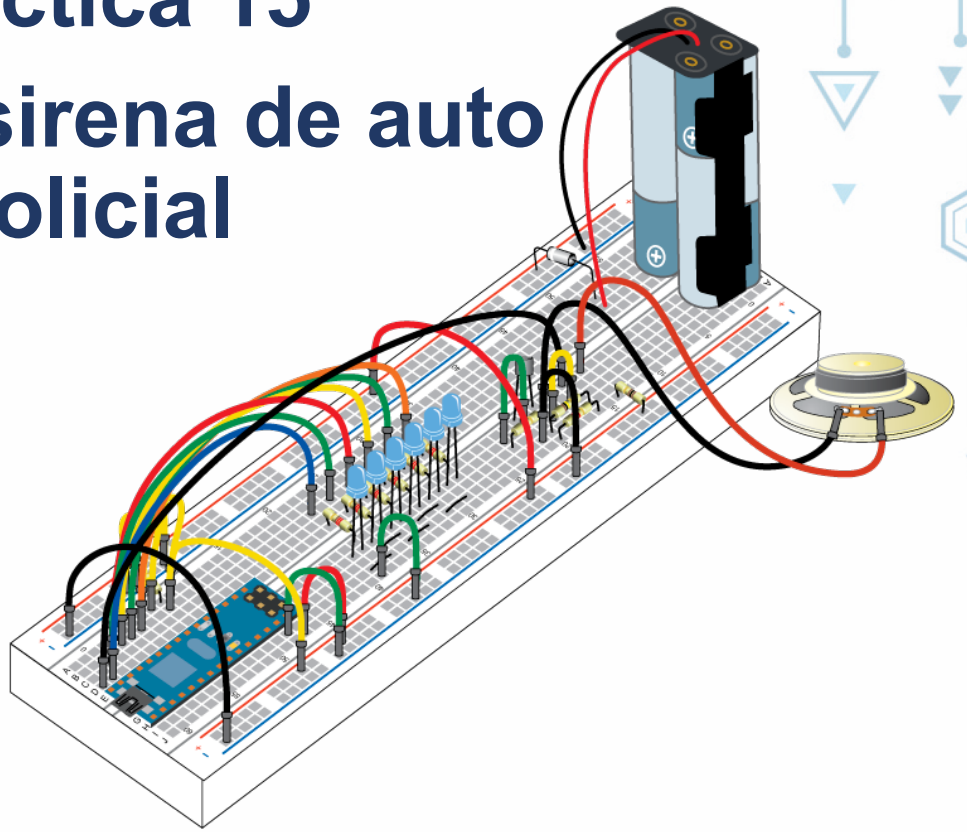
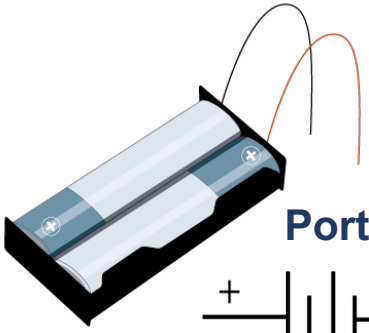
Electrónica Junior

