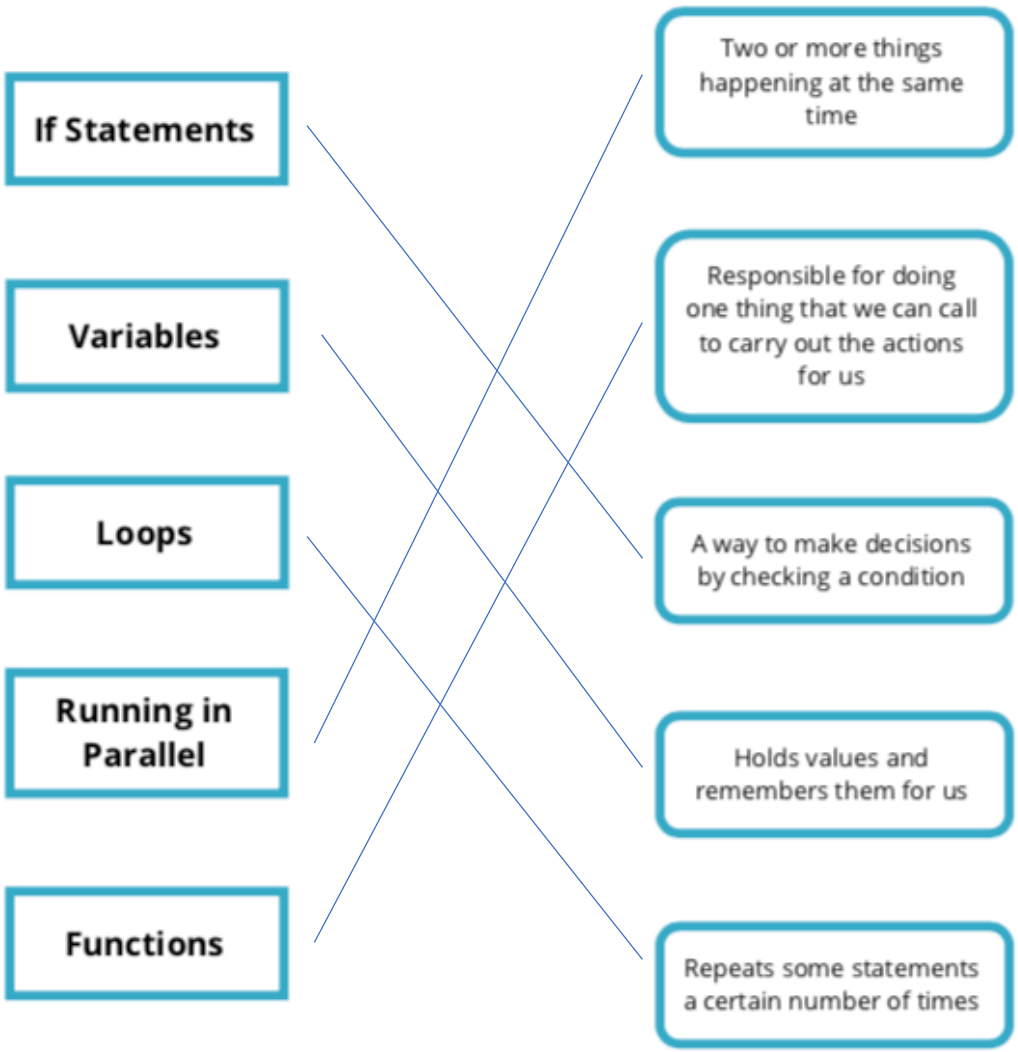
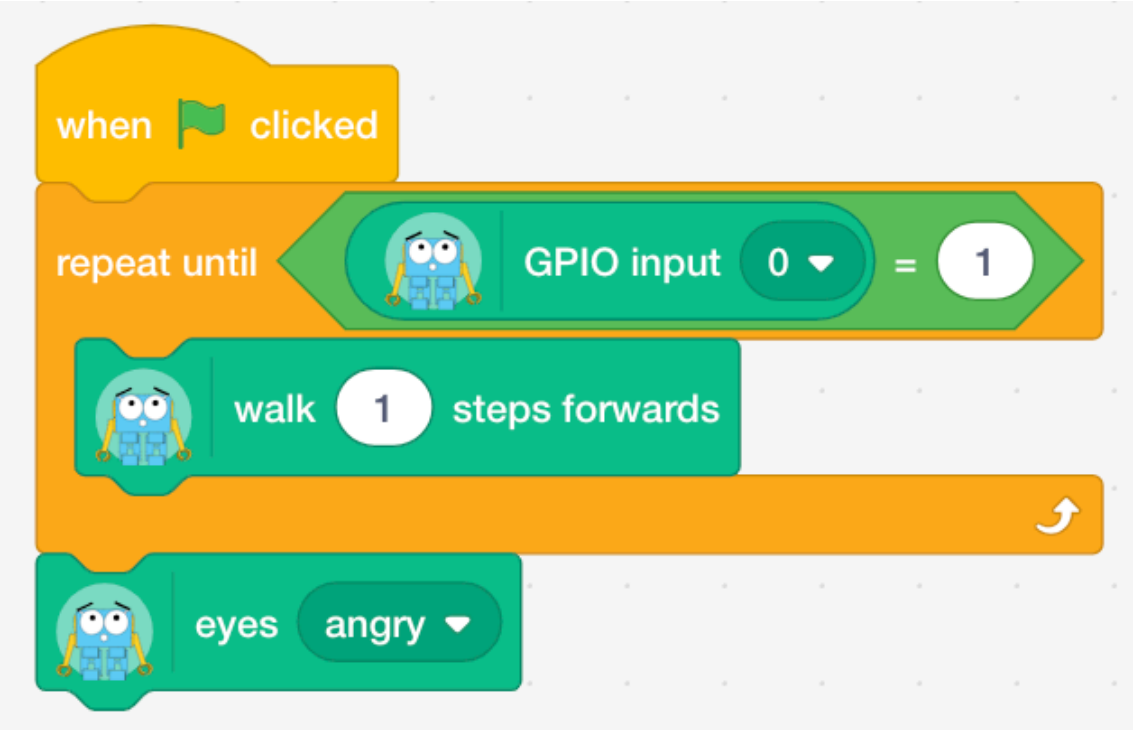
Solutions

