

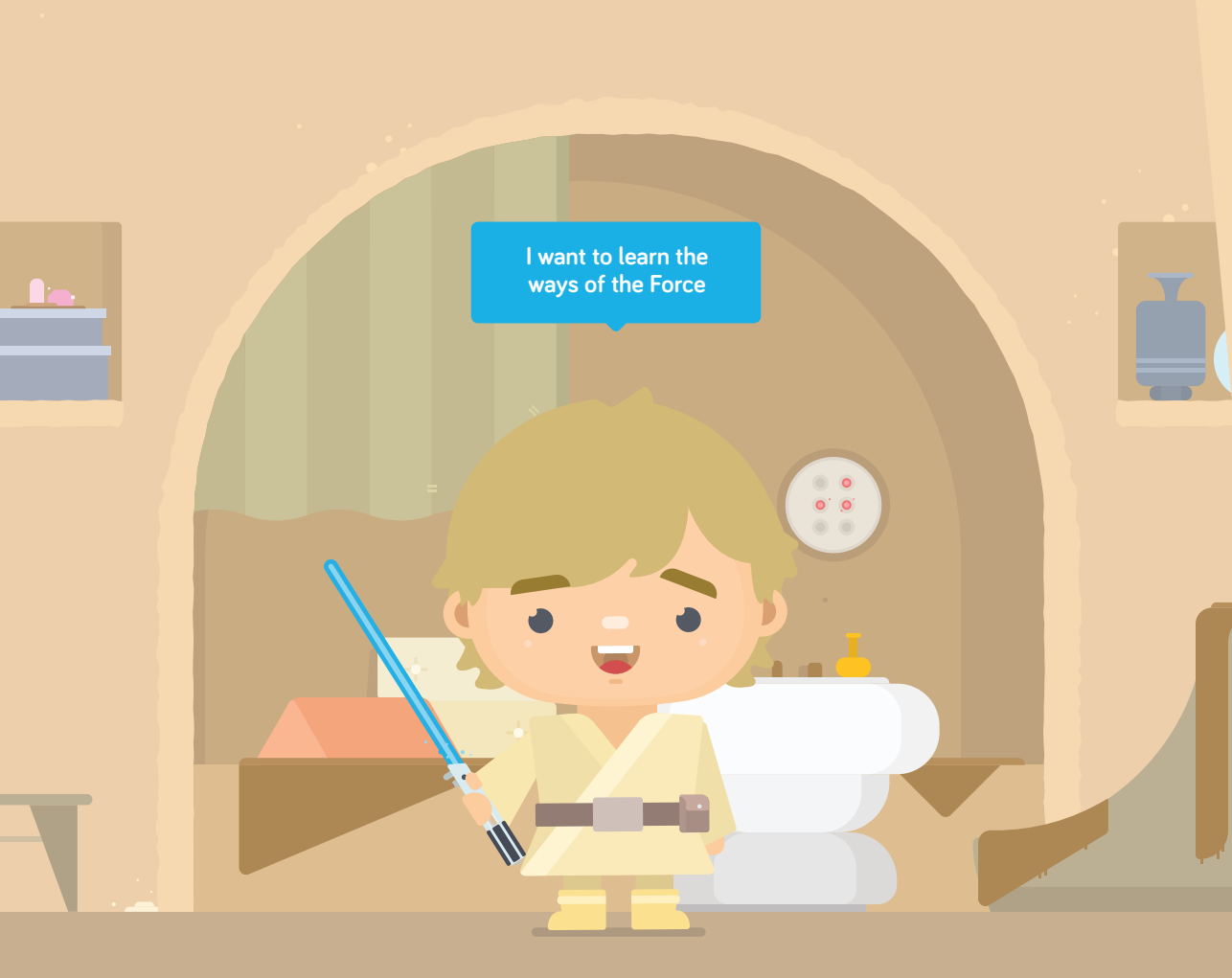
How to make

The Force™ Coding Kit motion sensor



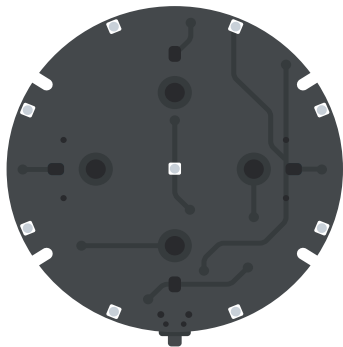
You don't know the
power of the dark side





