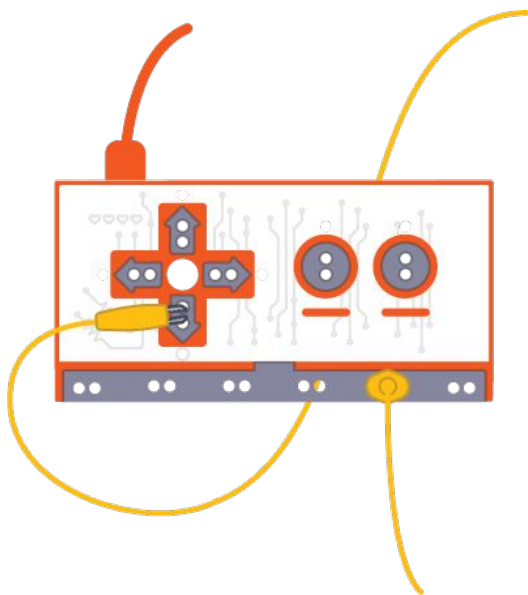




Makey Makey Cards



**Make projects that connect to the
physical world with Makey Makey!**



Cards in This Pack

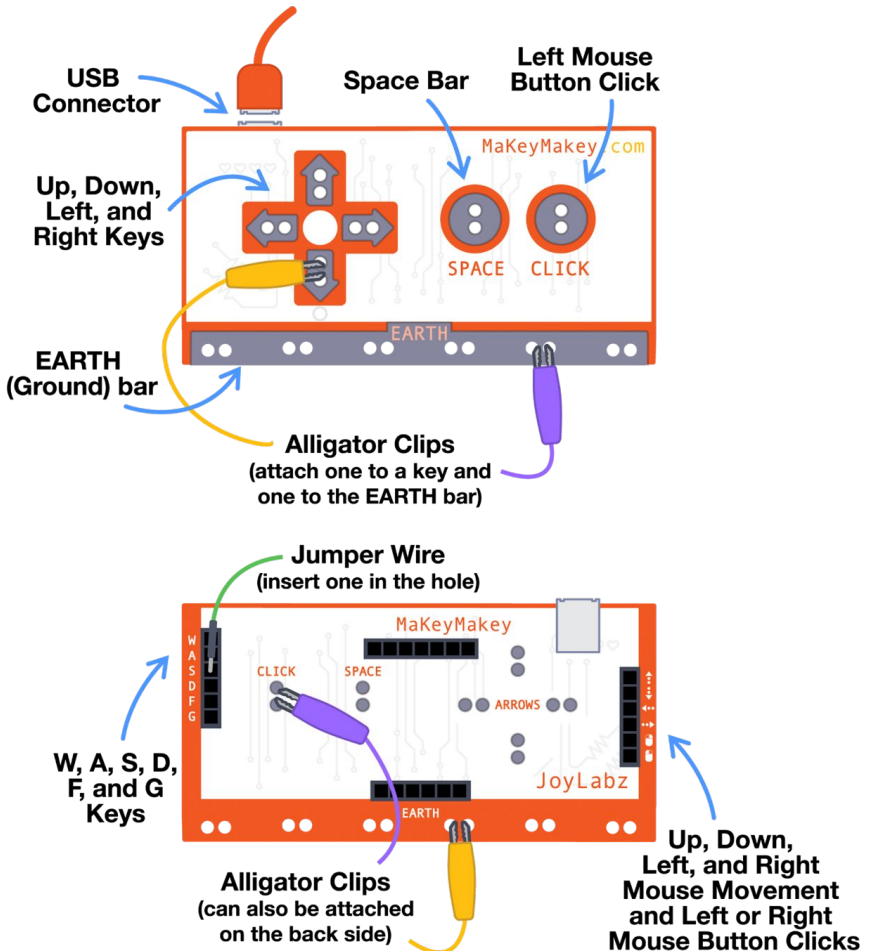
- Makey Makey Hardware and Blocks
- Set Up Makey Makey

