What is a Makey Makey anyway?

It’s a micro controller (which is a small computer on a single integrated circuit)! It allows objects that conduct electricity to interact with your computer. Basically that means it will let you use things like play dough or bananas to simulate key presses or mouse clicks. You could play Minecraft with aluminum foil floor pads if you want to.

Here’s what you’ll need to make a Makey Makey controller:

- **Makey Makey Board:**
  - This board will let us interface with the computer.

- **Alligator Clips:**
  - Connect to the makey makey to create circuits.

- **USB cable:**
  - Connects Makey Makey board to the computer.

- **Laptop:**
  - Without it, the Makey Makey is kind of not fun.

You’ll also need stuff that conducts electricity. The point of the makey makey is to convert everyday objects (like bananas, keys, or even people) into keyboard and mouse buttons.

It should look something like this:

- The other end of the clip is attached to an object that will simulate the click.
- When you touch the apple, it will be like clicking the mouse.
- The alligator clip is attached to the click.
- The alligator clip is attached to the ground.
How do I get the Makey Makey to do the thing?
Great question me. Here’s how it works:

**Step 1:** Use the included USB cable to connect the Makey Makey board to the computer.

**Step 2:** Attach one end of another alligator clip to the Earth insertion points (along the bottom of the board).

Humans conduct electricity, so hold the other end of the alligator clip to continue the circuit.

**WHAT’S THE EARTH** (besides the planet we live on... for now)?! The Earth, often called a ground, is the path upon which electricity returns to the power source. Like a ski lift that returns skiers back to the top of the mountain.
Step 3: Attach one end of an alligator clip to the **click** insertion points on the board (or any of the other labeled insertion points).

Connect another alligator clip to the **click** insertion points.

Keep your fingers on the ground alligator clip.

Now, when you touch the alligator clip attached to the **click** insertion points you can simulate a click (or a space, or an arrow key press).

Look for the green light to verify that you activated the button.

Step 4: Add other elements to your circuit. See what else conducts electricity. A banana? A baby?

Bananas conduct electricity! You can attach the alligator clip to a banana and use it to press keys.
A diagram of the Makey Makey:

And this is the front:

Earth (or ground).

Arrow controls.

Space and Click controls.

This is the back:

USB connector.

Mouse and arrow controls.

W, A, S, D, F, and G controls.

Ground.

Some ideas for conductive materials:

- Most fruits and vegetables work great
- Plants can work too! Nothing too dry.
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- Lots of other food works. Marshmallows, gummies, macaroni and cheese...
- Play-doh and clays work very well as long as they stay moist.

YOU’RE DONE! HERE’S SOME NEXT STEPS YOU COULD TAKE:

Play some games with the Makey Makey: Head over to scratch.mit.edu and you can play user created games... with bananas.

Try the Full body controller: The ideaLAB has a full body controller (it’s got foot pads, and a hammer that you use to click... it’s amazing). See if you can hook it up.

A tutorial?!: There’s a great little tutorial at makeymakey.com/howto.php, check it out!