I want to learn the
ways of the Force

Take out the pieces



PCB + Sensors

0103 1V18AΔ7N



Power

0103 1V18AΔ7N



Light ring

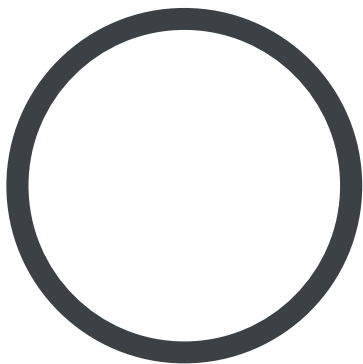
1V18AΔ7N 71A17



Batteries

0103 1V18AΔ7N





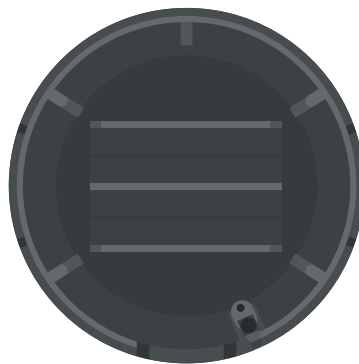
Top case

↓ ↱ ↲ ↴ ↵ ↶ ↷



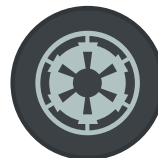
kano.me/app/starwars

↱ ↲ ↴ ↵ ↶ ↷



Bottom case

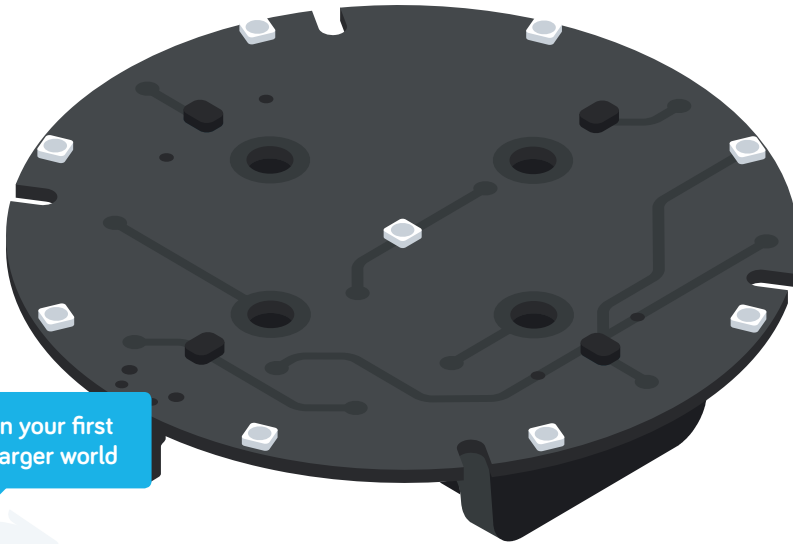
↱ ↲ ↴ ↵ ↶ ↷



Icons

↱ ↲ ↴ ↵ ↶ ↷

Let's begin. Pick up this piece

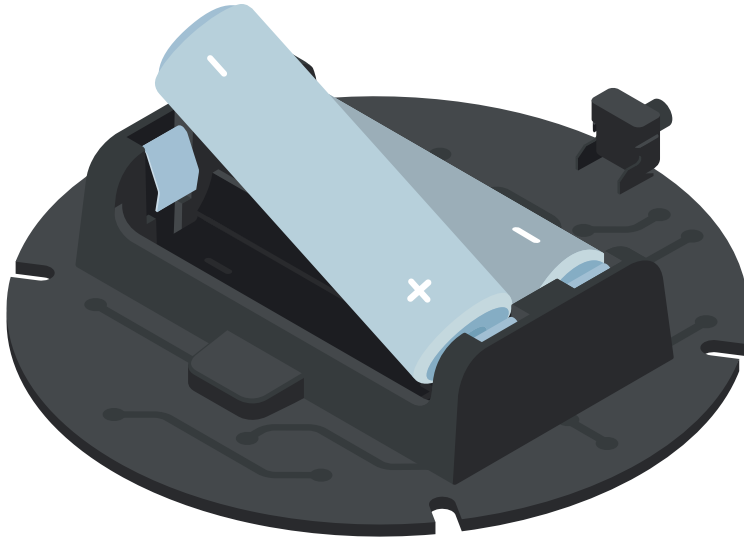


You've taken your first
step into a larger world



It's called a Printed Circuit Board or PCB

Turn over the PCB and slot in both batteries



