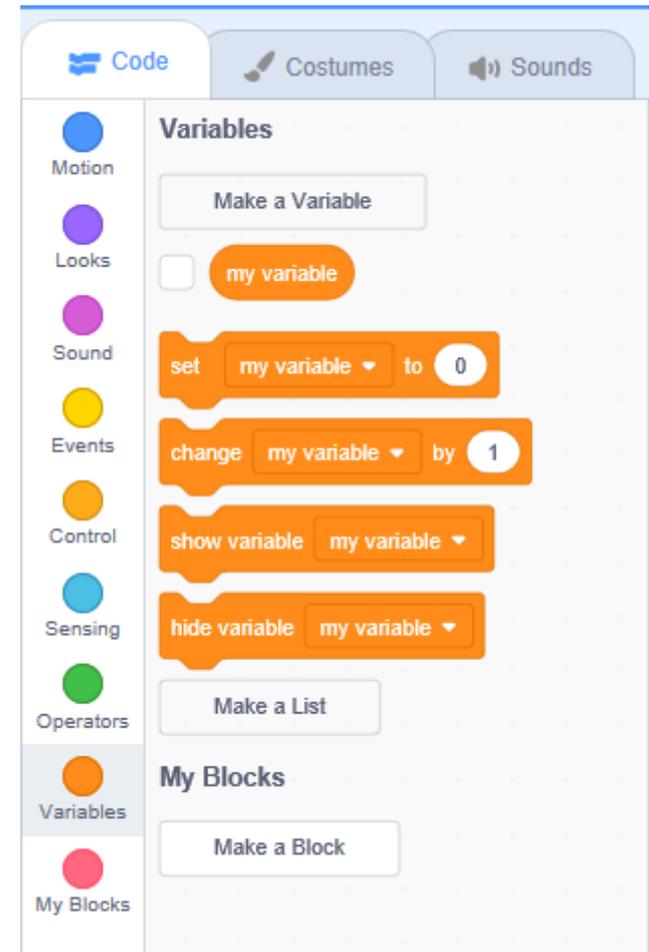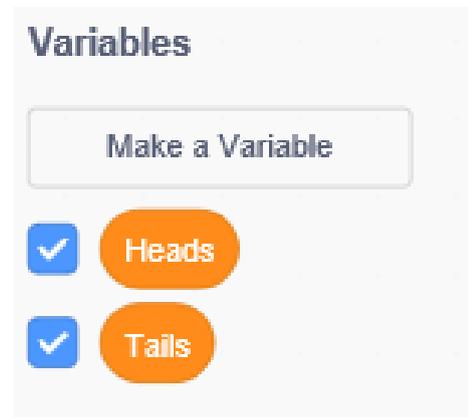
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To allow the scores to reset to zero on each turn, use this code. The children may not consider this code initially, and it may present as a challenge after first trying their programme. Any event block could be used.
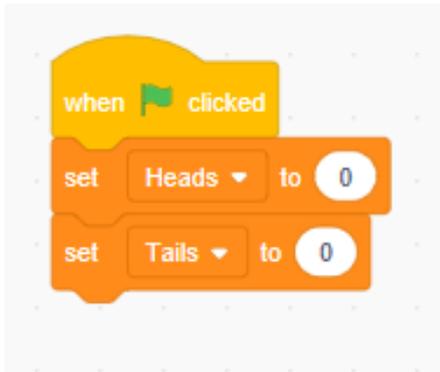
A different input should be used to track each variable – one for heads and one for tails. We suggest two different key presses. On each key press the value of the variable will increase by one
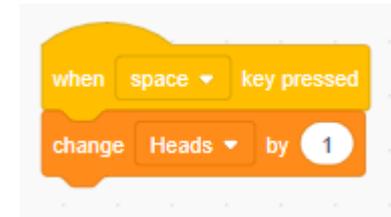
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If the valuable of the variable is displayed on the game screen as shown on the previous page, there is no need to add any code to the programme to recall the values for heads and tails. However further code could be added to the script to recall the values when a certain condition is met**. For example, when another key is pressed, or after a one minute countdown.
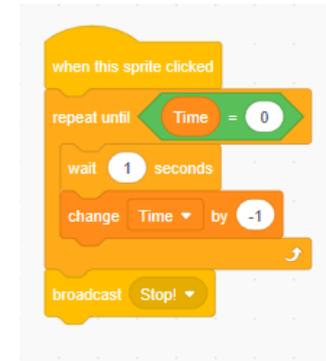
Script for timer
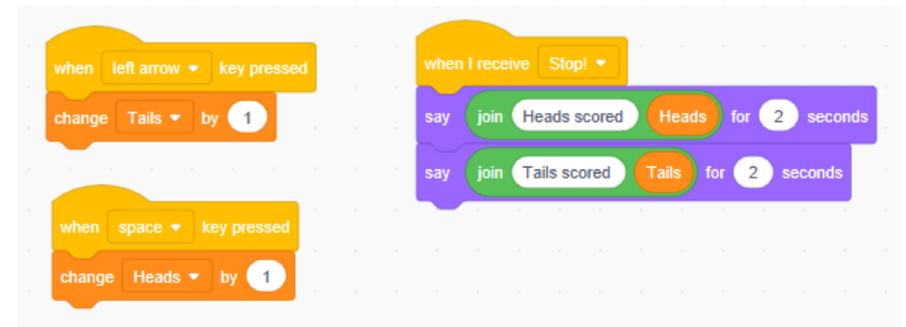
**See our Intro to conditionals lessons for further learning here. Combine variables and conditionals to have your programme 'choose' heads or tails for you

Notes

Code Playground