Responding to Our Environment

LESSON 1.15



Keep walking until the bump switch is clicked,



Using bump switches in different places,

Bump Switch Attached to…	Activity Ideas
Front of feet	*Stop when there is something in front of me like an obstacle*
Arms	*When the switch is clicked, offer a handshake*
Underneath feet	*The bump switch will be clicked if someone lifts Marty off the ground*

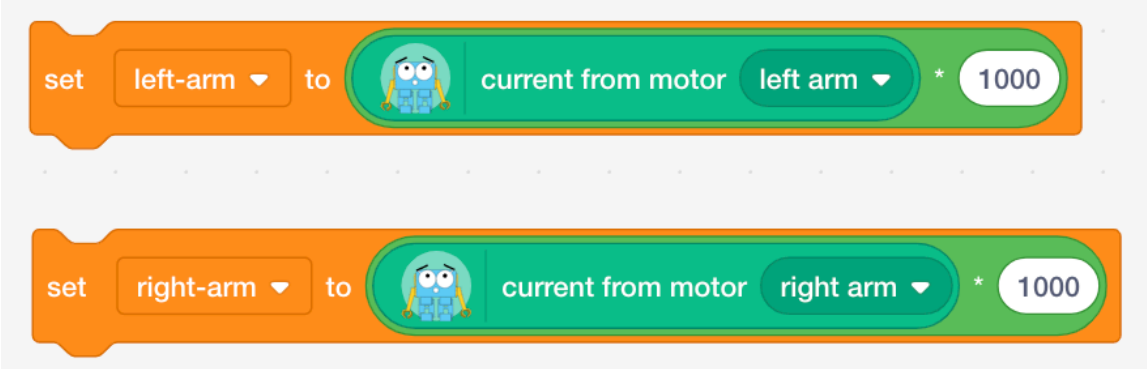
Note that there are many other examples that could be placed in this table!