Make sure they are the right way round



Take a closer look

SENSORS
~V1A~\A7~\

LEDs
~V17~\

Size matters not

It's made of sensors, LEDs, microprocessors,
resistors and tracers



Each sensor has two lenses. The top lens sends out an infrared beam



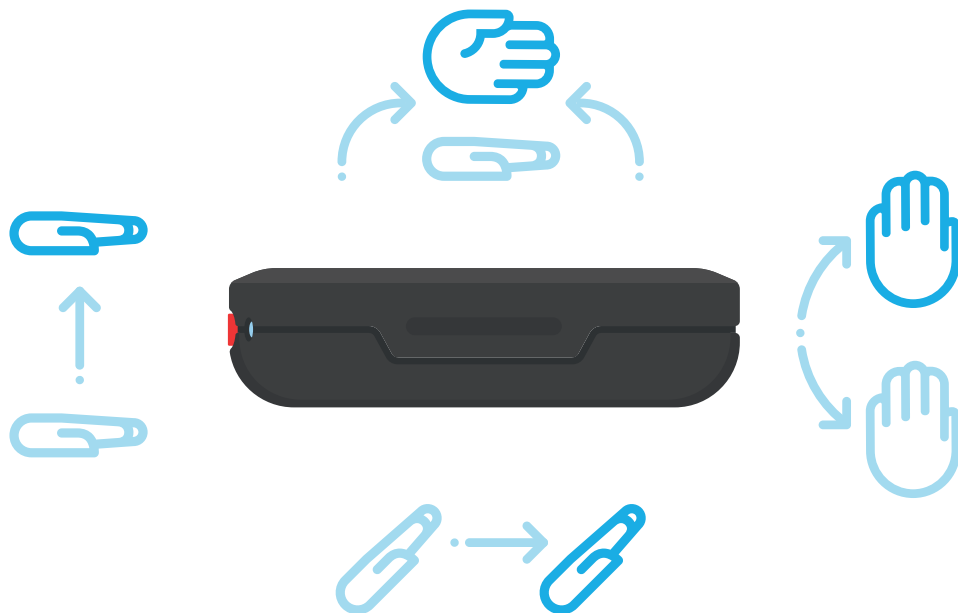
Infrared is a type of light invisible to humans

When your hand breaks the beam, it gets reflected back to the bottom lens



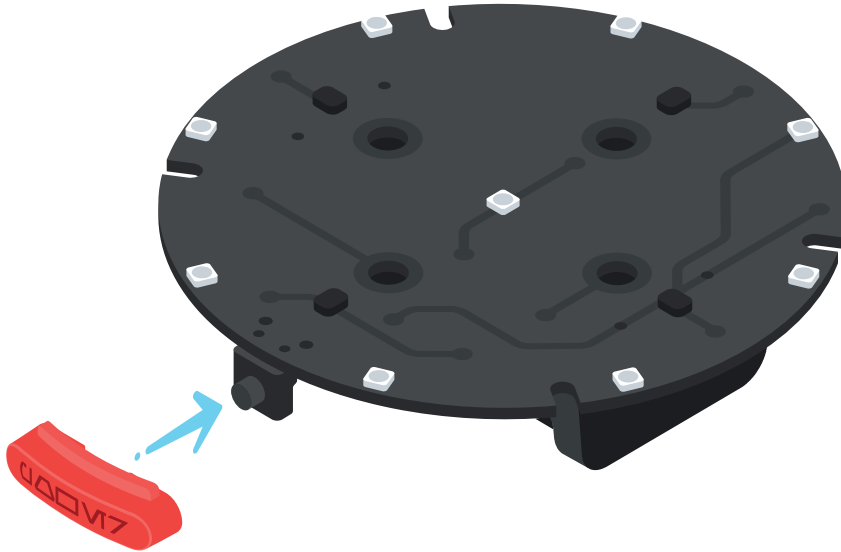
so the sensor can see where your hand is

All four sensors work together to tell if your hand is going...



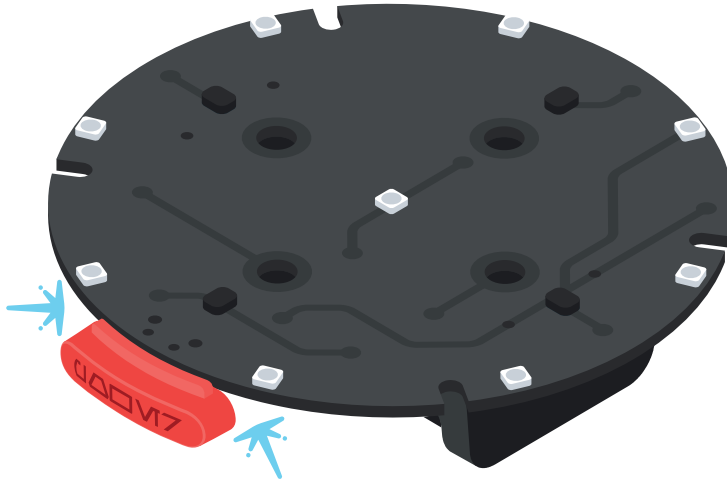
up, down, forwards, backwards, left, right, or tilting

