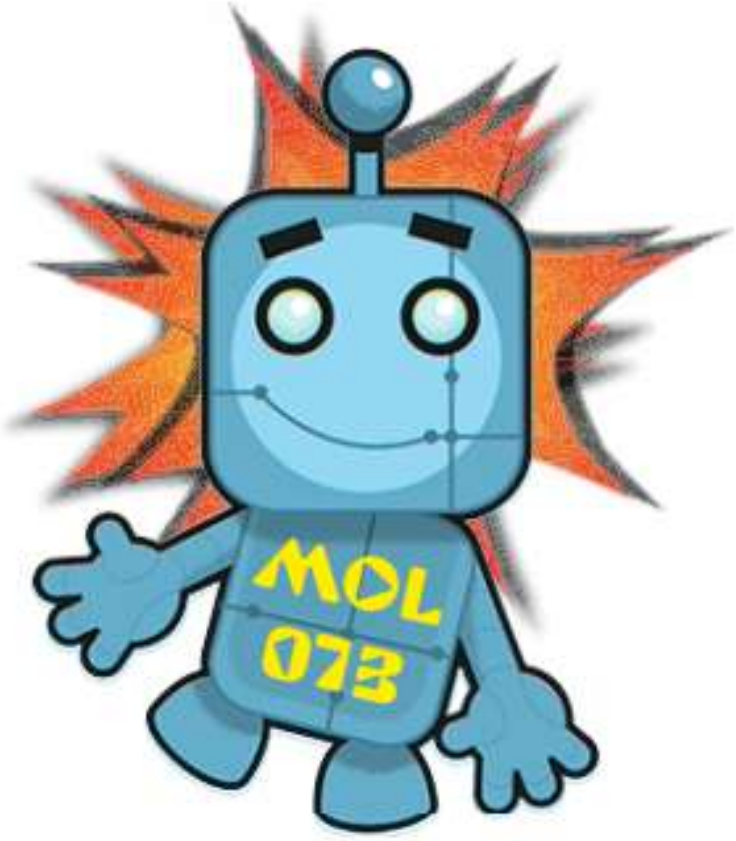
Mobiel Ontdek Lab 073

Neuron

Inventor kit

Makeblock



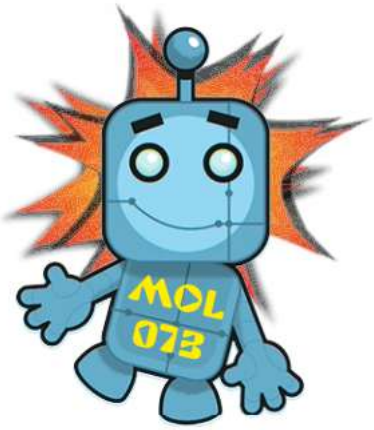
's-Hertogenbosch

WTE

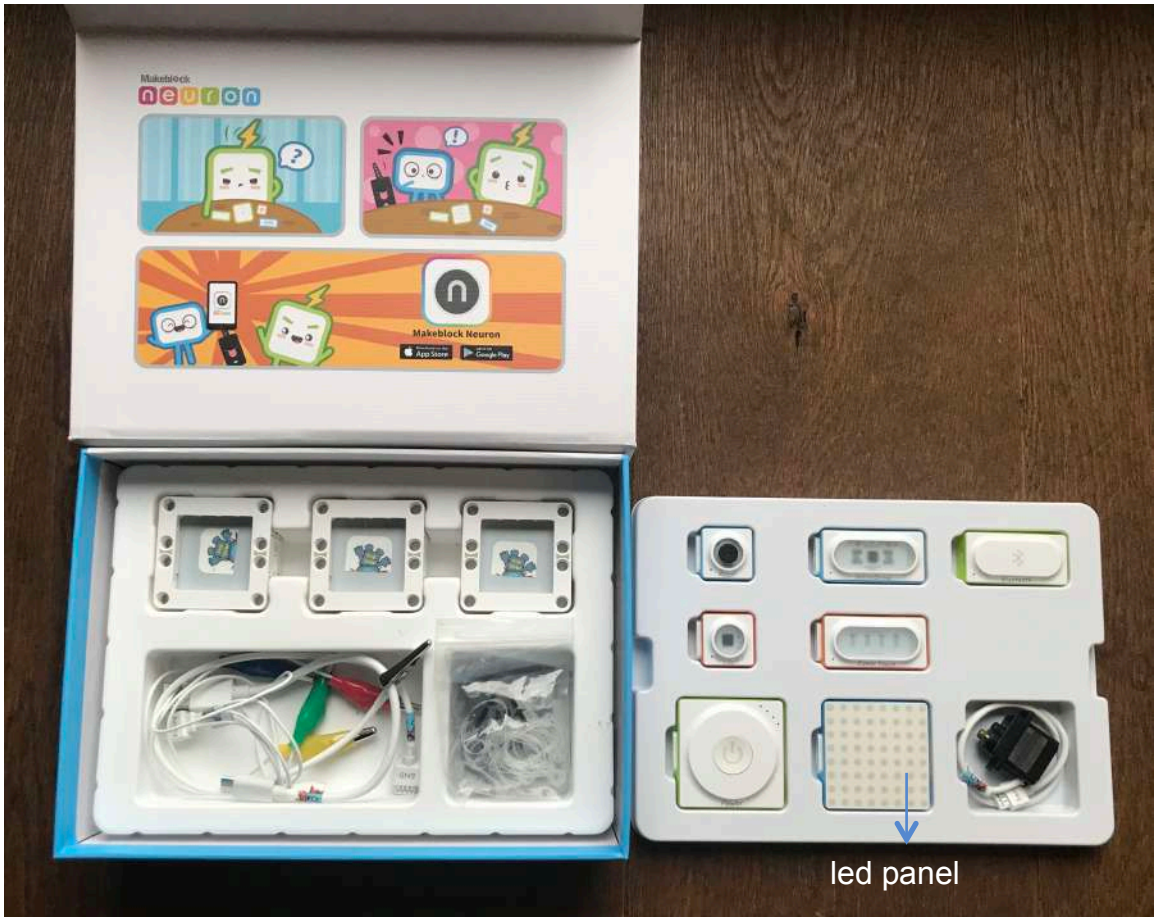
Stichting Schoolbesturen
Primair Onderwijs
's-Hertogenbosch

