# Information to discuss with students about Makey Makey

# Detailed information for the Learning input section of the unit

# What is a Makey Makey board?

- It is a two-sided circuit board a simple and a complex side.
- The simple side (top side) of the board has 6-inputs the up/down/left/right arrow keys, as well as the space bar and mouse left-click.

# What features are on the Makey Makey boards?

- There are a range of inputs; for example, the up/down/left/right arrow keys, as well as the space bar and mouse left-click.
- There is an 'Earth bar'
- There is a USB connection port.

## How do we connect materials to the Makey Makey boards?

• To connect different materials to the boards you need to the use the alligator clip cables to clip into the hole pair on the board and one to the item you will be using to conduct.

## How do we make the Makey Makey board work?

The following is from Sparkfun's MaKey MaKey Quick Start Guide:

- A connection to a MaKey MaKey input. This can be done using alligator clips on the top side, or jumper wires on the bottom.
- Connection to a MaKey MaKey ground (Earth). Again, you'll connect to earth using either alligator clips or jumper wires.
- Some sort of key material. This is the fun/creative part! There's a world of MaKey MaKey keys out there. Anything that's even slightly conductive is just waiting to become a computer input.
- Something to activate the key, by connecting between the key material and the ground input. Your fingers work pretty well for this. Anything even slightly conductive will do though.
- Activating a key means creating a closed circuit. For the circuit to work, electrons have to be able to flow from the MaKey MaKey input key to MaKey MaKey's ground.

## How do we setup to Makey Makey board?

- 1. Plug in the USB the small end of the cable plugs into the Makey Makey board. The big side plugs into the computer.
- 2. Connect to 'Earth' Using an alligator clip, connect one end to 'Earth' which is located at the bottom of the simple side of the Makey Makey board.
- 3. Connect to yourself Hold the other end of the alligator clip between your fingers. You are now grounded.
- 4. Connect to a button, e.g. 'Right arrow' While you are still 'grounded', touch the 'right arrow' pad on the Makey Makey board. You should see a light on the Makey Makey and your computer will think that the right arrow key was pressed.
- 5. Test with the other key pads to see how each of the other functions work on the simple side of the Makey Makey board.

