

## Hipercubo lab

<https://hipercubolab.com/cursos/visualizacion-de-datos-biologicos-con-touchdesigner-arduino/lecciones/software/>

<https://hipercubolab.com/cursos/visualizacion-de-datos-biologicos-con-touchdesigner-arduino/lecciones/grabaciones/>

## Arduino:

<https://www.arduino.cc/>

12v-5v

Tipos:

Uno (para prototipos)

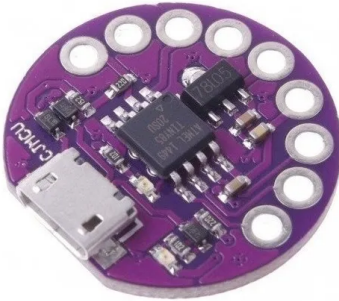
nano

lilypad

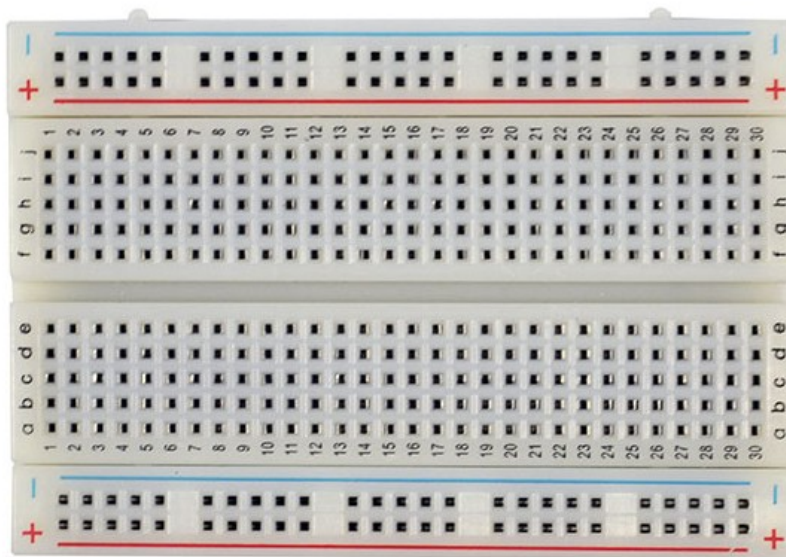
micro

Mega

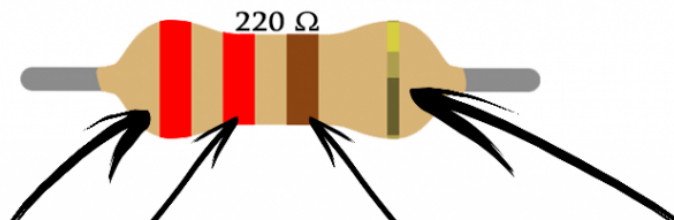




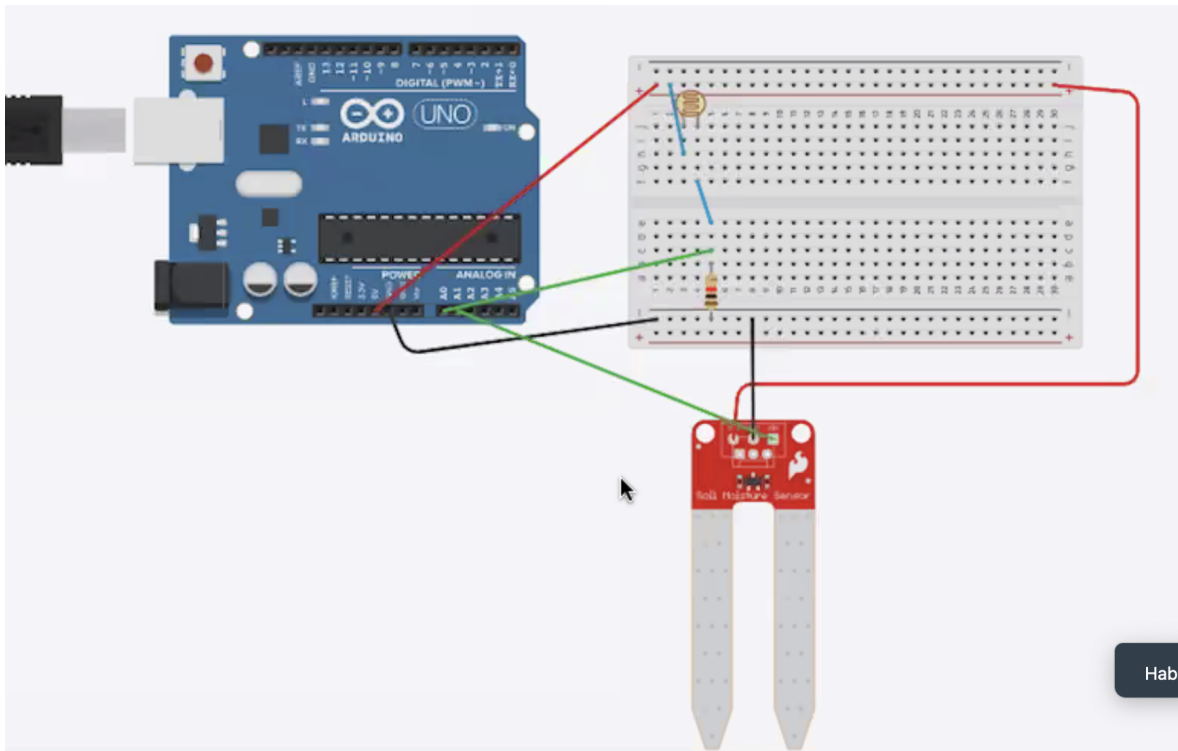
## Protoboard



## Resistencias



Color	Banda 1	Banda 2	Banda 3 (multiplicadora)	Tolerancia
Negro	0	0 x1		
Café	1	1 x10		1%
Rojo	2	2 x100		2%
Naranja	3	3 x1000		
Amarillo	4	4 x10000		
Verde	5	5 x100000		0.5%
Azul	6	6 x1000000		0.25%
Morado	7	7 x10000000		0.10%
Gris	8	8 x100000000		0.05%
Blanco	9	9 x1000000000		
				Dorado 5%
				Plata 10%



## Colectivo Electrobiota: Laboratorio Rizosférico

<https://www.gabrielamunguia.com/laboratorio-rizosferico/>

**Autodesk tinkercad** (Diseño 3D)

<https://www.tinkercad.com/>

kinetronica (tienda por copilco)