Práctica 15

Luces y sirena de auto policial

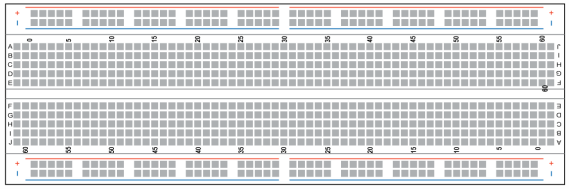


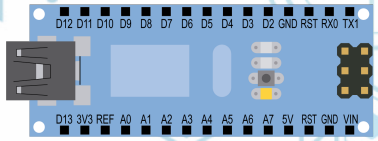
Materiales



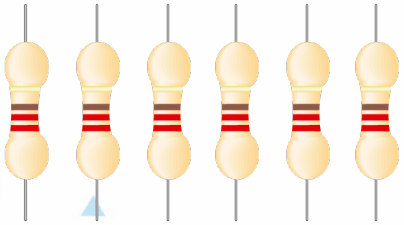
Portapilas

Protoboard





Tarjeta Arduino No. 1



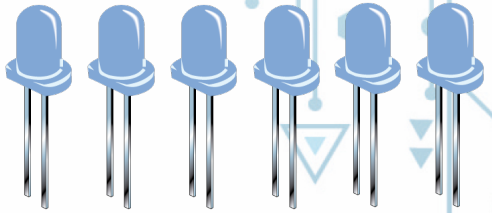
6 resistencias 220 ohm

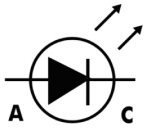
10 K

2 de 100 K

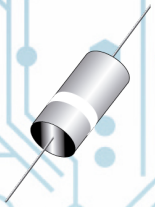
2.2 K

10 ohms

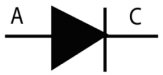




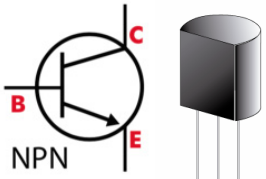
6 diodos leds



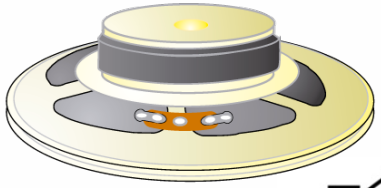
1 diodo rectificador

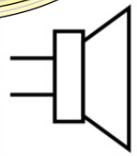


Cables de distintos tamaños



Transistor BC547



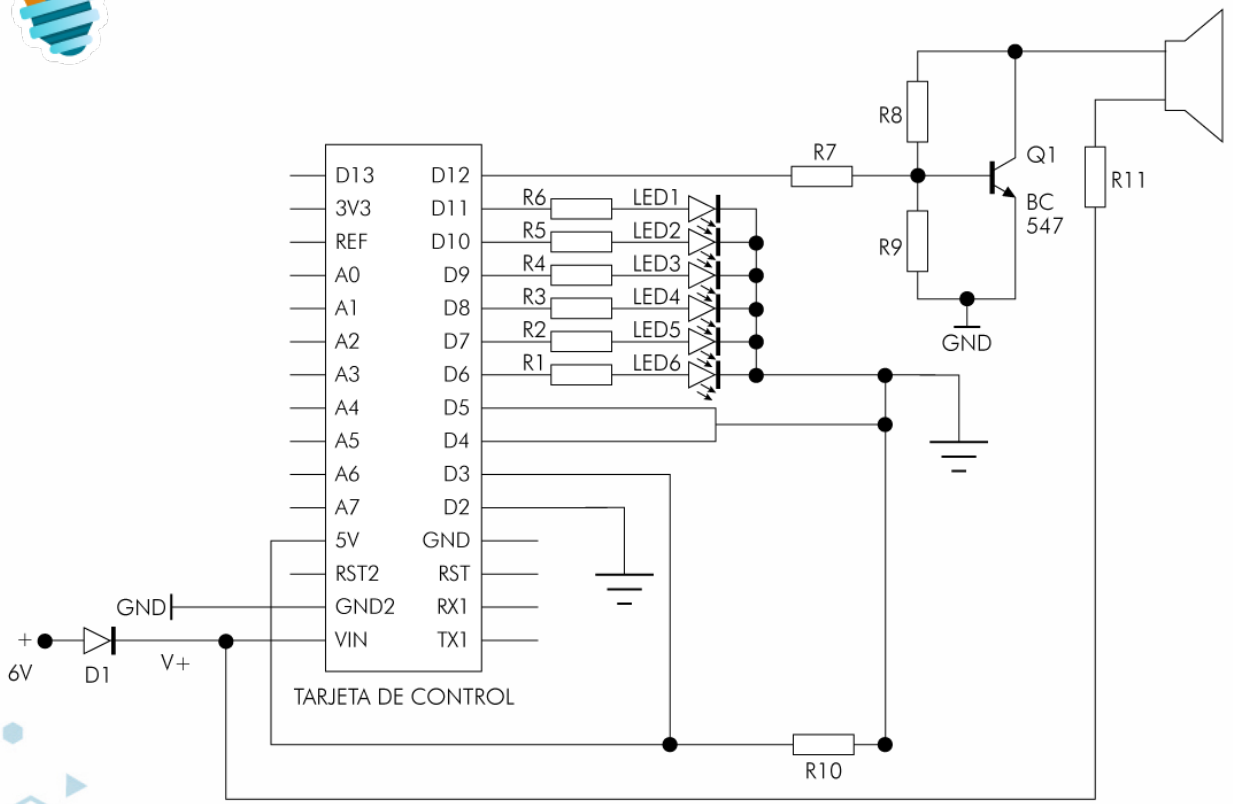


Bocina

4 minutos

Electrónica Junior

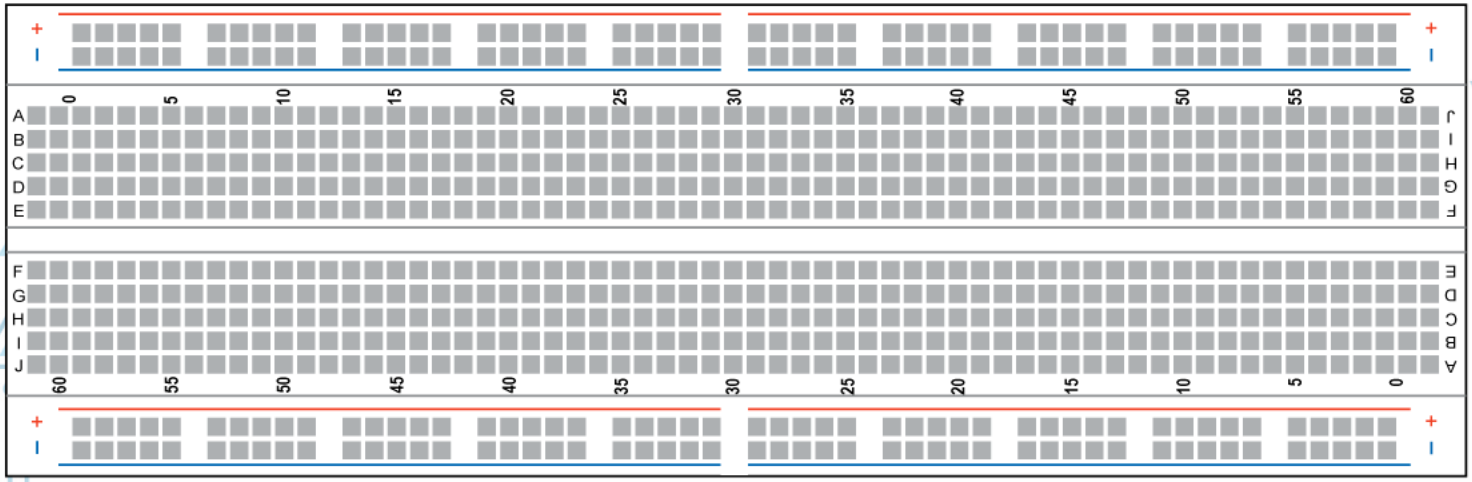
Diagrama esquemático



2 minutos

Electrónica Junior

¿Cómo funciona la Protoboard?