Time to add some control

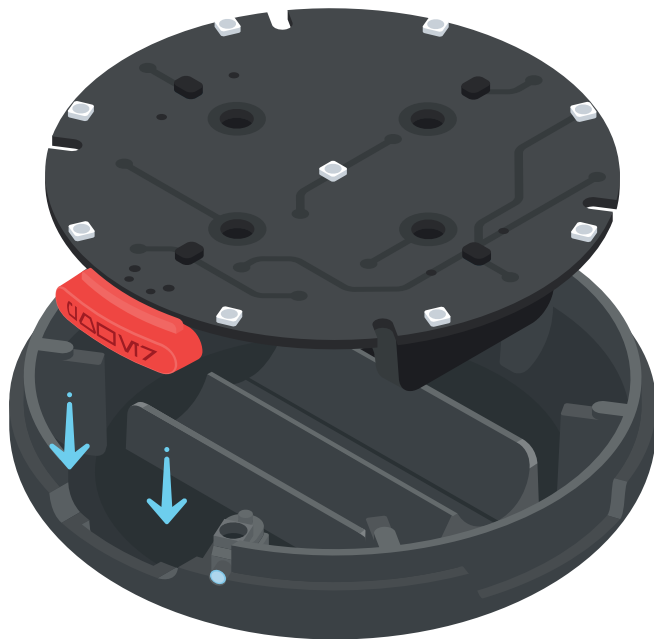


Push the power button onto the PCB

Make sure it is snug

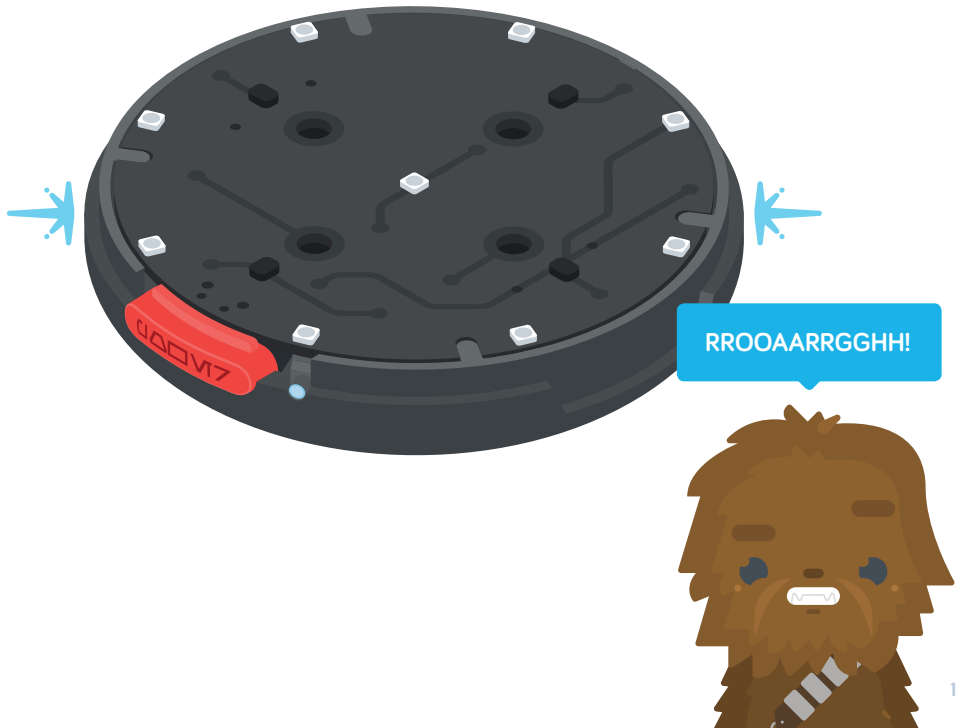


Now place the PCB into the bottom case

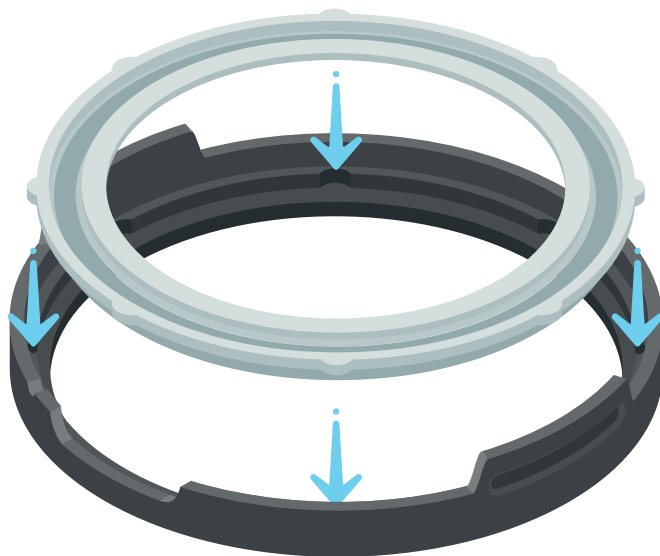


Line up the button with the groove in the base

Gently push the PCB into the base

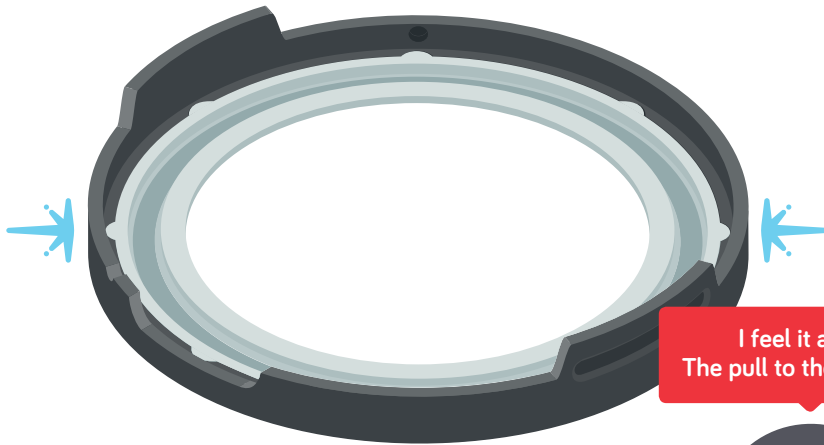


Take the top case



and push the light ring into it