Try These Cards In Any Order:

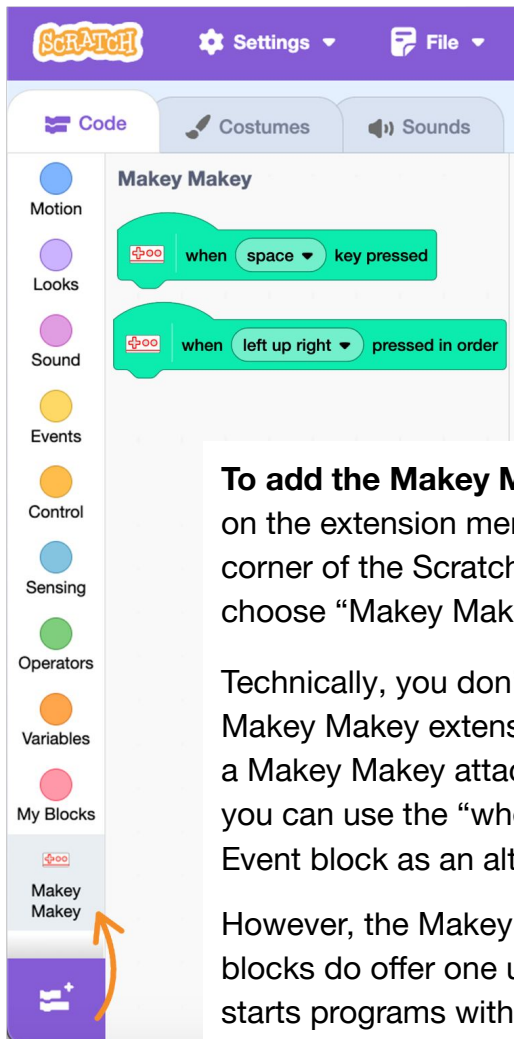
- Electric High Five
- Secret Code
- Foil Piano
- Art Comes Alive

Or combine with other cards like “Make It Fly” to create an external keyboard to control a game!

Makey Makey Hardware



Makey Makey Blocks

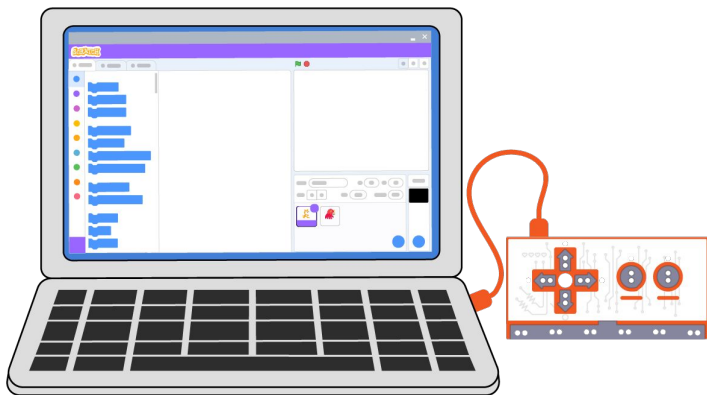


To add the Makey Makey extension, click on the extension menu in the lower-left corner of the Scratch project editor and choose “Makey Makey.”

Technically, you don’t have to use the Makey Makey extension blocks. If you have a Makey Makey attached to your computer, you can use the “when _ key pressed” Event block as an alternative.

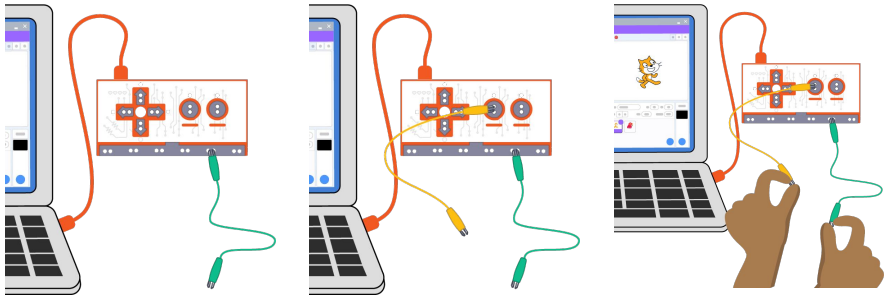
However, the Makey Makey extension blocks do offer one unique hat block that starts programs with a key sequence.