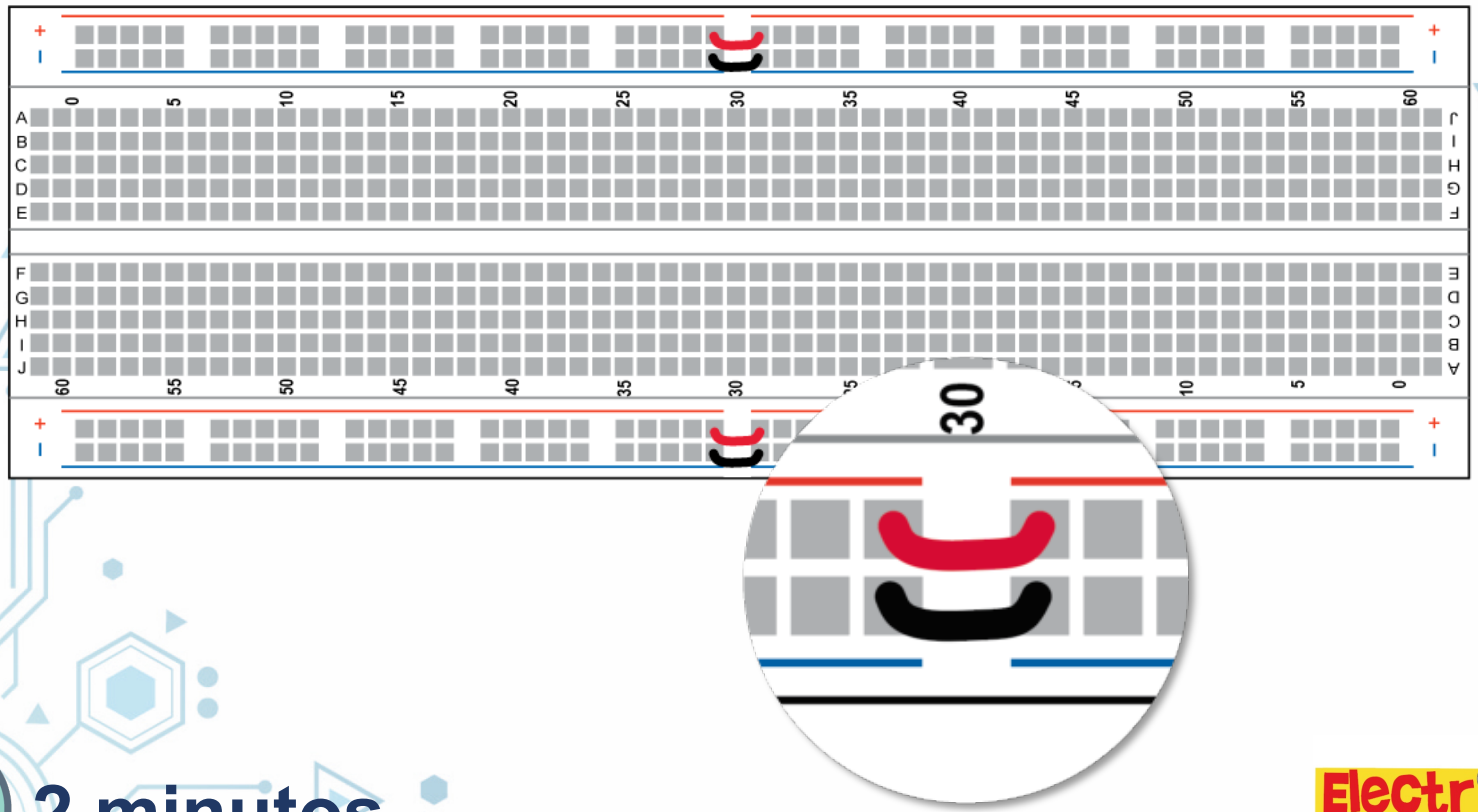


2 minutos

Electrónica Junior

Coloca puentes en las líneas de voltaje de ambos extremos

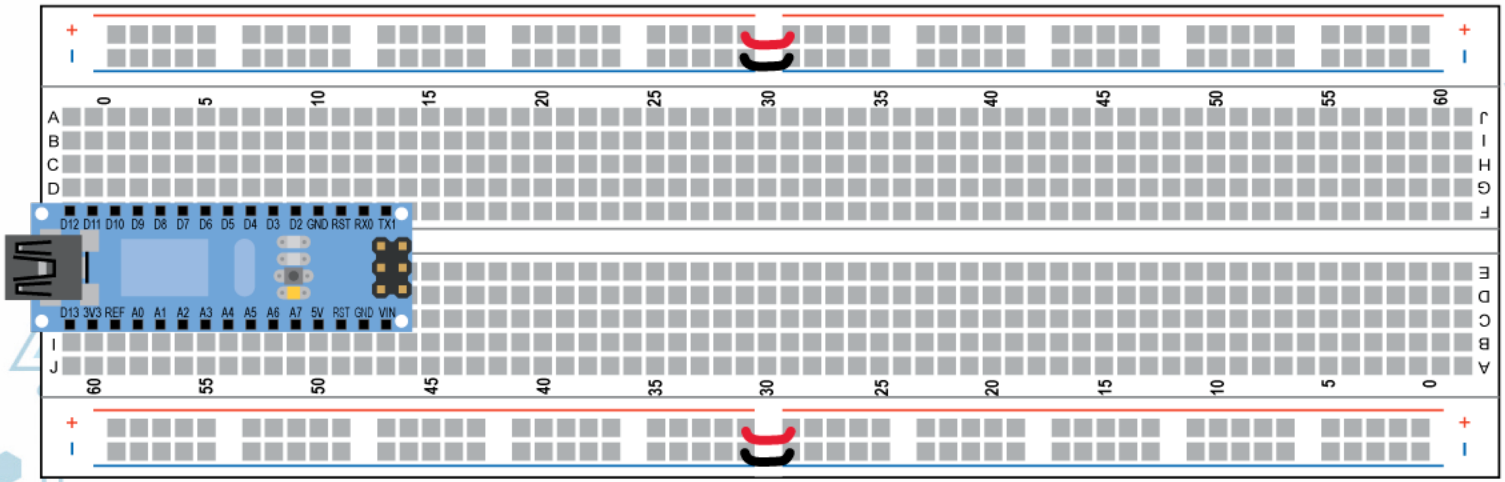
(si tu protoboard es continua, omite este paso)