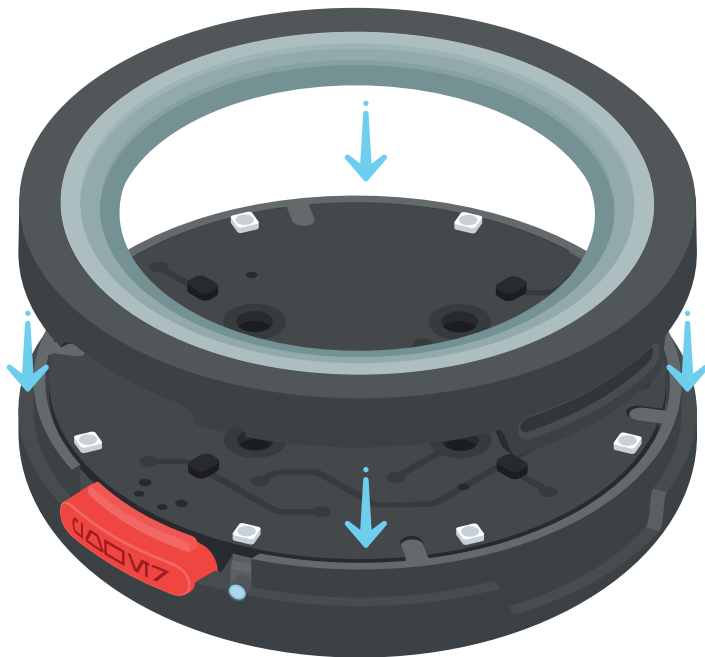
Make sure it's pushed in all the way



I feel it again.
The pull to the light side

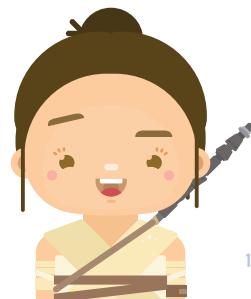
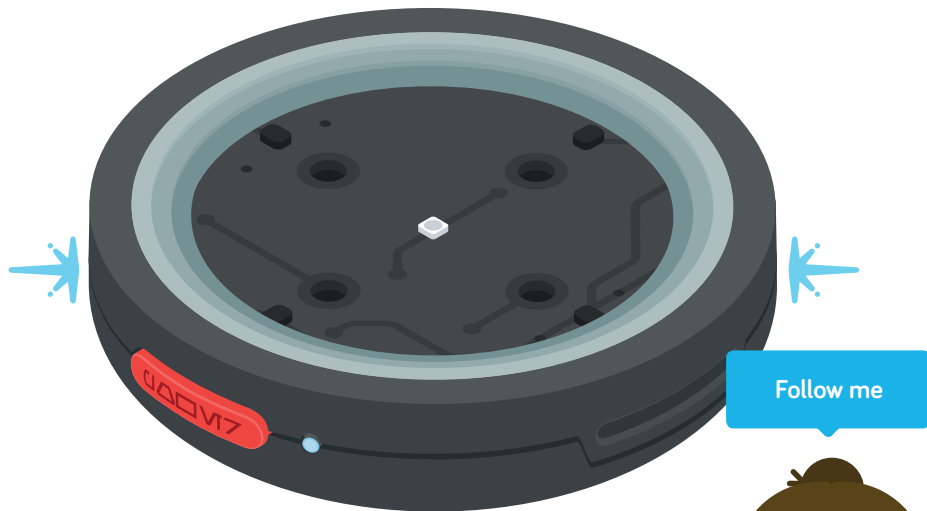


Take the top case with the light ring



Push it onto the bottom case

Until it clicks



Choose an icon



Rebel
7MSVN



Galactic Empire
17KJL111 V12U17VI



Are you light side or dark side?

