



# Home learning

\*In case of a lockdown, the school can lend the material to children for some time after signing a responsibility contract with their families.

## We will learn...

- To use Scratch and Makey Makey to give percussion DIY instruments real percussion instrument timbers.
- To distinguish among different instrument timbers.
- About electrical circuits.
- About conductive and insulator materials.
- To develop basic coding skills.

## Connections

Related ideas that we need to know before we start.

### Did you know?

**Conductivity:** is the property of allowing heat or electricity to go through something.

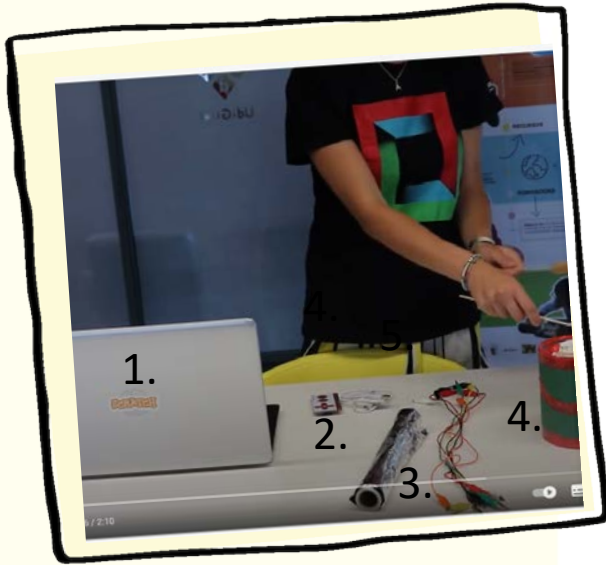
**Electronic instruments:** produce or change sounds using electricity.

This Capsule that you are starting is about giving **different timbers and pitches** to your DIY percussion instruments. For later, form a band and put your musical skills in practice.



Get ready!

Collect the materials that you will need to create your drum kit.



## Materials

Tick the materials that you already have

- 1. Computer with access to Scratch
- 2. Makey Makey
- 3. Tin foil paper
- 4. DIY percussion musical instrument

Other materials

Are you missing a material?  
For which one could you replace it?  
Will you use others as props?  
Write them down.

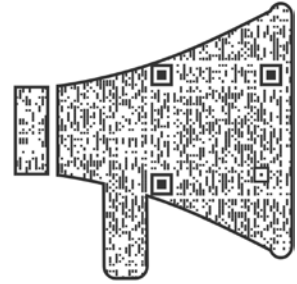
Imagine

Which steps do you imagine you will have to follow? Draw/name them.

*Let's create!*

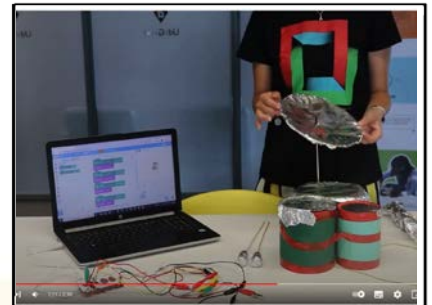
Follow the instructions and ask for an adult supervision when necessary.

1. Scan the QR code to follow the video tutorial.



2. Cover the **drumsticks tip** with tin foil paper.

3. Also, the top head of the toms, the bass drum and the cymbal.



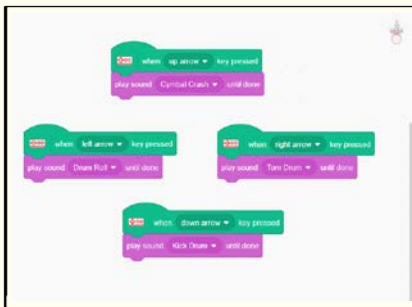
4. Why do you think we are using tin foil paper? Scan the QR code to find out more.



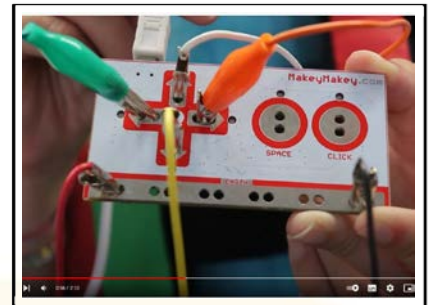
5. Open the Makey Makey **Scratch extension** on the computer and connect the **Makey Makey board** using the white USB cable.



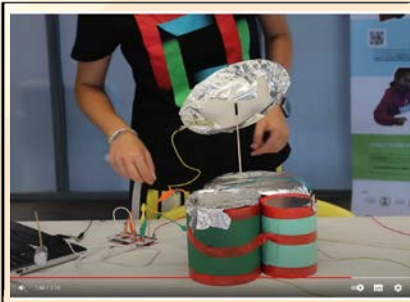
6. Program different sounds for each Makey Makey board key: up, down, right and left arrows.



7. Connect the **alligator pegs** from the Makey Makey board to each of the drum set parts tom head.



8. Then, connect an alligator cable from **Makey Makey Earth** to each drumstick. Does it play your Scratch program?



## Play and share

Draw the before and after of your drum set.

I shared my new drum kit with



## Reflect

Choose one of the following questions and develop its answer.

1. Explain why your drum kit has become or not an electronic instrument.
2. Explain with your own words why you could play the sounds you had programmed in Scratch.
3. Explain a problem you encountered and how you solved it.

How many stars will you  
give to your critical  
thinking? Colour them!





# School Workshop

\*\* Otherwise, children do the Educative Capsule Drum Kit at home and the Electric Drum Kit at school, giving them the opportunity to work with materials that wouldn't get to know in another context as Makey Makey might not be affordable for all families.



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## Reflect

Choose one of the following questions and develop its answer.

1. Explain why your drum kit has become or not an electronic instrument.
2. Explain with your own words why you could play the sounds you had programmed in Scratch.
3. Explain a problem you encountered and how you solved it.

How many stars will you give to your critical thinking? Colour them!