Set Up Makey Makey



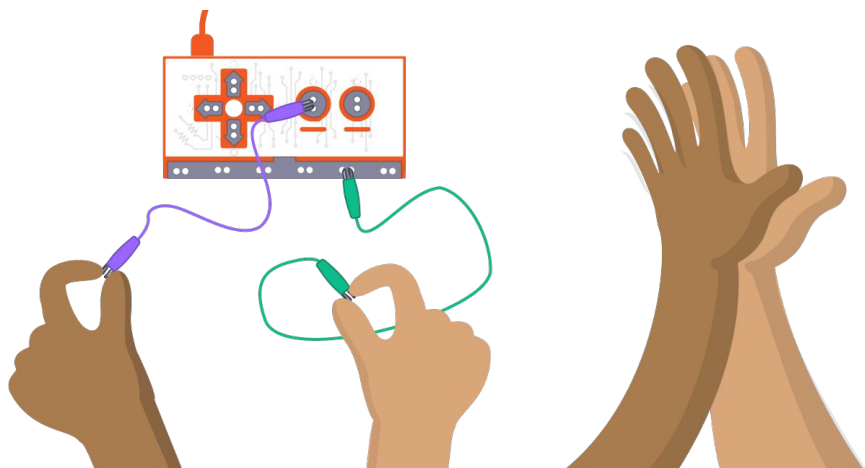
Instructions:

1. Plug the Makey Makey Board into your computer using the provided cable. You should see a light turn on on the board to know it is connected properly. (There is no need to install drivers, etc.)
2. Open Scratch and create a new project.



3. Connect an alligator clip to any set of holes along the “EARTH” strip on the bottom of the board.
4. Connect an alligator clip to any of the holes aligned with a keyboard key.
5. Create a script to run when that keyboard key is pressed.
6. Close the circuit to make the program register that keyboard key was pressed by holding the metal part of each alligator clip (key and EARTH).

Electric High Five



Instructions:

1. Connect one alligator clip to EARTH.
2. Connect a second alligator clip to a keyboard key.
3. Have each person touch an alligator clip and give a high five to close the circuit and see the result!

Makey Makey: Electric High Five

scratch.mit.edu

GET READY



Choose any
sprite.

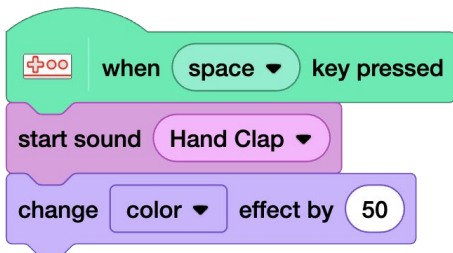


Pico

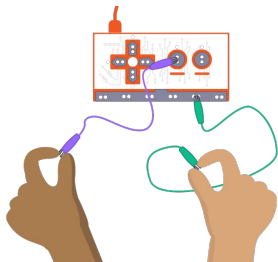
Find a
partner.



ADD CODE AND TEST



Add code to happen when the keyboard key is pressed. (You can use the Makey Makey extension hat block or the Event hat block.)