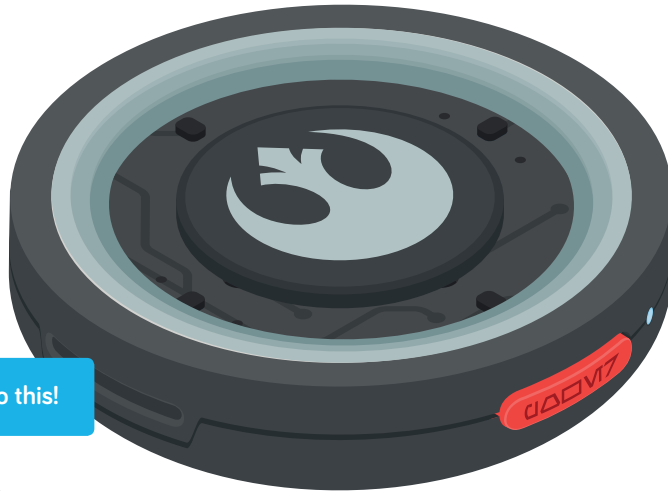
Place it on top



Push the pegs into the holes



To turn it on...

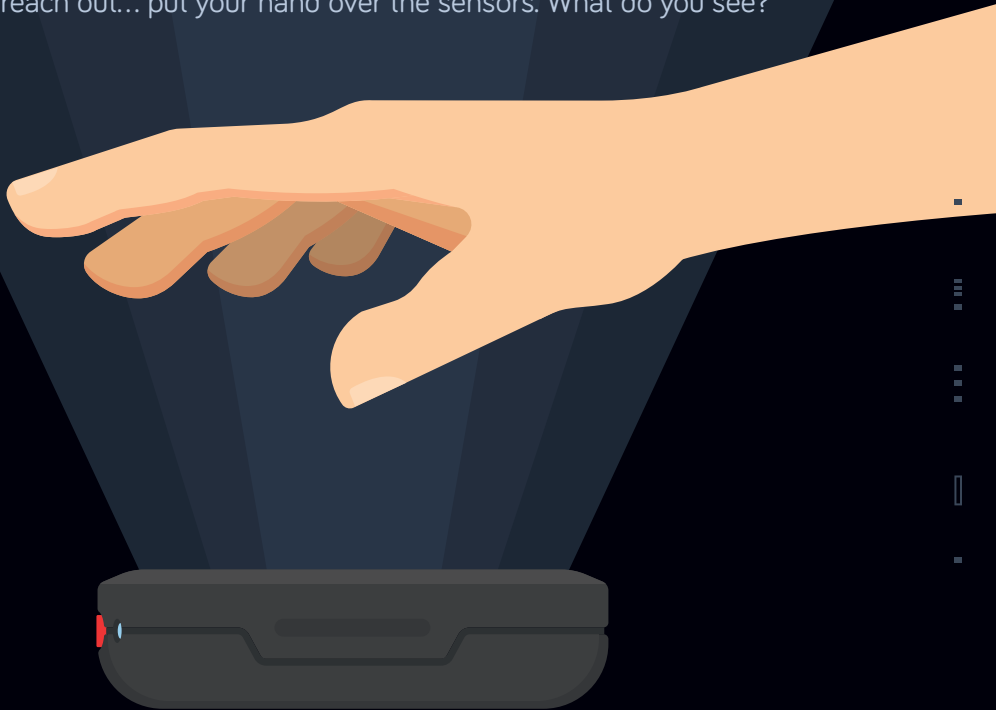


We're gonna do this!



press the power button

Now, reach out... put your hand over the sensors. What do you see?

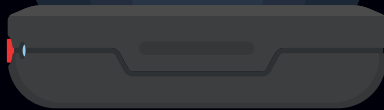
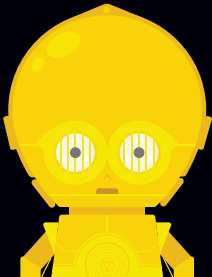