LESSON 1.16

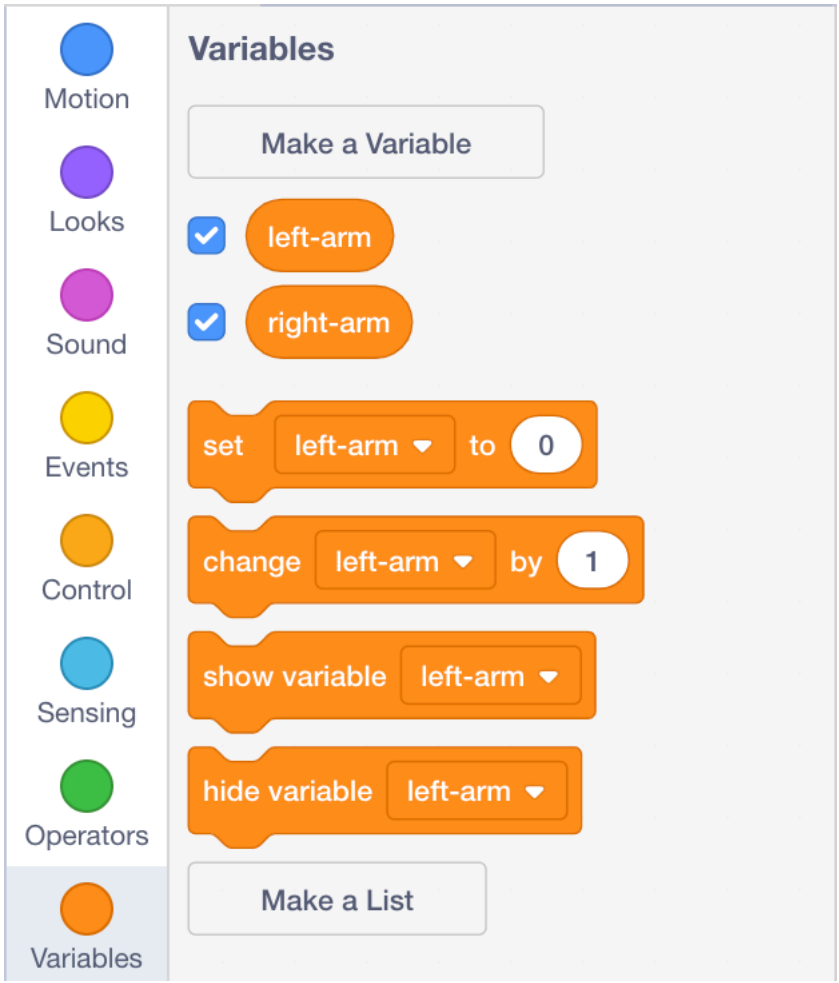
Students should be encouraged to break the obstacle course down into different sections and create a function for each section of the course using logic and bump switches.