KNOOPPUNT
TECHNOLOGIE
073

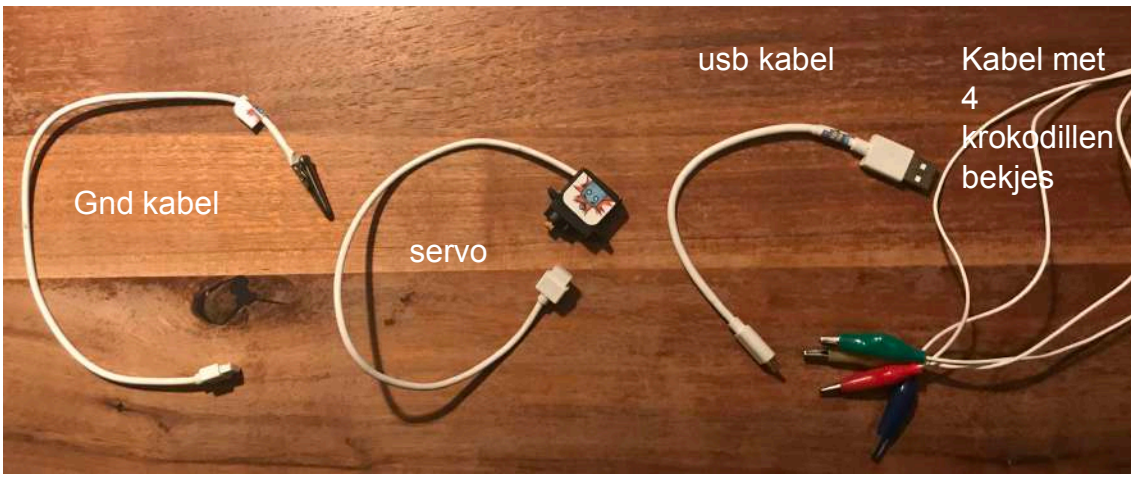
Mobiel Ontdek Lab 073



Inhoud:



16 stuks


usb kabel
Kabel met 4 krokodillen bekjes
Gnd kabel
servo

3 witte servo hubs + 3 schroefjes
35
19
connectors
elastiekjes

1 power

1 gyro sensor

1 bluetooth

1 buzzer

1 servo driver

1 funny touch

1 servo motor

1 led panel (blauw)

1 usb kabel

1GND kabeltje met krokodillenbek

1 kabeltje met 4 krokodilenbekjes

9 witte Neuron blokken

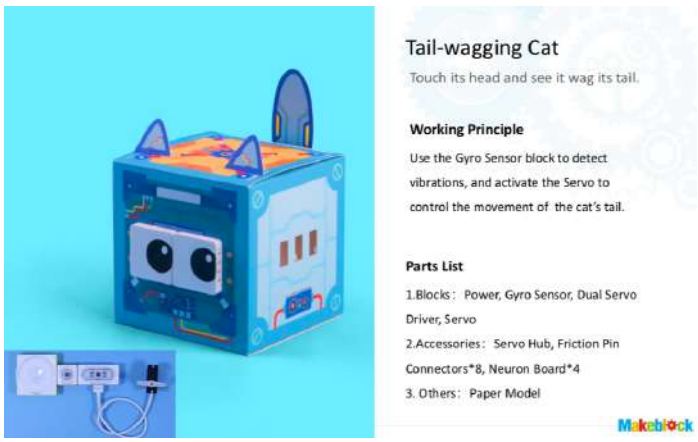
3 witte servo hubs + 3 schroefjes

35 zwarte pinnetjes (connectors)

19 elastiekjes

gebruiksaanwijzing

16 kartonnen accessoires



Telegraph

Send Morse Codes using a mock Telegraph.

Working Principle

Funny Touch is able to turn any conductive object into a touch switch. The Buzzer beeps when Funny Switches and GND Wire are connected together. Short and long beeps makes Morse code.

Parts List

1. Blocks: Funny Touch, Power, Buzzer
2. Accessories: Neuron Board*6, Friction Pin Connectors*10, Funny Switch, GND Wire
3. Others: Paper Model

Makeblock

Electric Guitar

Let's make an Electric Guitar.

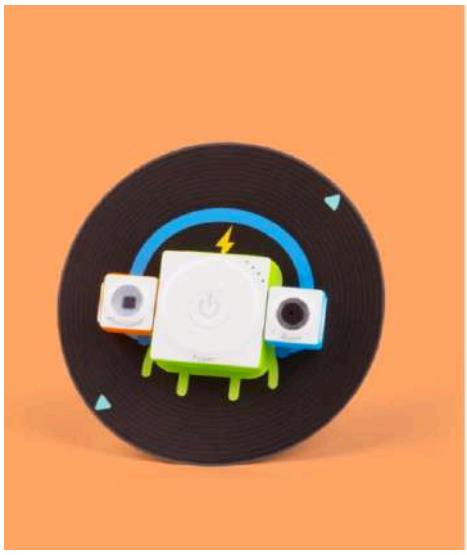
Working Principle

Funny Touch is able to turn any conductive object (such as human body and water) into a touch switch. Touch the GND Wire and Funny Switches. Different combination makes different sounds

Parts List

1.Blocks: Funny Touch, Buzzer, Power
2.Accessories: Neuron Board*7, Friction Pin Connectors*12, Funny Switch, GND Wire
3.Others: Paper Models

Makeblock



DJ Machine

Twirl the disc to make your own music.