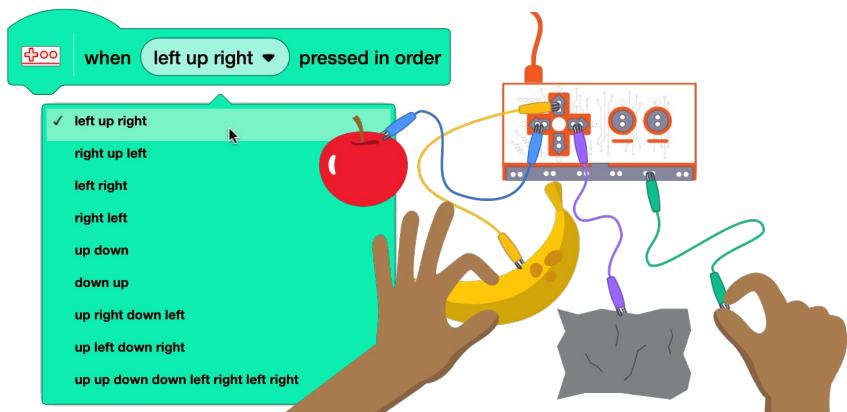


One person holds the alligator clip connected to the keyboard key. The other holds the clip connected to EARTH.



Now, give a high five to close the circuit and run your code!

Secret Code



Instructions:

1. Use a unique block available under the Makey Makey Extension.
2. Select a keyboard combination to activate your secret code program.
3. Touch the alligator clips or connected conductive objects in the right order to close the circuit and see the result!

Makey Makey: Secret Code

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GET READY



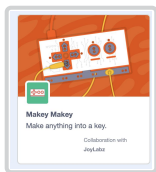
Choose any
sprite.



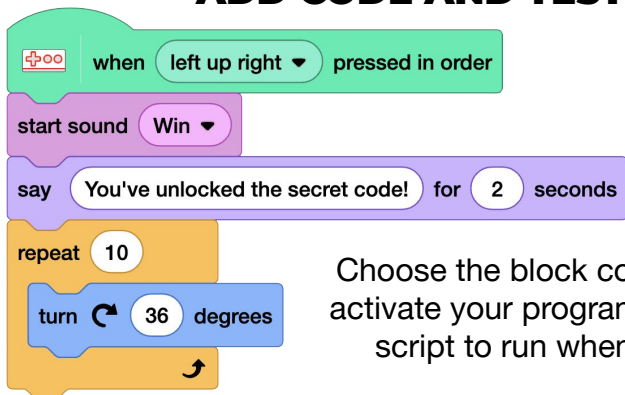
Pico



Add the Makey
Makey Extension.



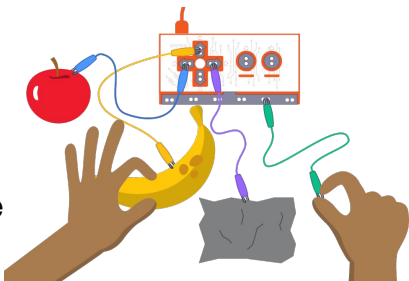
ADD CODE AND TEST



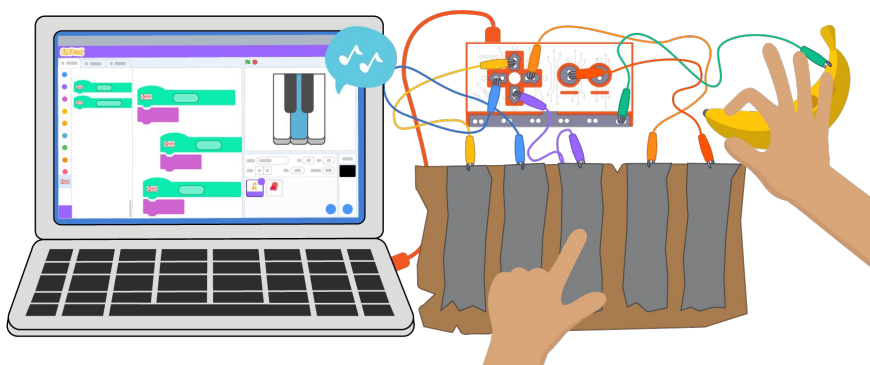
Choose the block combination to
activate your program, and write a
script to run when received.