2 minutos

Electrónica Junior

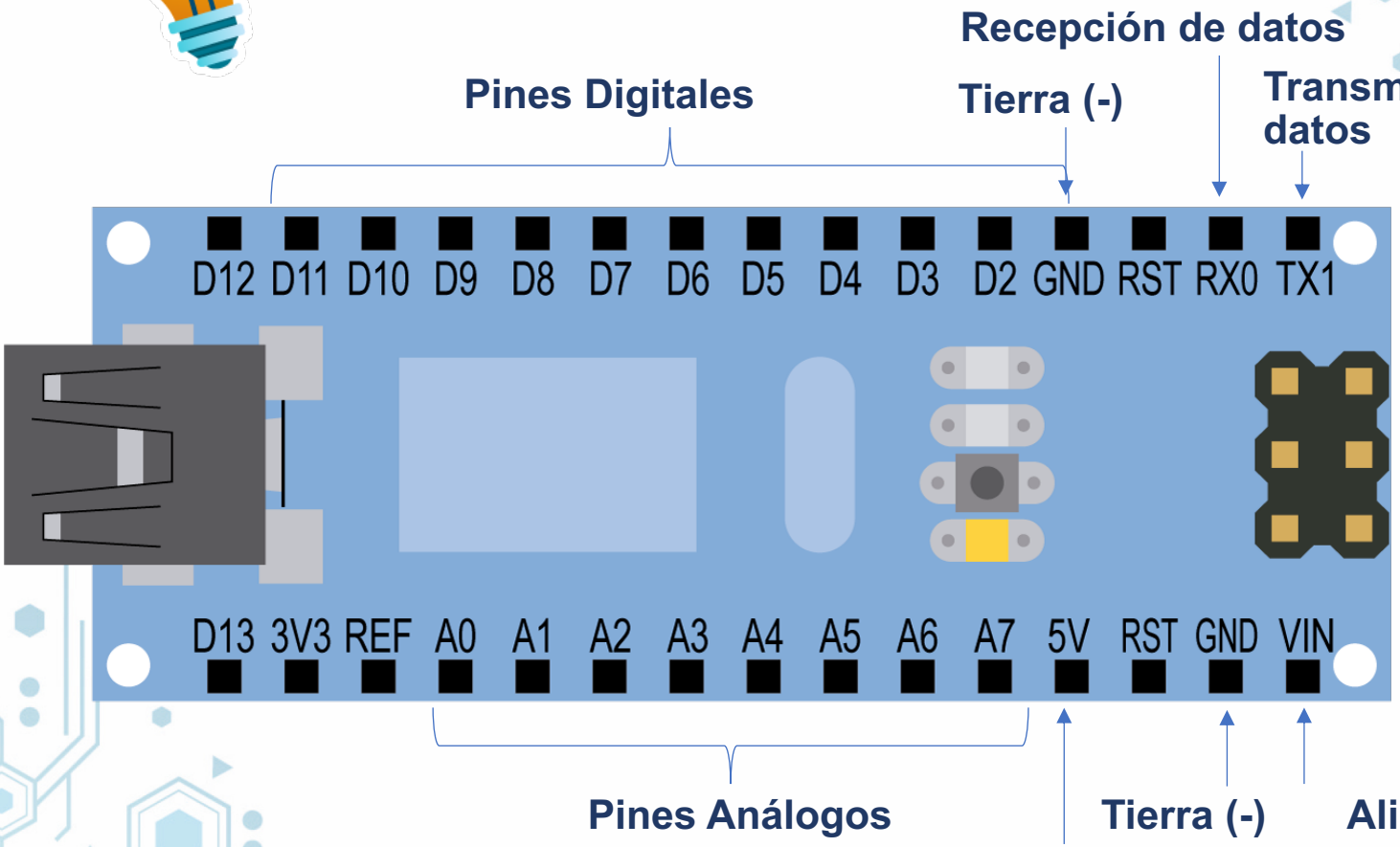
Coloca la Tarjeta Arduino



2 minutos

Electrónica Junior

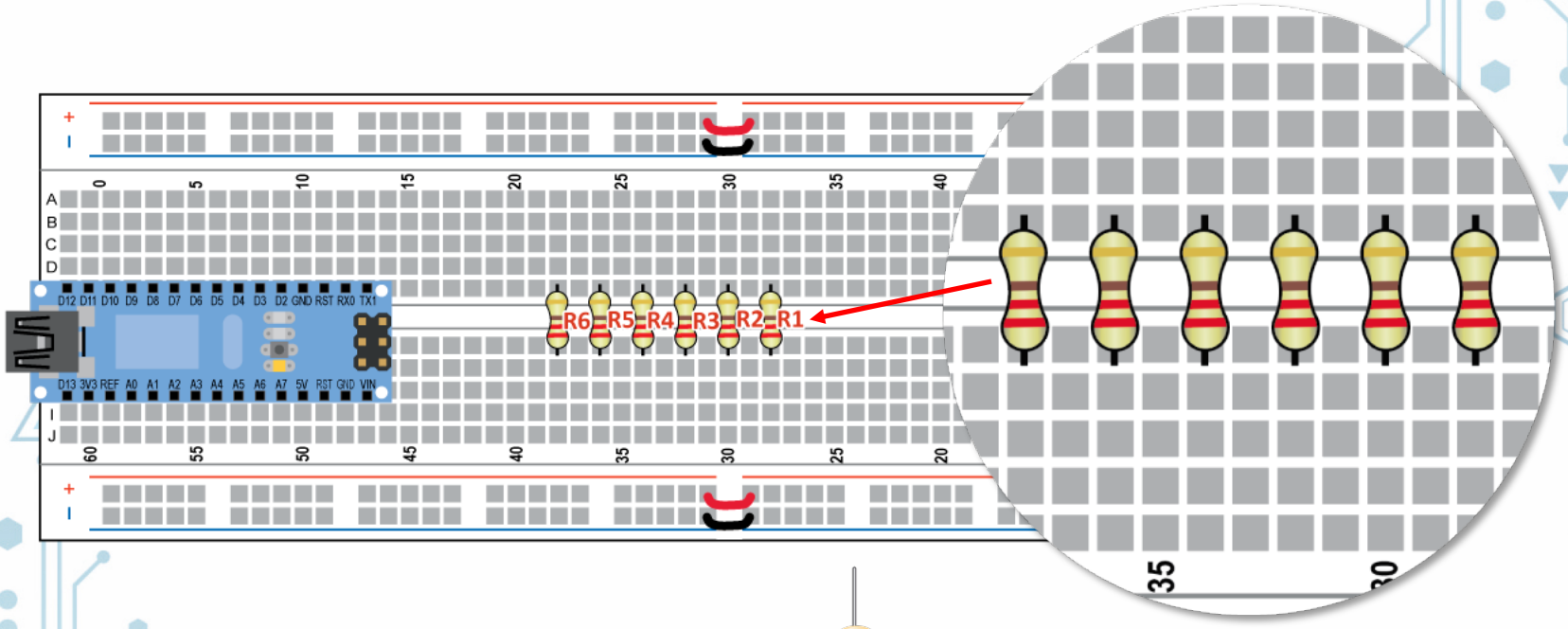
Identifica las terminales



3 minutos

Electrónica Junior

Conecta las 6 resistencias, recuerda su funcionamiento

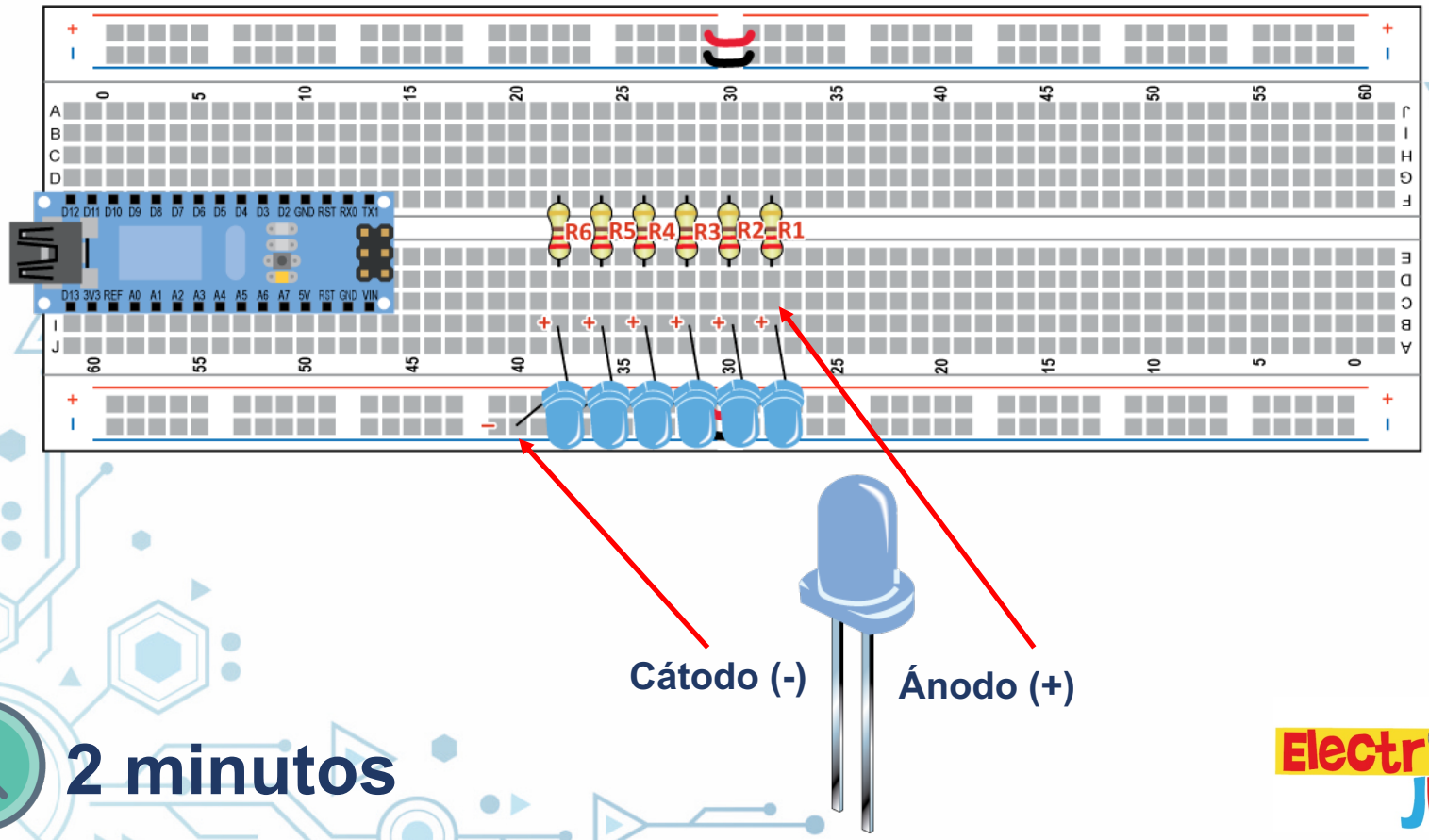


220 Ohms
rojo-rojo-café-dorado

3 minutos

Electrónica Junior

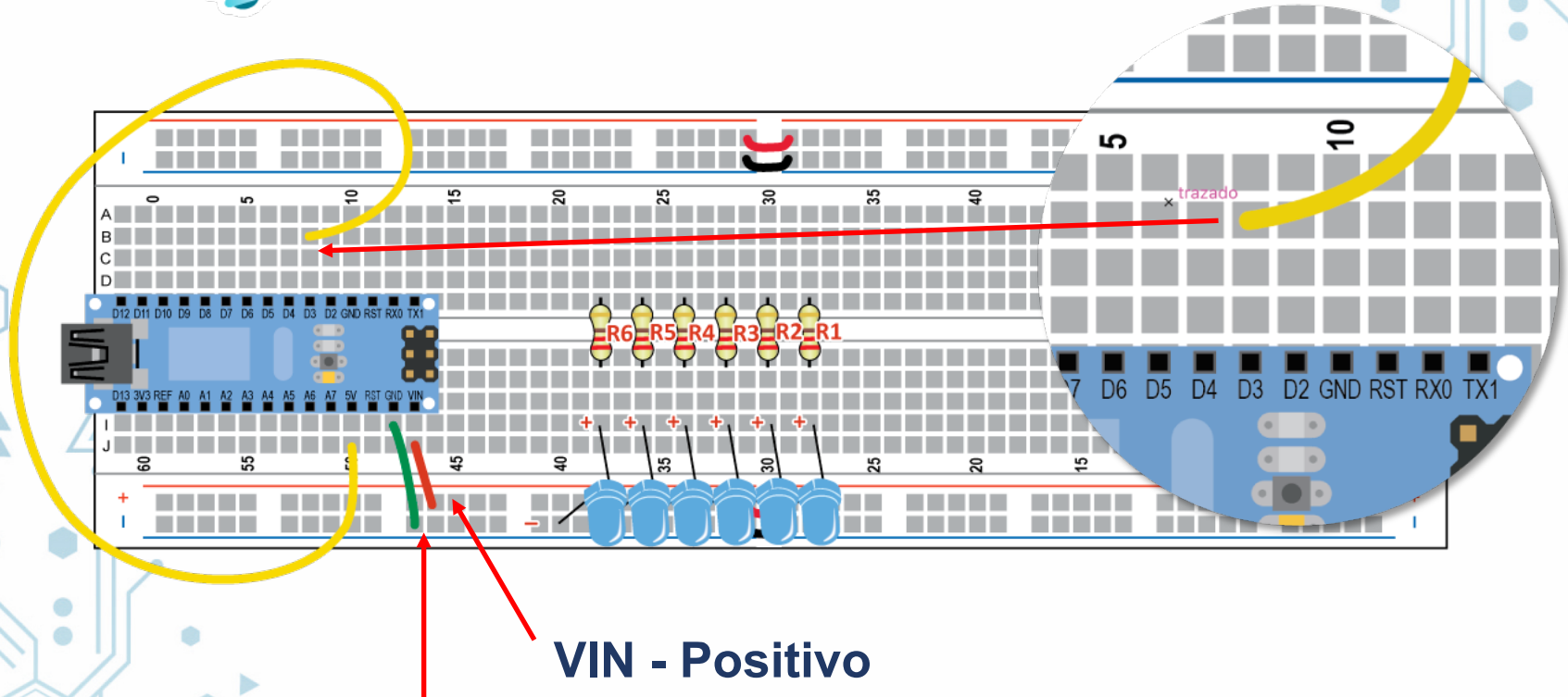
Conecta los 6 diodos leds, recuerda la polaridad