Working Principle

Rotate the Gyro Sensor on the desktop to make sound of various pitches.

Parts List

1. Blocks: Gyro Sensor, Power, Buzzer
2. Accessories: Neuron Board*1, Friction Pin Connectors*1
3. Others: Paper Model

Light Palette

A palette changing its color.

Working Principle

Funny Touch is able to turn any conductive object into a touch switch. Touch the GND Wire and Funny Switch to bring about various lighting effects.

Parts List

1.Blocks： Funny Touch, Power, LED Panel

2.Accessories: Neuron Board*4, Friction Pin Connectors*6, Funny Switch, GND Wire

3.Others： Paper Model

Peace Keeper

Diffuse the bomb by taking of the clips without triggering the alarm.

Working Principle

The Buzzer will buzz when the Gyro Sensor detects a vibration. A buzzing Buzzer means the bomb has exploded, meaning game over.

Parts List

1.Blocks： Power, Funny Touch, LED Panel, Gyro Sensor, Buzzer

2. Accessories： Neuron Board*5, Friction Pin Connectors*8, Funny Switch, GND Wire

3. Others： Paper Model

Handleiding:

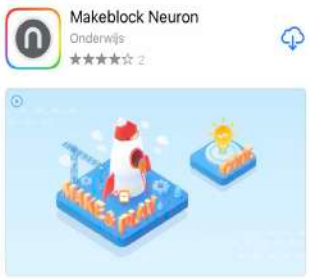
Wat is de Makeblock Neuron Inventor Kit ?

De Makeblock Neuron Inventor Kit, is een pakket met Makeblock Neuron programmeerbare elektronische bouwstenen inclusief geluid, licht en allerlei sensoren. Makeblock Neuron moedigt alle “makers” aan om hun ideeën om te zetten in echt werkende gadgets.

Bouwstenen worden in een handomdraai verbonden met **magnetische Pogo-pinnen**. Gebruikers kunnen eenvoudig de blokken samenstellen om creatieve gadgets te maken zonder code te hoeven schrijven.

Geen programmeerervaring vereist: De grafische programmeer interface in de Neuron-app stelt beginners in staat eenvoudig Neuron toepassingen te maken en basis- of geavanceerde functionaliteit toe te voegen aan hun uitvindingen.

Download de gratis app in de App Store: **Makeblock Neuron**



Volg de instructies op je scherm

Het input block (**oranje**) moet aan de linkerkant vastgeklikt worden van het output block (**blauw**), wanneer je de app niet gebruikt!

Je kan zonder en mèt coderen aan de slag.

Druk op de powerknop en je ziet aan het aantal lichtjes wanneer je het blok moet **opladen** met de usb-kabel in je computer/tablet/chromebook.

Uitzetten: druk 3 seconden de powerknop in!

Bluetooth: draadloze verbinding tussen blokken en tablet/smart phone

Je kan dan de blokken programmeren via Makeblock Neuron app.

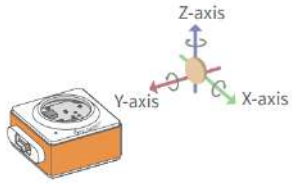
Bluetooth

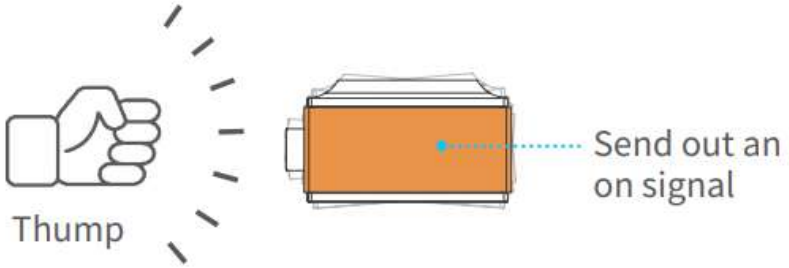
Establish wireless connection between blocks and Neuron APP

Input blokken (**oranje**)

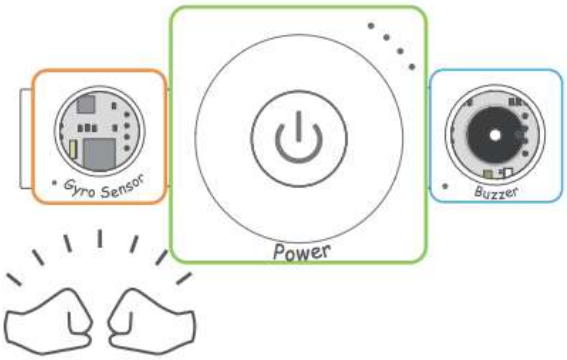
Gyro sensor

- positie bepalen/beweging van je creatie
- bij trilling zal de sensor een signaal geven