The PCB tells the lights to brighten as your hand gets closer to the sensors

The PCB also turns your movements into 1s and 0s – binary code

I am fluent in over six million
forms of communication

A simple language your computer
can understand



It beams those 1s and 0s to your computer



letting you make things move on a screen



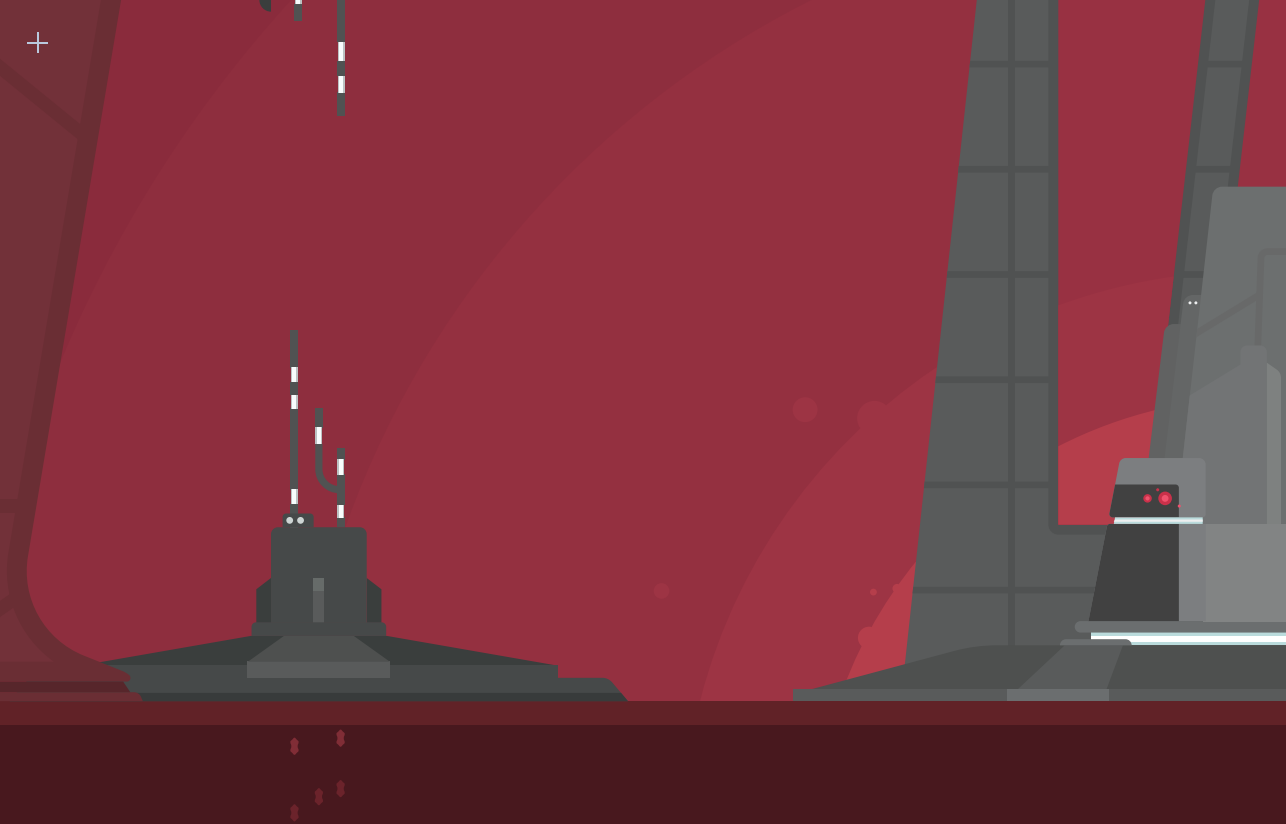
YAHOOOOO!
Your kit is complete, kid



Now, simply download the **Star Wars™ Coding Kit by Kano** app onto your device to start playing with the **Star Wars™ The Force™ Coding Kit** motion sensor