2 minutos

Electrónica Junior

Conecta la alimentación de la tarjeta y el puente de 5V a D3



2 minutos

Electrónica Junior

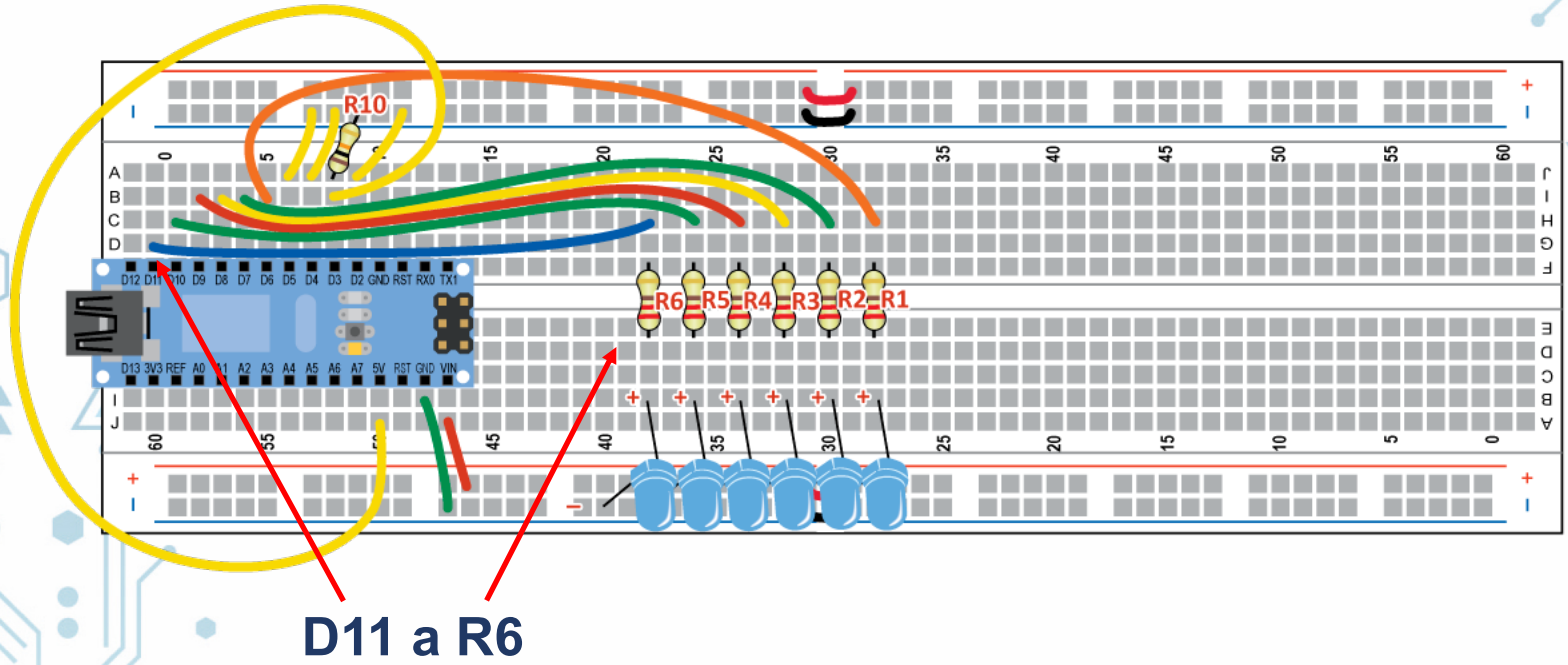
Conecta la otra resistencia en D3 y los 3 puentes

10 K
café-negro-naranja-dorado

2 minutos

Electrónica Junior

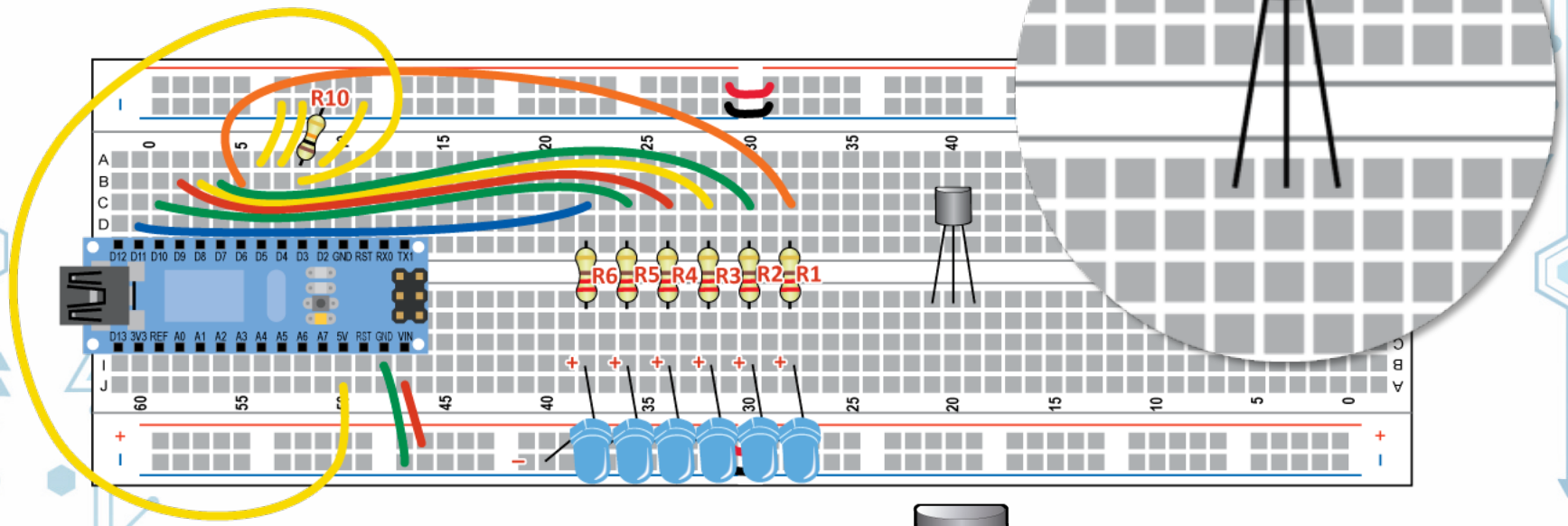
Conecta los 6 puentes de las terminales de la tarjeta a las resistencias