<http://www.kinetroni.com/>

**TouchDesinger**

<https://derivative.ca/download/archive#tab-1-3>

[https://docs.derivative.ca/AbsTime\\_Class](https://docs.derivative.ca/AbsTime_Class)

**Taller INA**

<https://www.youtube.com/watch?v=z8UGrWeM1Ks>

**Python y TouchDesinger**

<https://www.youtube.com/watch?v=OpYMClweT6I&list=PLs0WIHa1rf209Yir05SuEquDbAq2DGNjs>

<https://www.youtube.com/watch?v=XqCnm0LN0mM>

[https://www.youtube.com/watch?v=Z\\_WfldiO6HI&list=PLFrhecWXVn5862cxJgysq9PYSjLdfNiHz](https://www.youtube.com/watch?v=Z_WfldiO6HI&list=PLFrhecWXVn5862cxJgysq9PYSjLdfNiHz)

<https://www.youtube.com/watch?v=0nI8V7XZ7yk>

**pythorch**

<https://www.youtube.com/watch?v=v3hTD9m2tM8>

**blender**

<https://www.youtube.com/watch?v=k043OByAG-4>

**Generador de Arte**

<https://www.youtube.com/watch?v=qtPi0JvmWbs>

**SuperCollider**

<https://www.youtube.com/watch?v=FkWMFjU7t0Y>

<https://www.youtube.com/watch?v=vhGUo-a8SjU>

**Codigo ascii**

<https://elcodigoascii.com.ar/>

**Open Sound Control**

[https://es.wikipedia.org/wiki/Open\\_Sound\\_Control](https://es.wikipedia.org/wiki/Open_Sound_Control)