LESSON 1.17

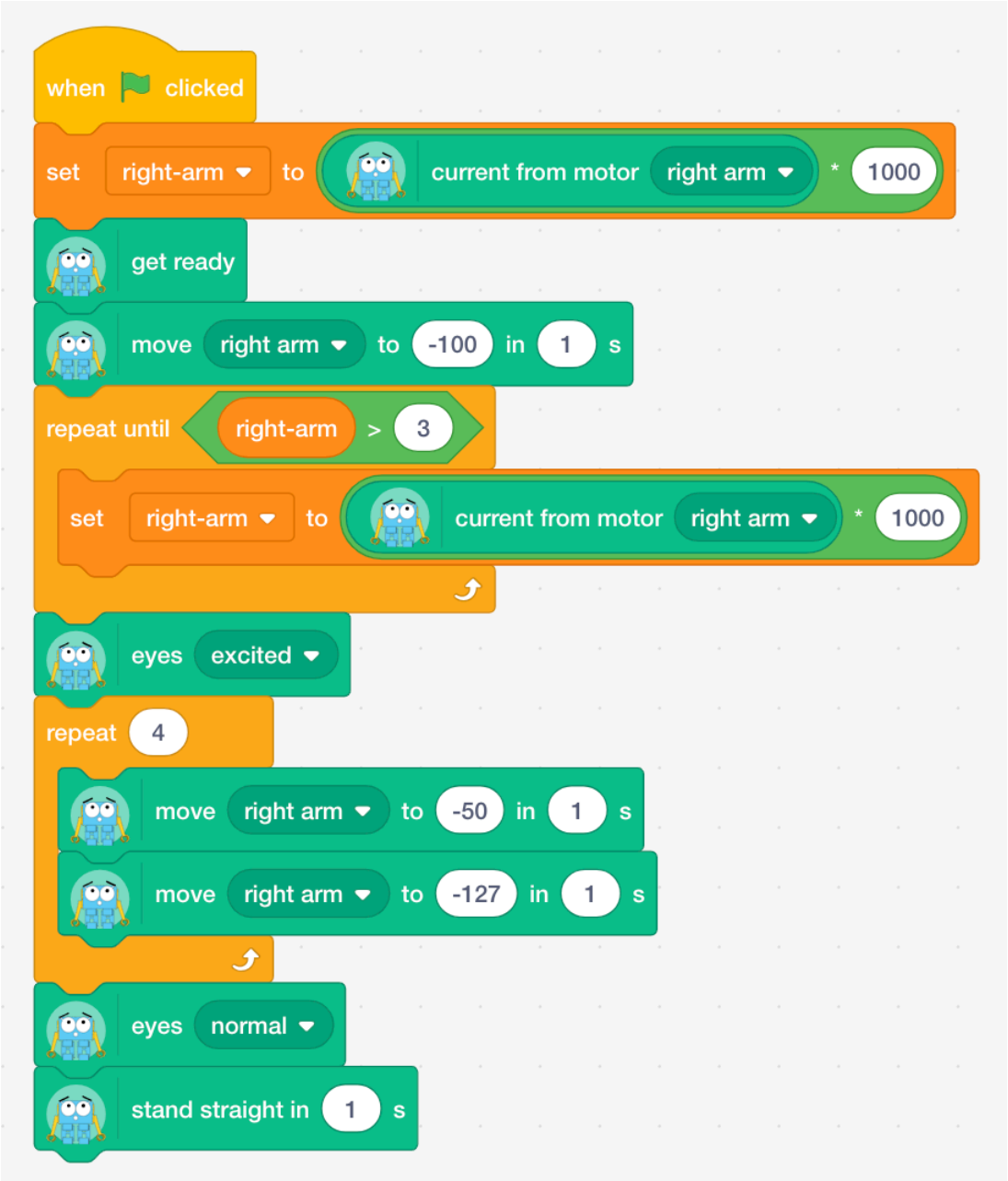
You can get values from Marty's motor sensors using the following line of code,



Make sure that you check the variables in the variable menu in Scratch so that they are displayed on the main stage to monitor when and how they change!



Programming a handshake with Marty,

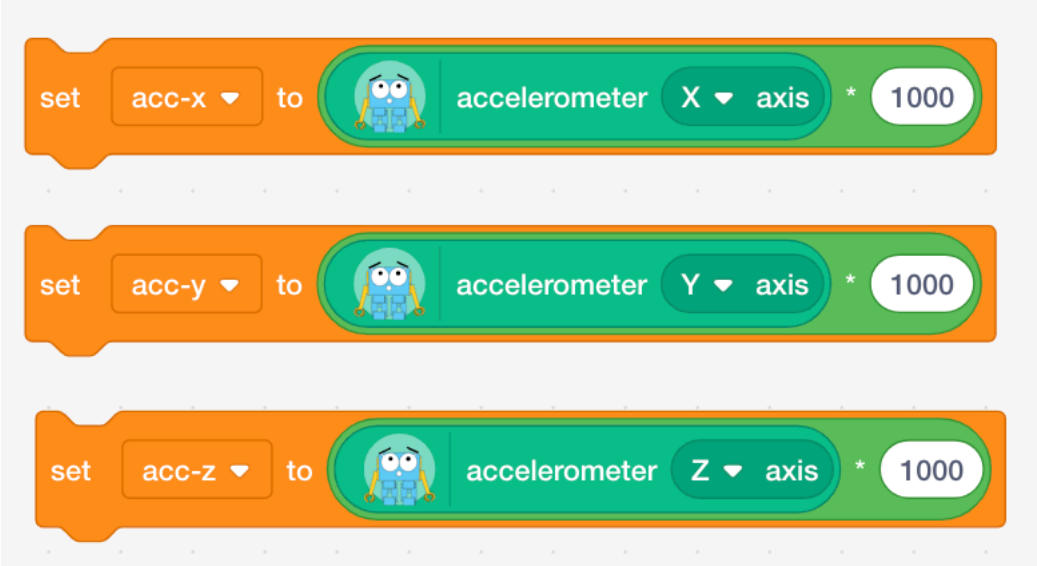


Students should then look to extend this code to create a secret handshake, including sounds and different movements. Encourage the use of functions in their code!