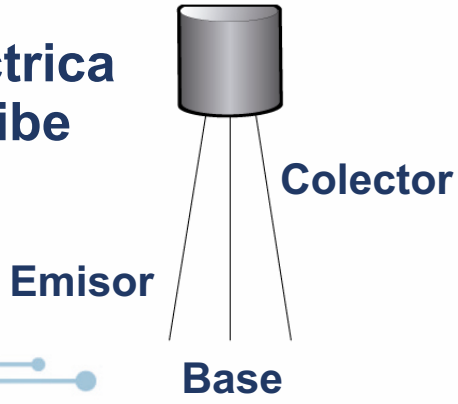
4 minutos

Electrónica Junior

Conecta el transistor



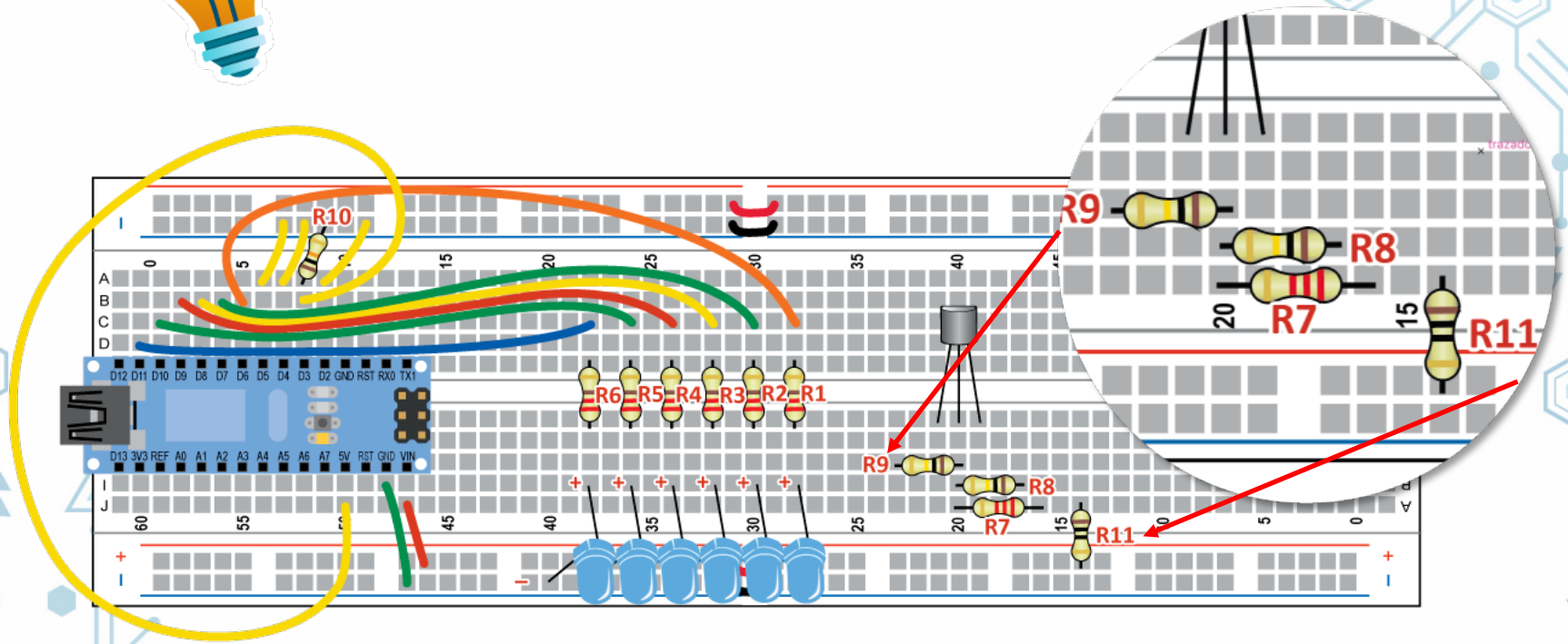
Modifica una señal eléctrica como amplificador (recibe una señal débil y la convierte en fuerte)