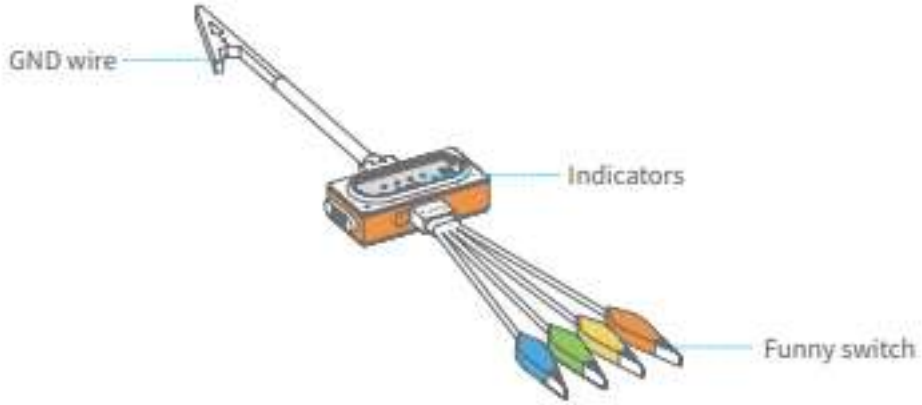


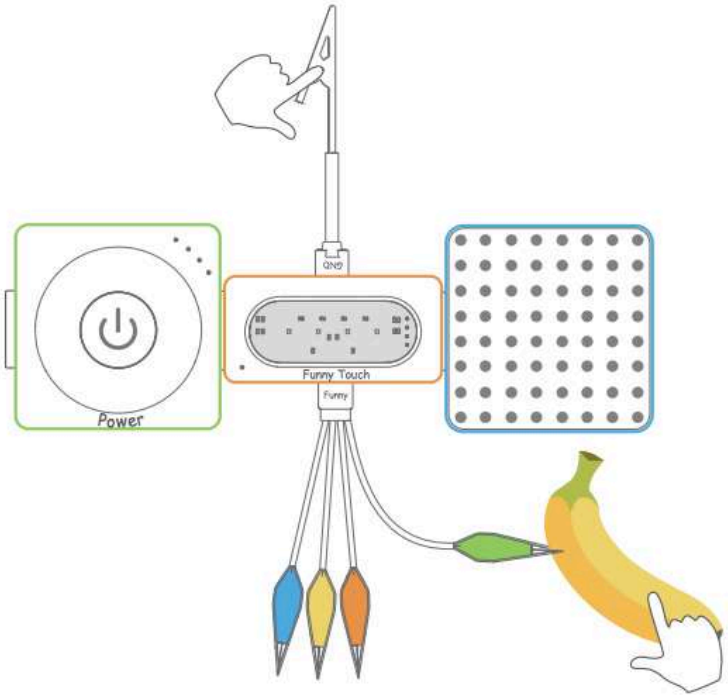
Probeer het volgende uit:



Funny touch

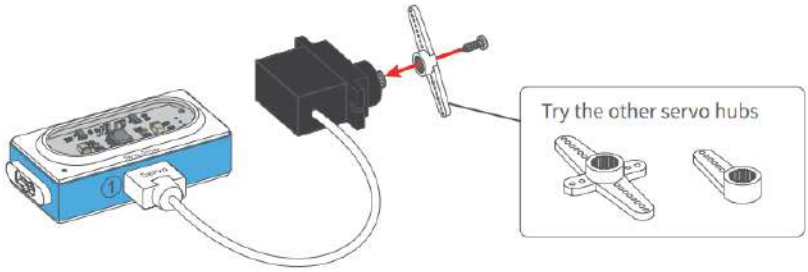
Je kan op deze manier kijken wat allemaal stroom geleidt.



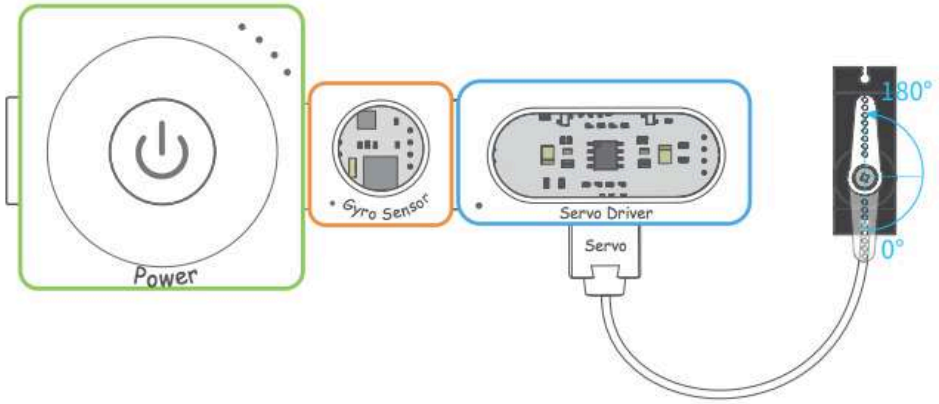


Input blokken (**blauw**)

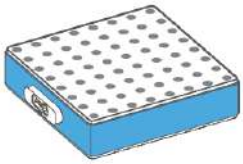
Dual servo driver + servo



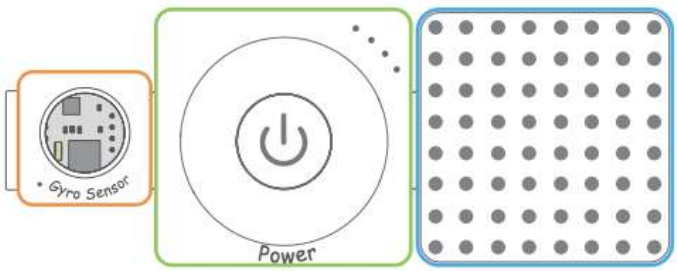
Probeer het volgende uit:



Led panel: 64 rgb leds

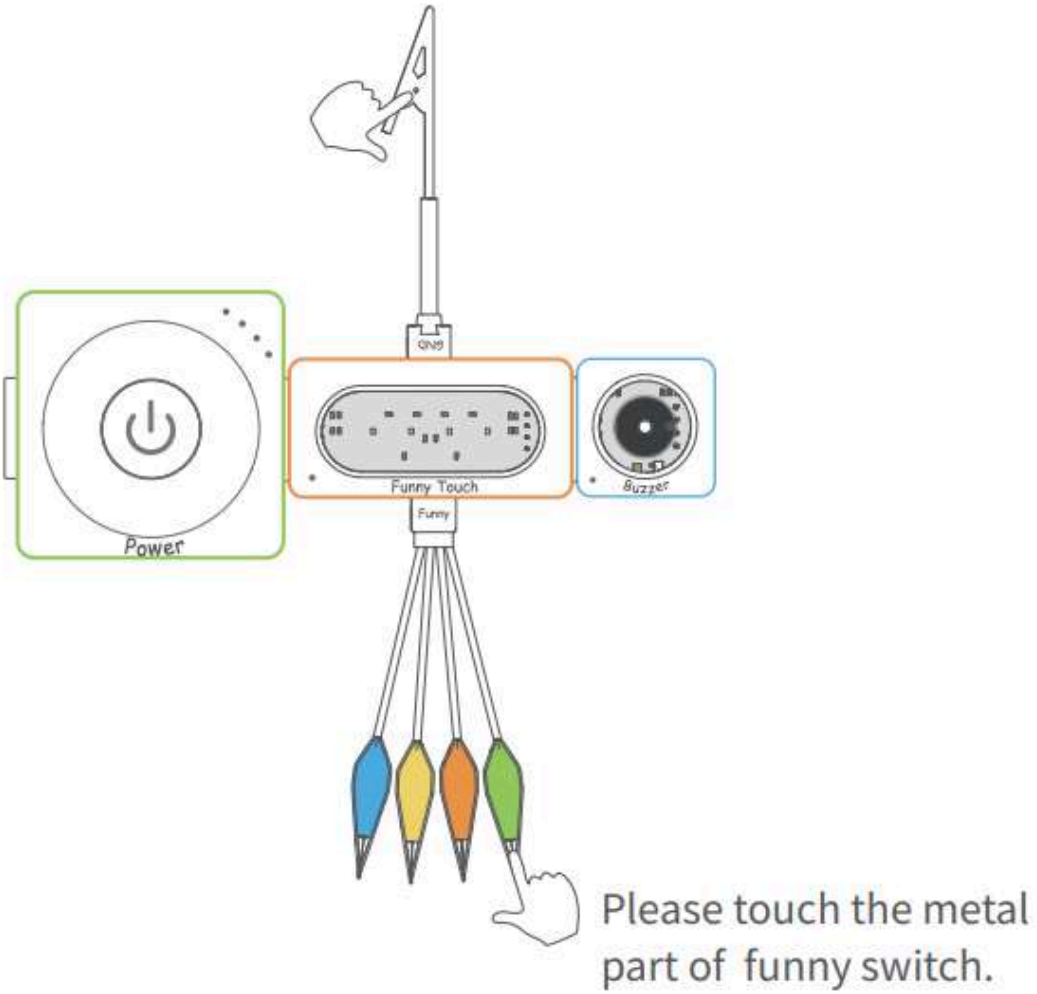


Probeer het volgende uit:

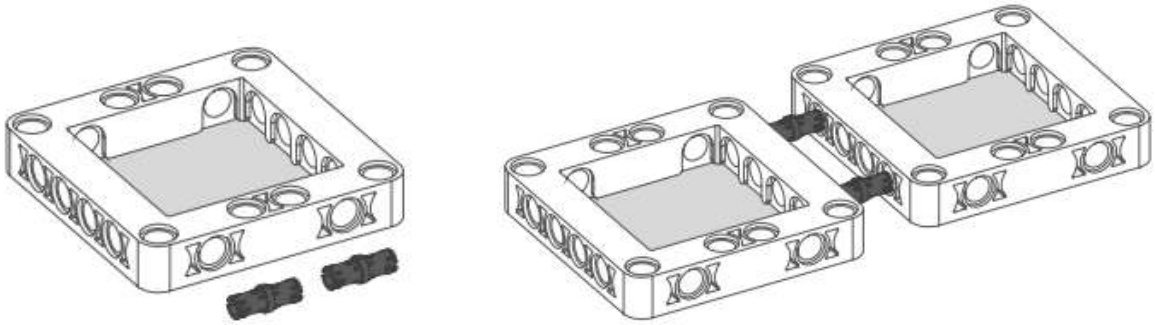


Buzzer

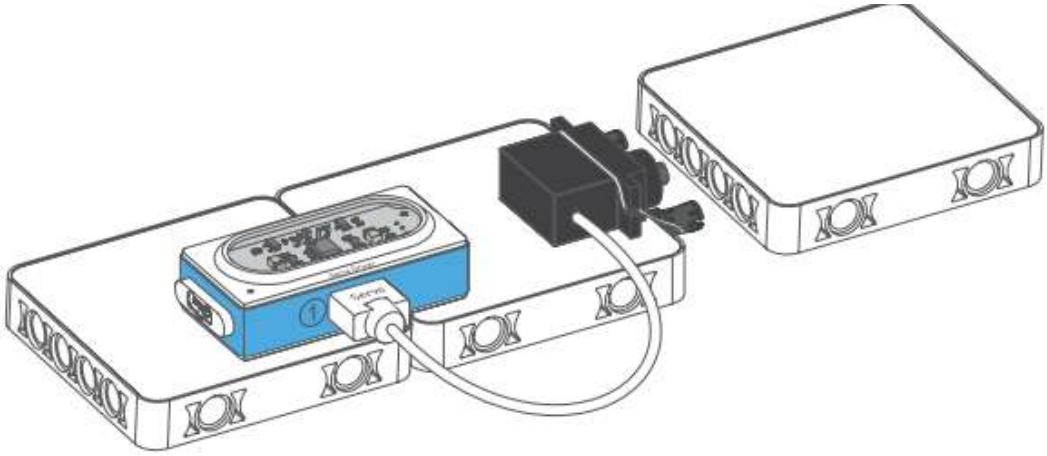
Probeer het volgende uit:



Zo verbind je 2 Neuron borden:

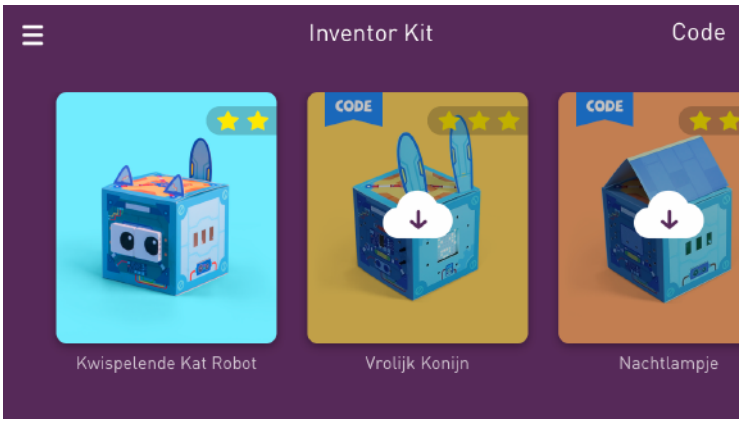


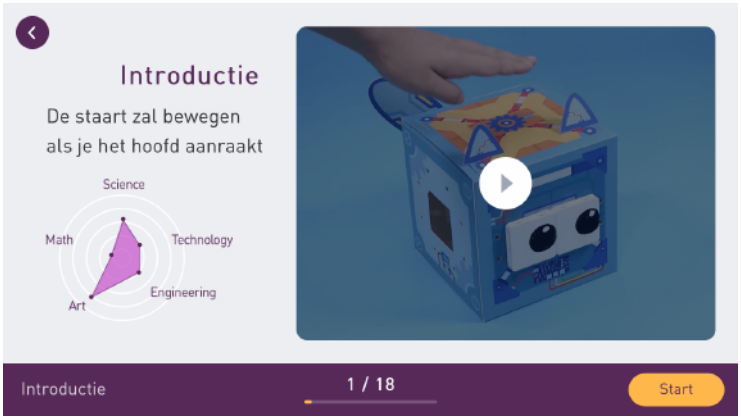
Met elastiekjes kan je het ook vast maken:



Ga nu naar de app (Makeblock Neuron) op je tablet/smart phone.

Kies één van de opdrachten en volg iedere stap op je tablet/smart phone.





De kwispelende kat bestaat uit 18 slides.

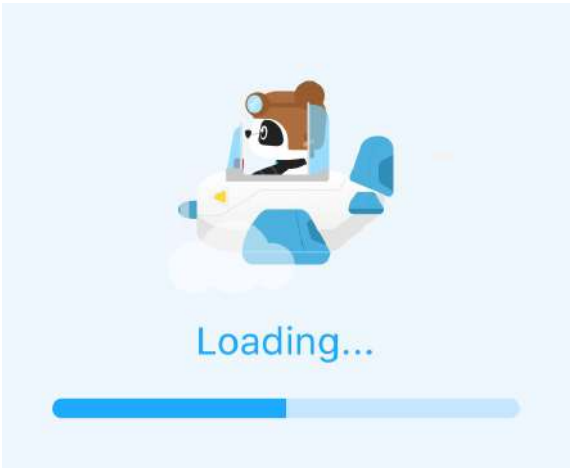
Zorg dat ze deze stap met een whiteboard stift uitvoeren!!!

Je kan de gratis mBlock app gebruiken

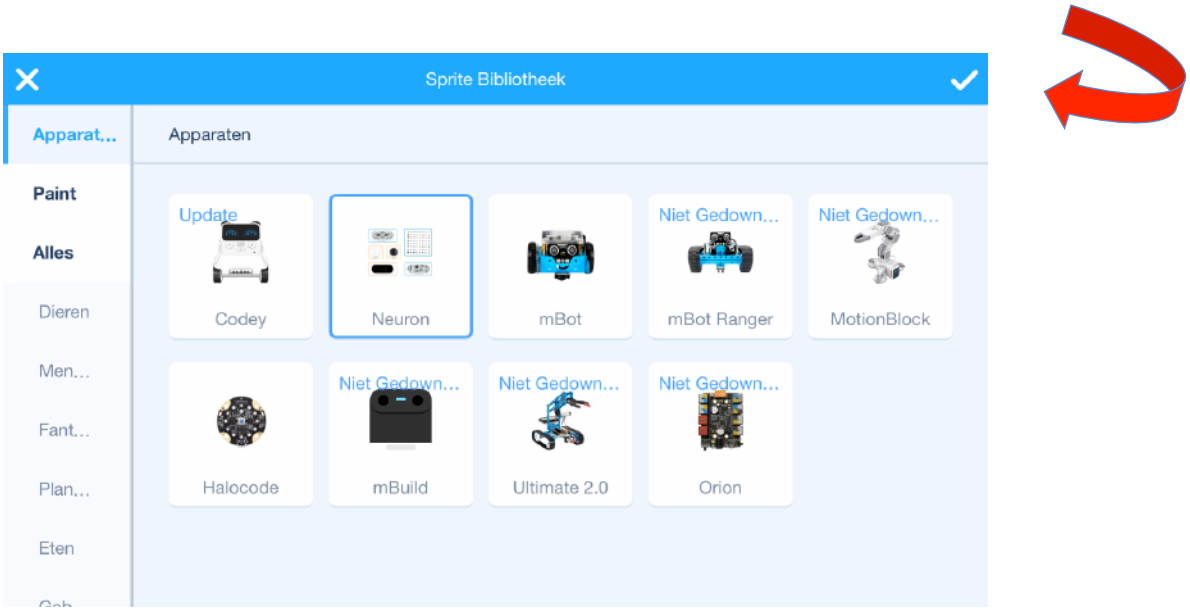
Open de app, klik op **Coding**:

Klik in het midden op de **+**

Het programma gaat nu laden:



Kies dan je apparaat, Neuron en klik rechtsboven op het vinkje.