LESSON 1.18

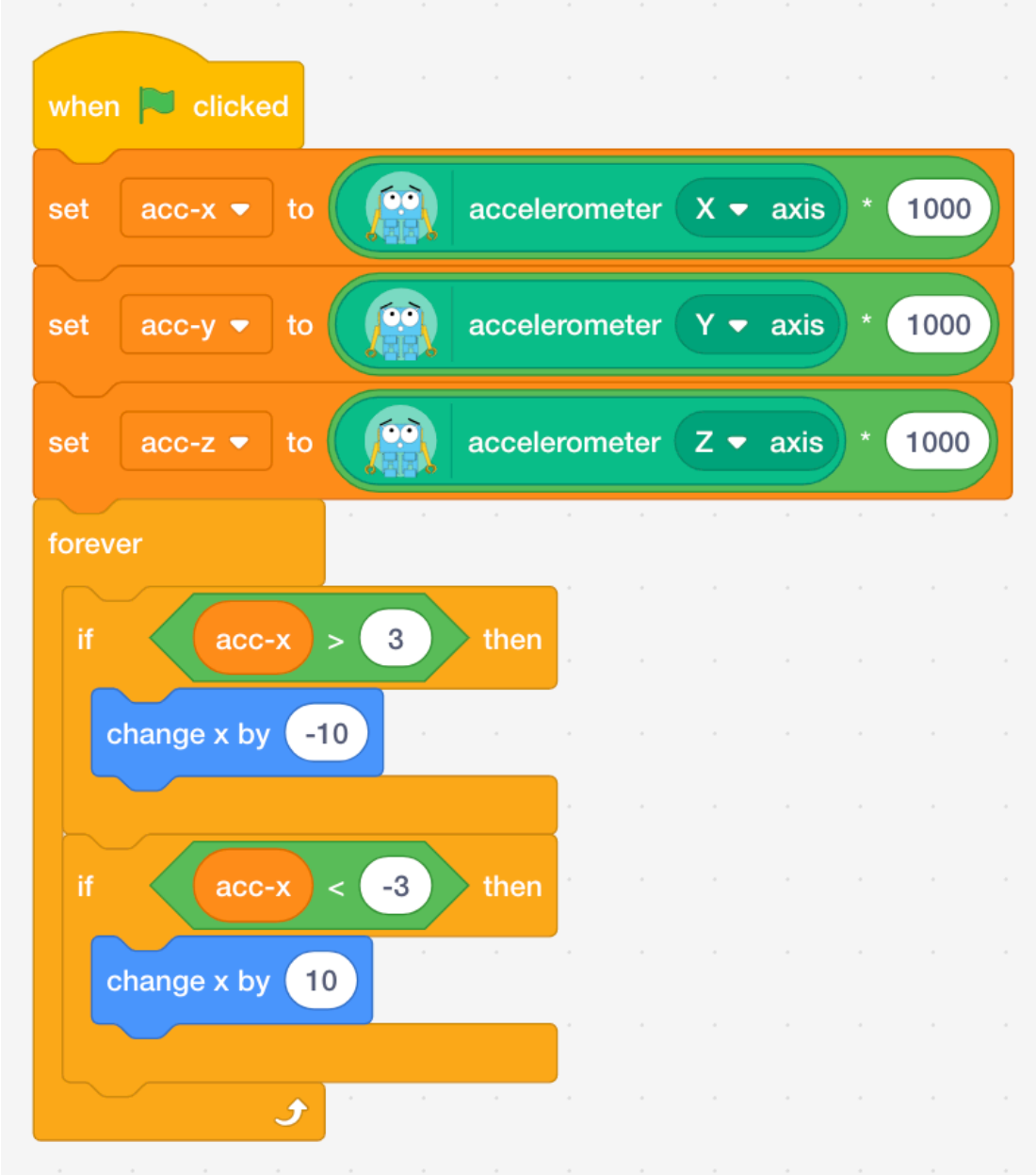
Does Contain	Does Not Contain
Mobile phones Washing machines Robots Smart watches Games controllers (some)	Televisions

Monitor the values for the accelerometer using,



Again, make sure the variables are checked on the variable menu so that they display on the stage for us to monitor!

With one sprite on the screen, here is an example of how you would use Marty as an input to move that sprite,



Note that some values may be different for students depending on the kind of movement that they are doing so always fully test and base things on the table that we filled out in the previous task!

Students can then add elements on the screen that fall or move around for Marty to catch or avoid!