2 minutos

Electrónica Junior

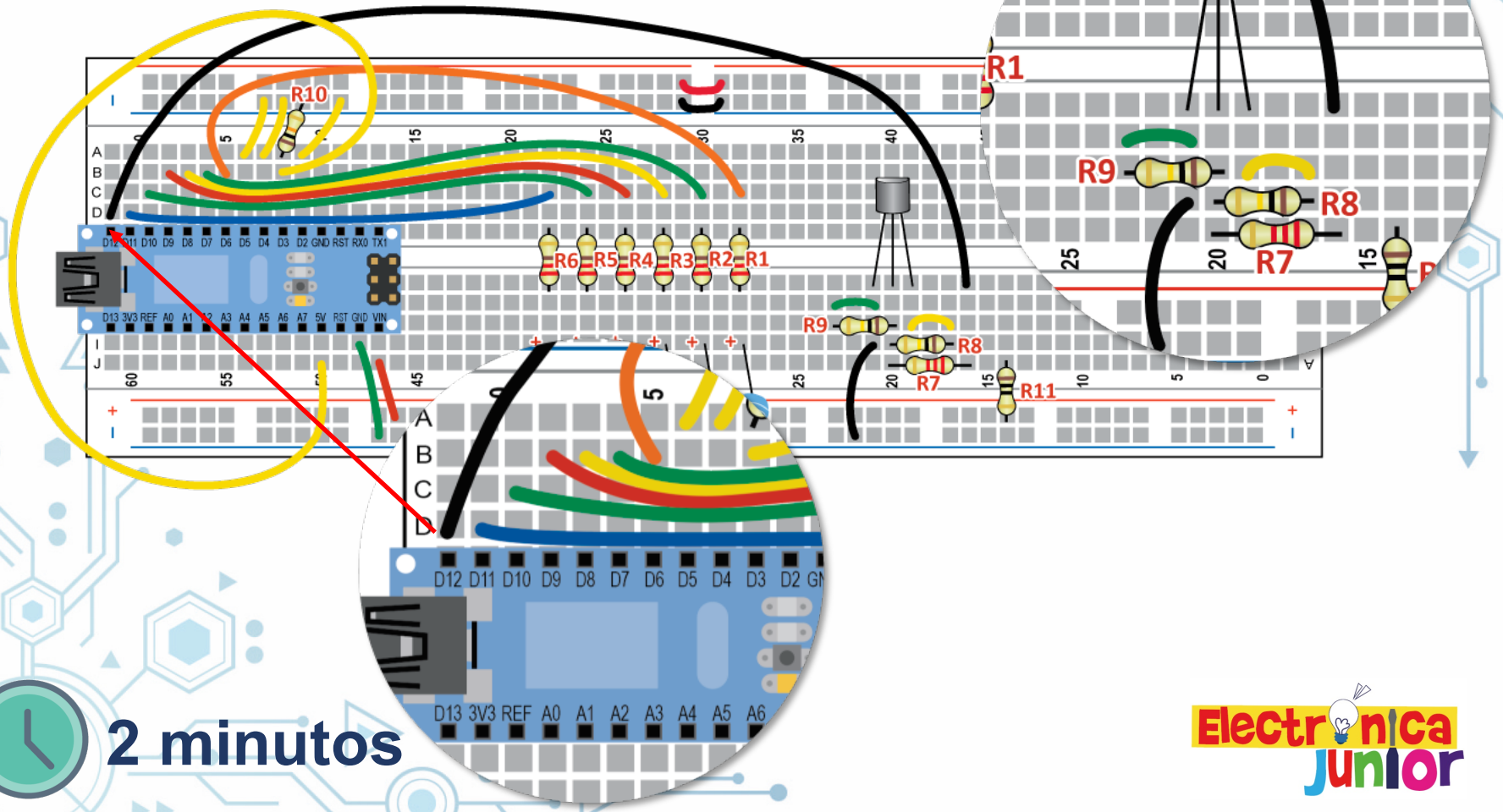
Conecta las 4 resistencias



3 minutos

Electrónica Junior

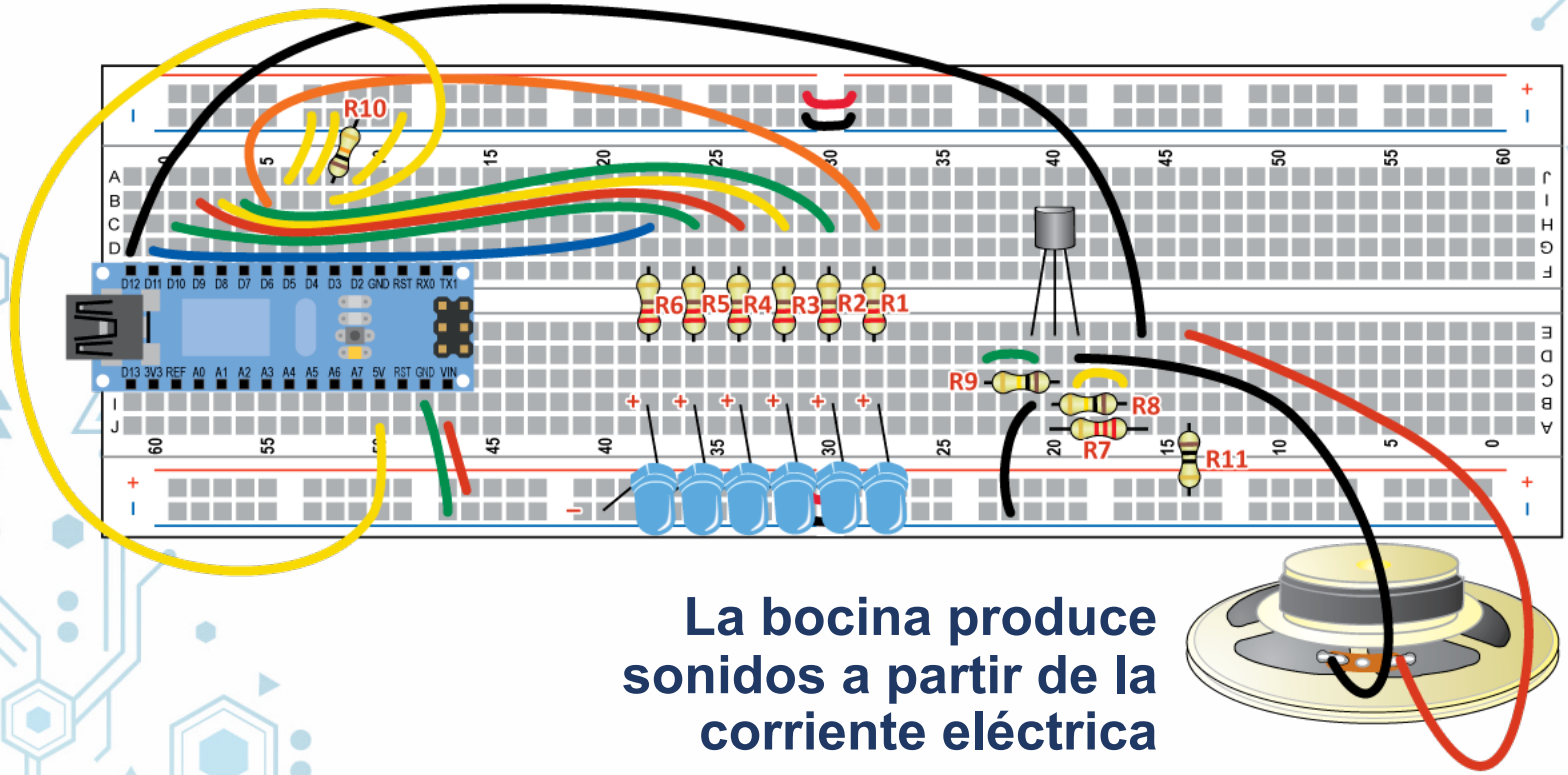
Conecta la alimentación hacia el transistor



