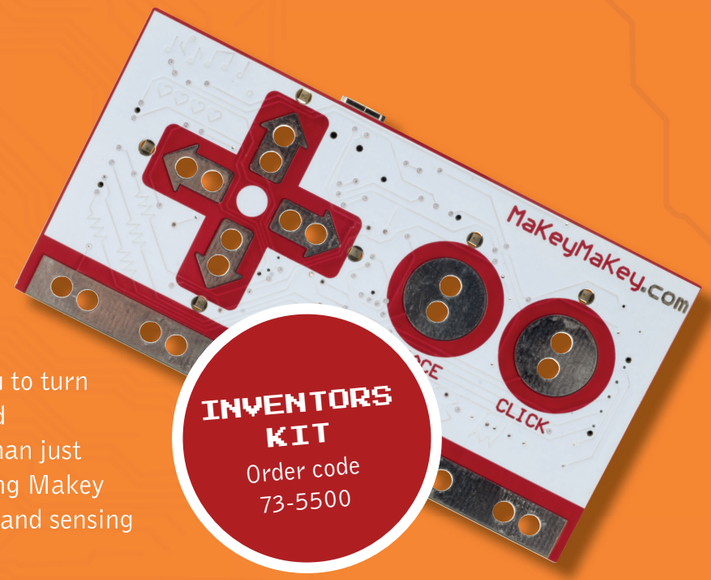
Makey Makey™



INVENTORS KIT
Order code
73-5500

Makey Makey is an invention kit that allows you to turn everyday items into a touch pad that can be used to control your computer. But it is much more than just a replacement for your keyboard – by integrating Makey Makey with Scratch, you can now bring control and sensing to your programs.

So what is so cool about Makey Makey?

Well, you can turn just about anything that is conductive into an input device for your computer. Tin foil, fruit and veg, or just by drawing a shape with a normal pencil, the list goes on and on.

Your students will learn about conductivity as well as getting to design their own input device or adding additional functionality to their Scratch programs.

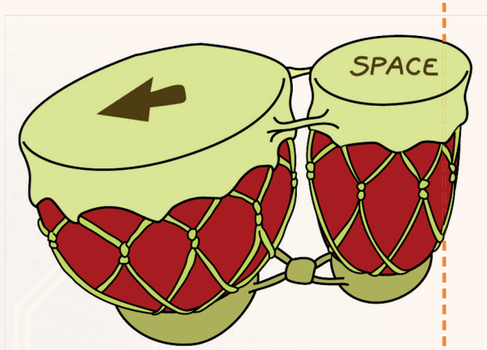
PROJECT IDEAS

Sounds great, so give me some examples of what I could do.

OK, let's start with something really simple – some Play Dough bongos. You can use off-the-shelf stuff or make your own from basic store-cupboard ingredients. Check out our Makey Makey page for a recipe!

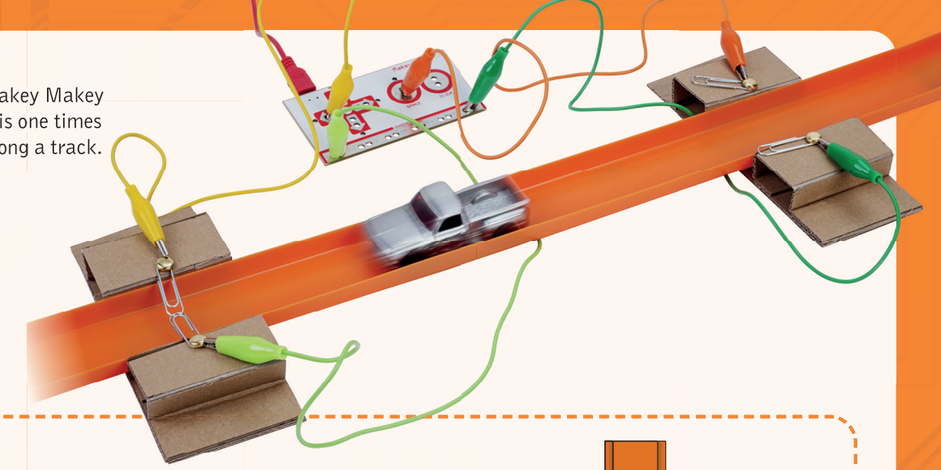
Example 1

1) Once you have some Play Dough, make a couple of bongo shapes, one larger and one smaller.
2) Now visit **apps.makeymakey.com/bongos** in your browser.
3) Plug your Makey Makey into your USB port.
4) Connect one crocodile clip lead to the left arrow pad and put the other end in the large bongo. Now connect another crocodile clip to the space pad and put the other end in the small bongo.
5) Make sure you are touching the earth on the Makey Makey with one hand and play the Play Dough bongos with the other!



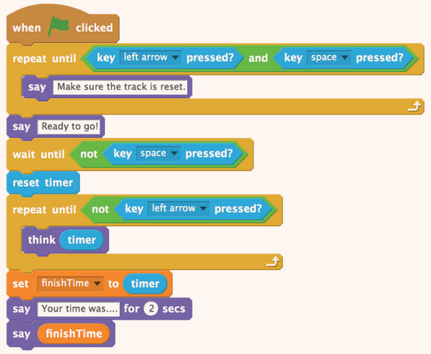
www.rapidonline.com/makeymakey

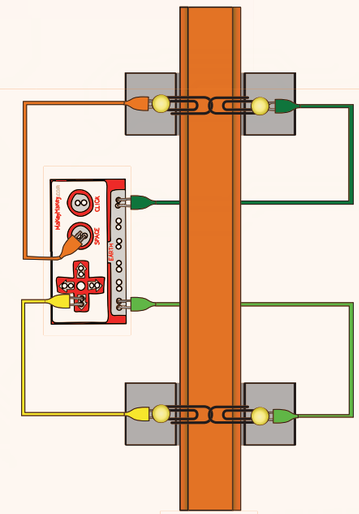
Now try integrating your Makey Makey with a Scratch program. This one times a small toy car travelling along a track. You'll need some card, split pins, paperclips, a car and some track. You'll also need Scratch running on a computer with your Makey Makey connected to it.



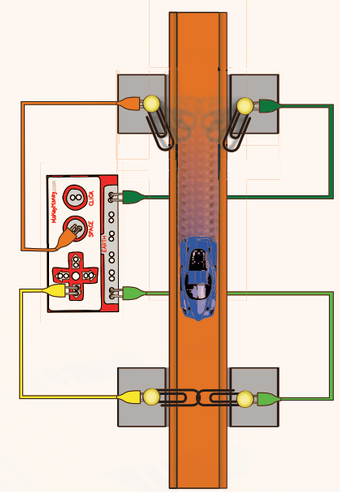
Example 2

1) Using card, paper fasteners and paper clips, make some gates to suit your car track similar to those shown. The aim is to make the paperclips touch when the gate is closed and so they can be pushed open by the car as it passes through.
2) Place the gates one metre apart near the end of the track.
3) Connect one side of each gate to the earth of the Makey Makey.
4) Connect the first gate to the space pad and the second gate to the left arrow.
5) In Scratch, create the program as shown and run it.





6) Make sure both gates are closed, the program will prompt you if they aren't. You will also see green lights on the Makey Makey next to the arrow and space keys if your gates are closed.
7) Run the car down your track – the program will time how long it takes to pass between the two gates.



Can you modify the program to tell you the speed in metres per second?