Close the circuit to register
each keyboard press by
touching EARTH and each
keyboard input in order.

Debug your code and test the
conductivity of materials by
trying actual keyboard keys
versus the Makey Makey.



Foil Piano



Instructions:

1. Connect one alligator clip to EARTH and various alligator clips to multiple keyboard keys, which will represent various musical notes.
2. Code a project so key presses play different notes.
3. Use foil, bananas, Play-doh, or other conductive materials as external keys.

Makey Makey: Foil Piano

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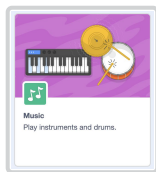
GET READY



Choose any
sprite or draw
your own.



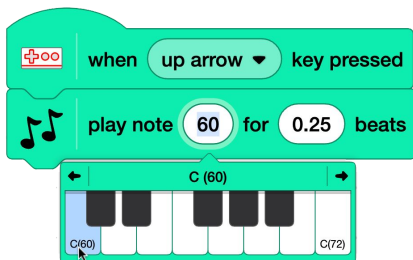
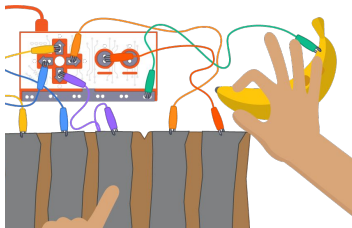
Optional: add the
Music Extension.



ADD CODE AND TEST



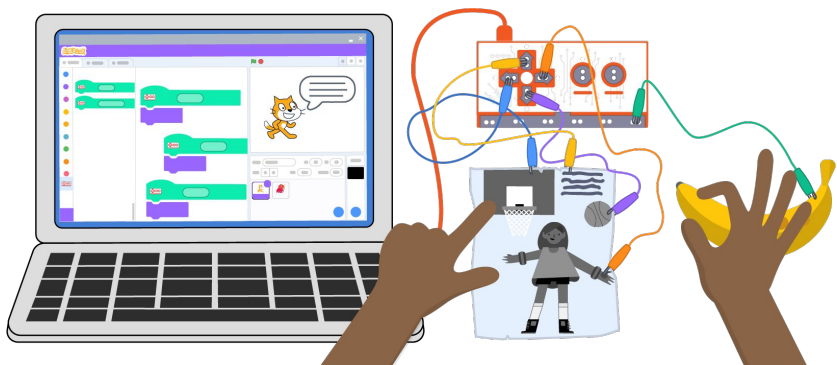
Select note sounds in
the Sound library to
play when different
keyboard keys are
pressed. (You can use
the Makey Makey
extension hat block or
the Event hat block.)



Or add the Music Extension
and select notes to play when
different keyboard keys are
pressed. Notes can be
customized for beat count
and instrument.

Close the circuit to register
each keyboard press by
touching EARTH and a
keyboard input.

Art Comes Alive



Instructions:

1. Create a drawing, informational sheet, poem, or poster you want to connect to the digital space.
2. Use a graphite pencil, foil, conductive tape, or conductive paint to create connection points with pieces.
3. Use Makey Makey and Scratch to provide additional information when participants interact with your work.

Makey Makey: Art Comes Alive

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GET READY



Choose any
sprite.

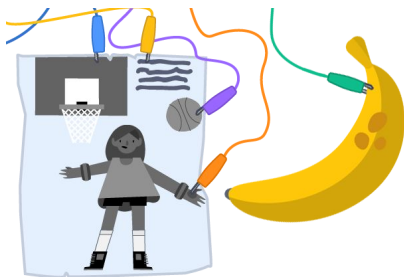


Pico

Create
your
drawing.



ADD CODE AND TEST



Connect different pieces of
your drawing to alligator clips.
Make sure the conductive
pieces don't overlap, so only
one key is registered as
pressed at a time. Don't forget
to connect EARTH!

Add code to play a sound (like
a recording of your voice) or
have your sprite say
something when
different pieces of
the drawing are touched.