2 minutos

Electrónica Junior

Conecta la bocina

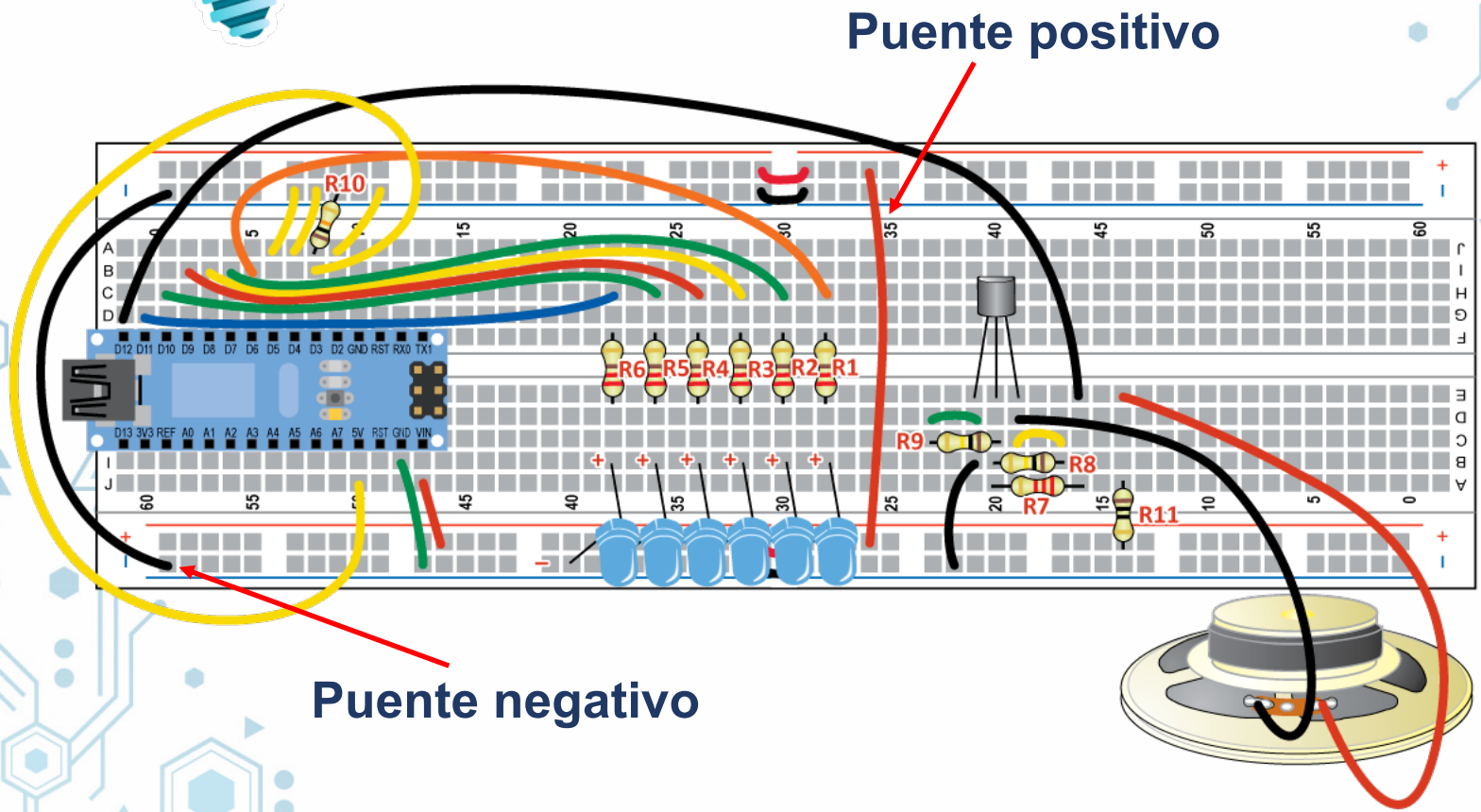


La bocina produce sonidos a partir de la corriente eléctrica

2 minutos

Electrónica Junior

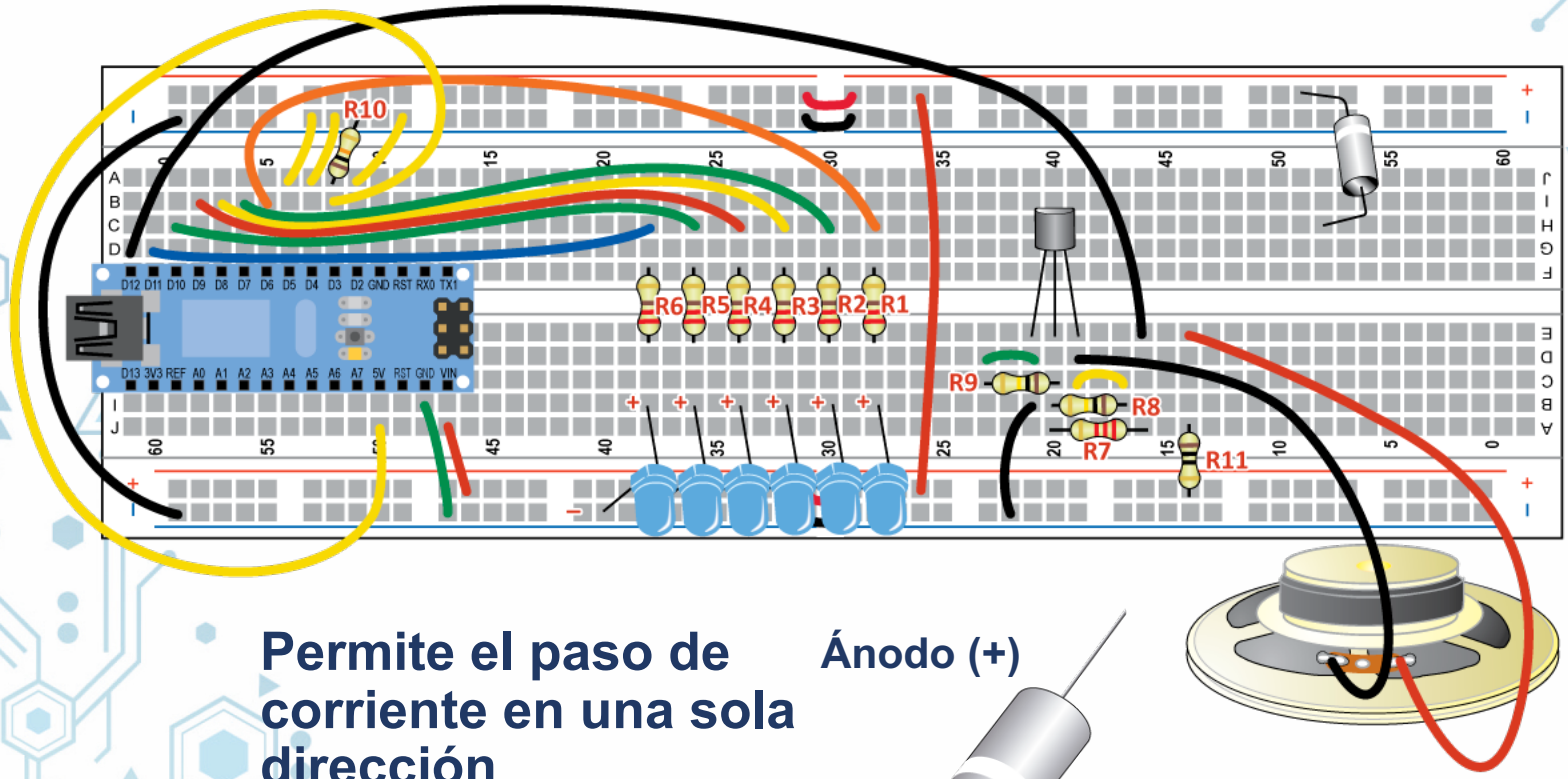
Conecta los dos puentes



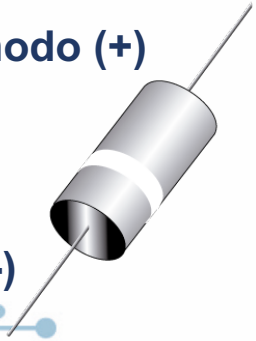
2 minutos

Electrónica Junior

Conecta el diodo rectificador



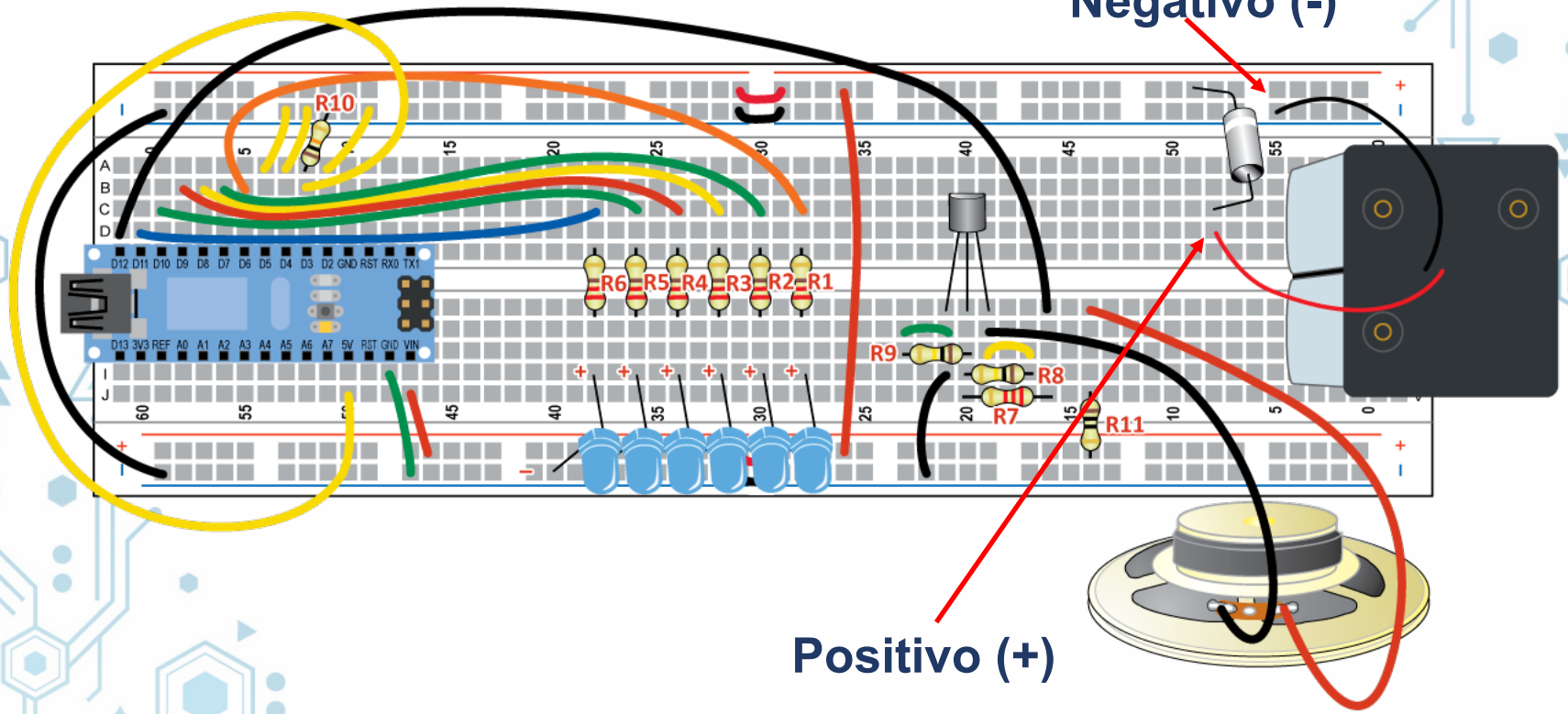
Permite el paso de corriente en una sola dirección



2 minutos

Electrónica Junior

Conecta el portapilas y escucha el sonido que se genera



1 minuto

Electrónica Junior