Download it at kano.me/app/starwars



Go from learner to master as you create endless *Star Wars*™ adventures



The more you train, the more powerful you'll become



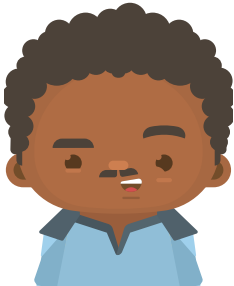
a galaxy of tips

⌘ ⌘⌘⌘⌘⌘⌘ ⌘⌘ ⌘⌘⌘

The power button should always point towards you

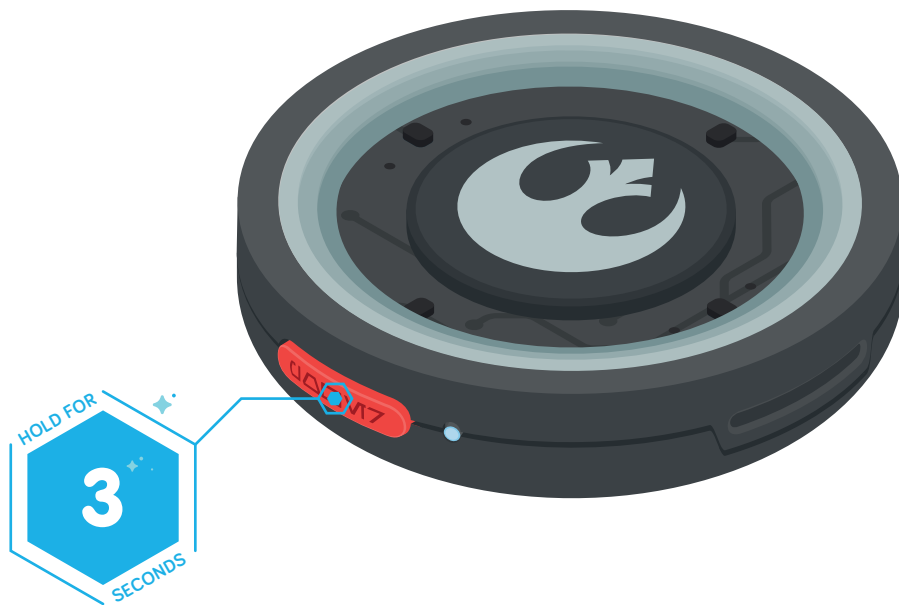


I'll take good care of her.
She won't get a scratch



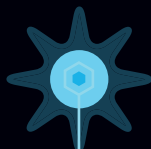
so the kit knows which way it is facing

To save battery power, put the kit into sleep mode



Press and hold the button for three seconds

The Bluetooth light on the side will tell you if your kit is connected



FLASHING
SEARCHING FOR
YOUR DEVICE

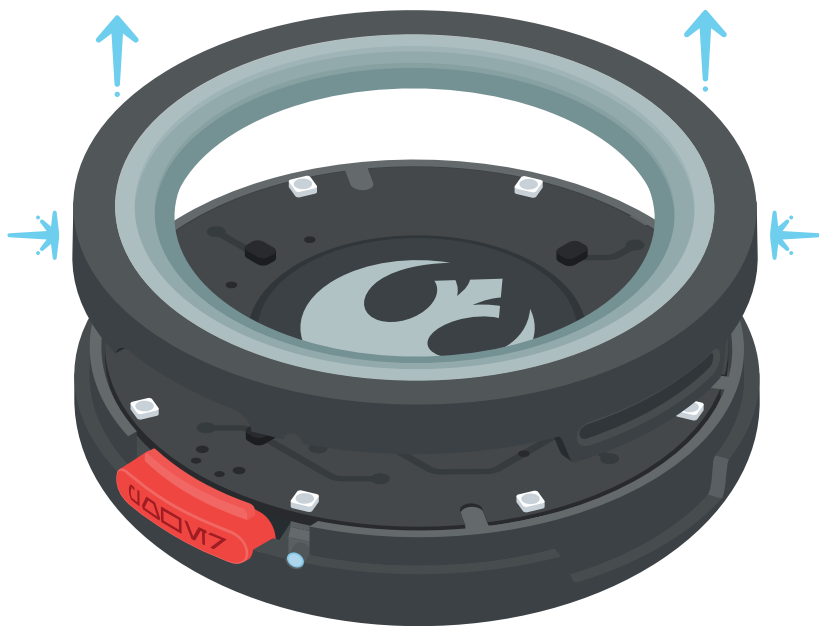


SOLID BLUE
CONNECTED TO
YOUR DEVICE



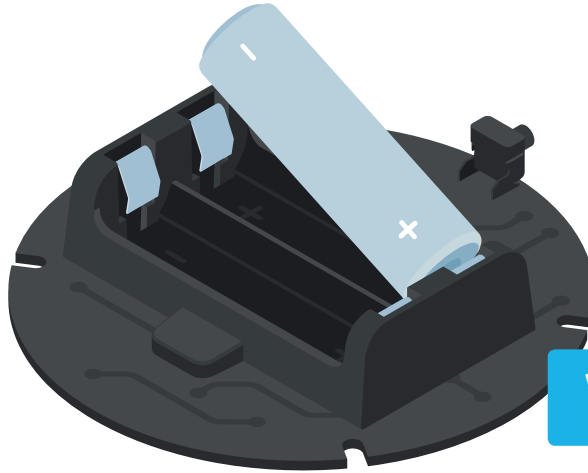


To change the batteries, press and hold the side



Pull the top case off

Take out the PCB



Why don't we just
use the Force?

and change the batteries



Aurebesh is a language in the *Star Wars*™ galaxy

⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒
A B C D E

⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒
F G H I J

⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒ ⌒⌒⌒
K L M N

Try to translate some of the Aurebesh words you see throughout this book



O



P



Q



R



S



T



U



V



W



X



Y



Z



Something not working? Get help fast at help.kano.me

Use these help codes

The Force™ Coding Kit not powering up	FK2
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The Force™ Coding Kit won't connect to device	FK3
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Help installing or using the <i>Star Wars</i> ™ Coding Kit by Kano app	FK4
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Device isn't supported	FK5
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Want more?



help.kano.me

Help with anything
from kits to coding



kano.me/blog

For interesting articles,
help, and highlights



kano.me/app/starwars

Download the app
onto your device



/teamkano

For tutorials, films
and fun stuff



/kanocomputing

Talk to us, and get
the latest news



@teamkano

Send us your pics
and questions

Only now, at the end,
do you understand



You must unlearn
what you have learned