Leg je blokken van Neuron klaar en druk op de powerknop.

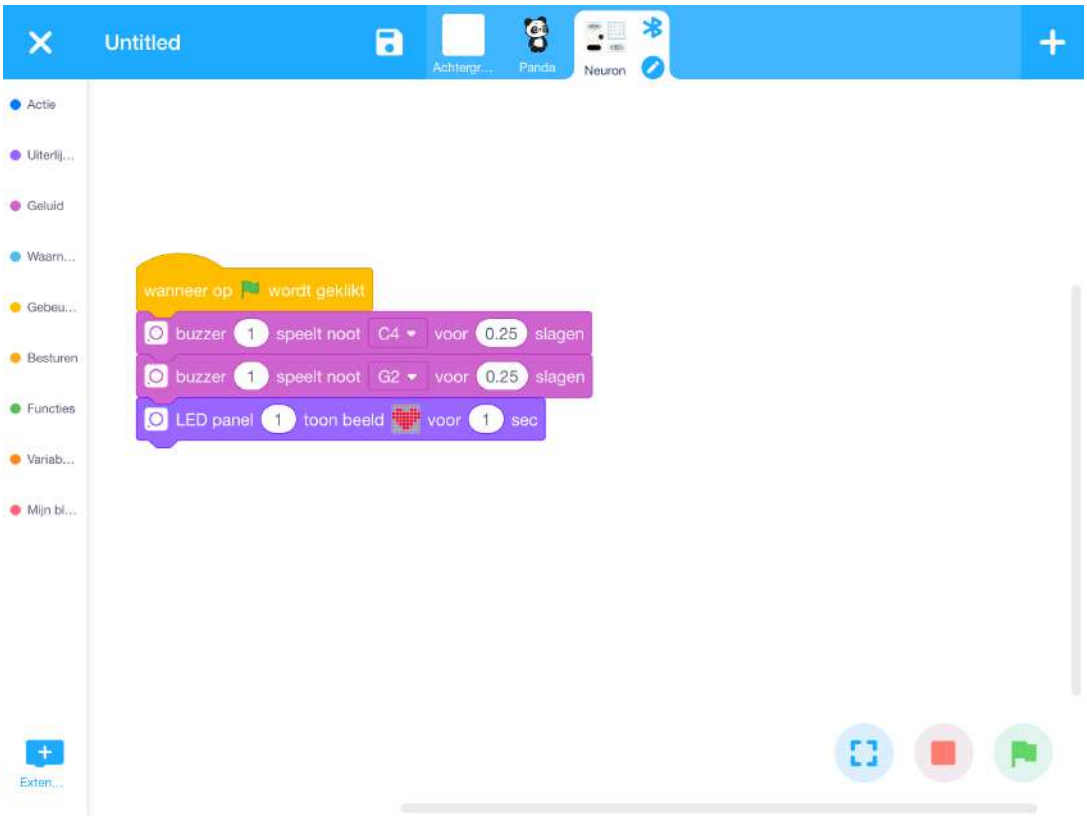
Klik in de bovenbalk van je app op het rode bluetooth teken.

Zet de powerknop van Neuron aan en klik op verbinden

Nu is je Neuron verbonden.

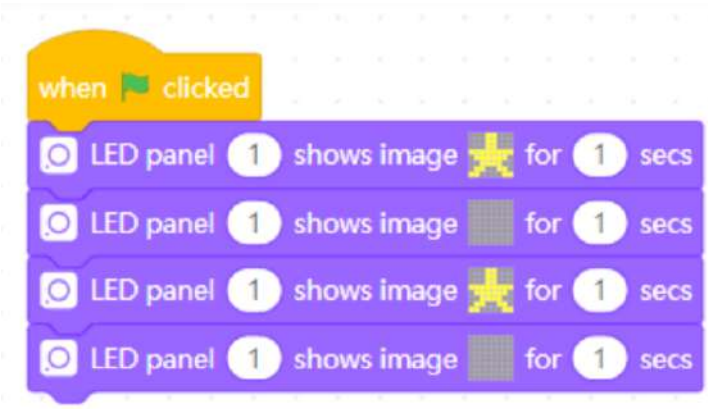
Probeer maar uit:

Je hebt de volgende blokken van Neuron nodig:

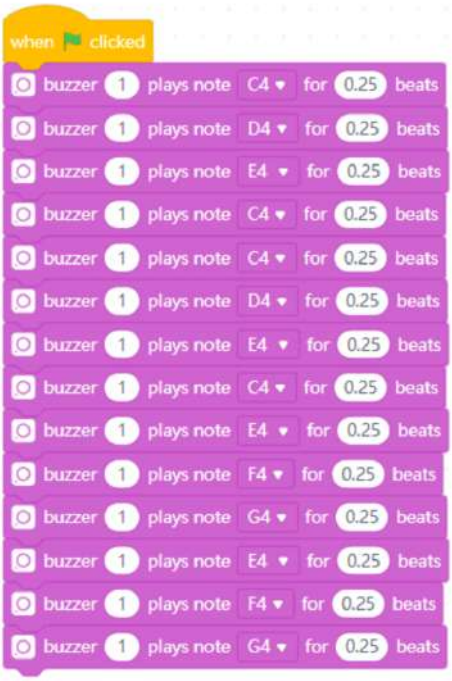


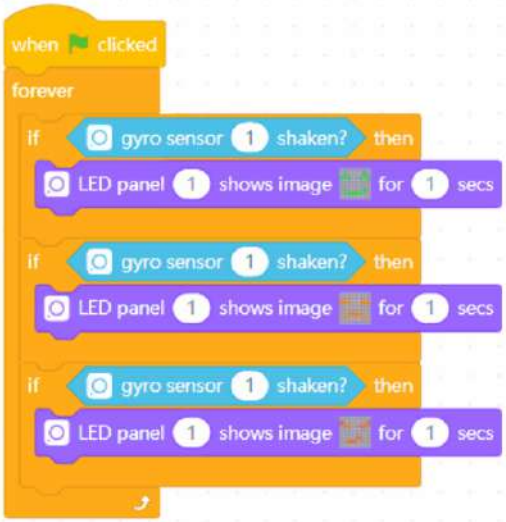
Klik op de groene vlag en je programma start.

Andere voorbeelden



Welk liedje hoor je?

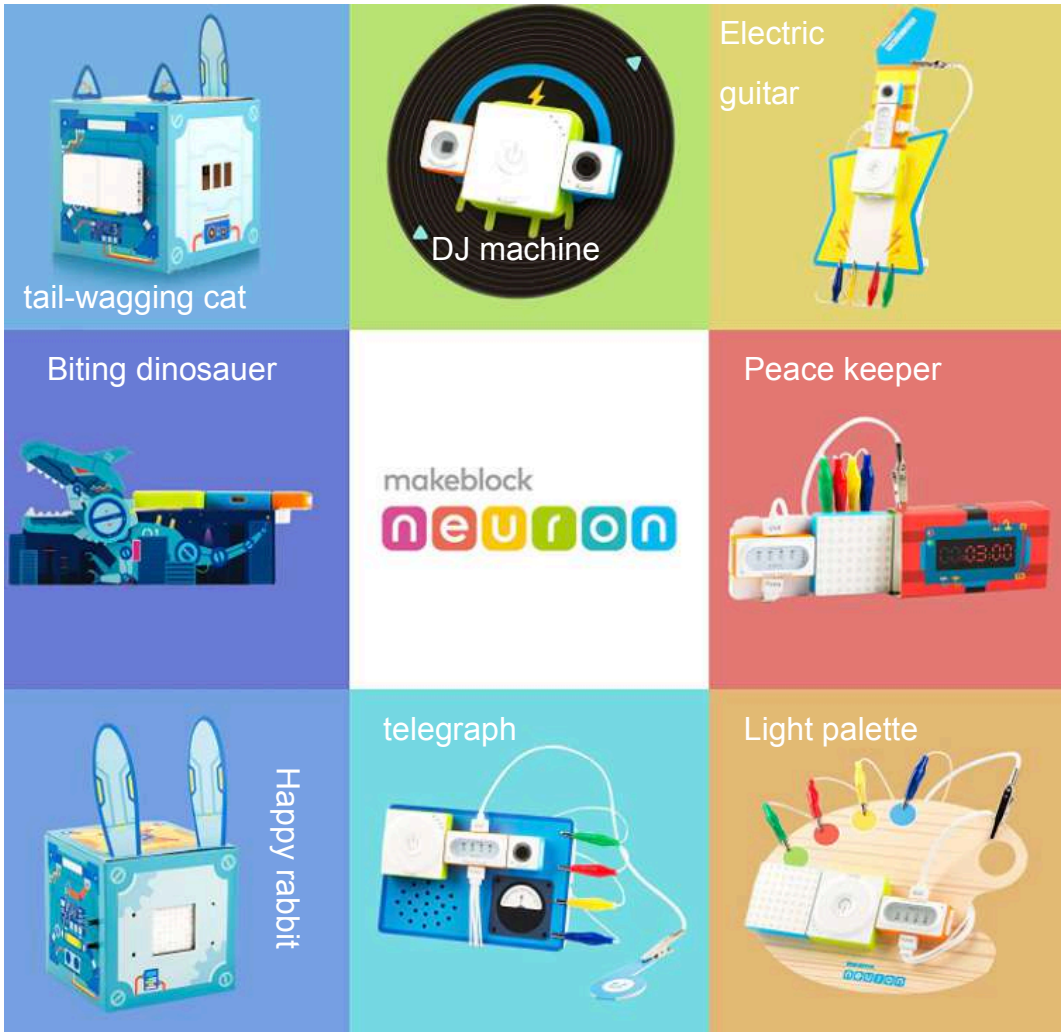
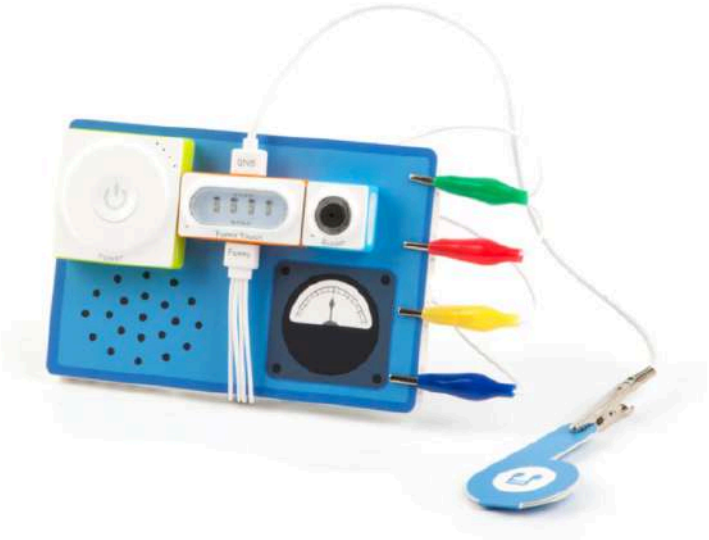




Schud voorzichtig met de gyrosensor.

Qr-code met uitleg-filmpje

Afbeeldingen ter inspiratie:



Makeblock
neuron