

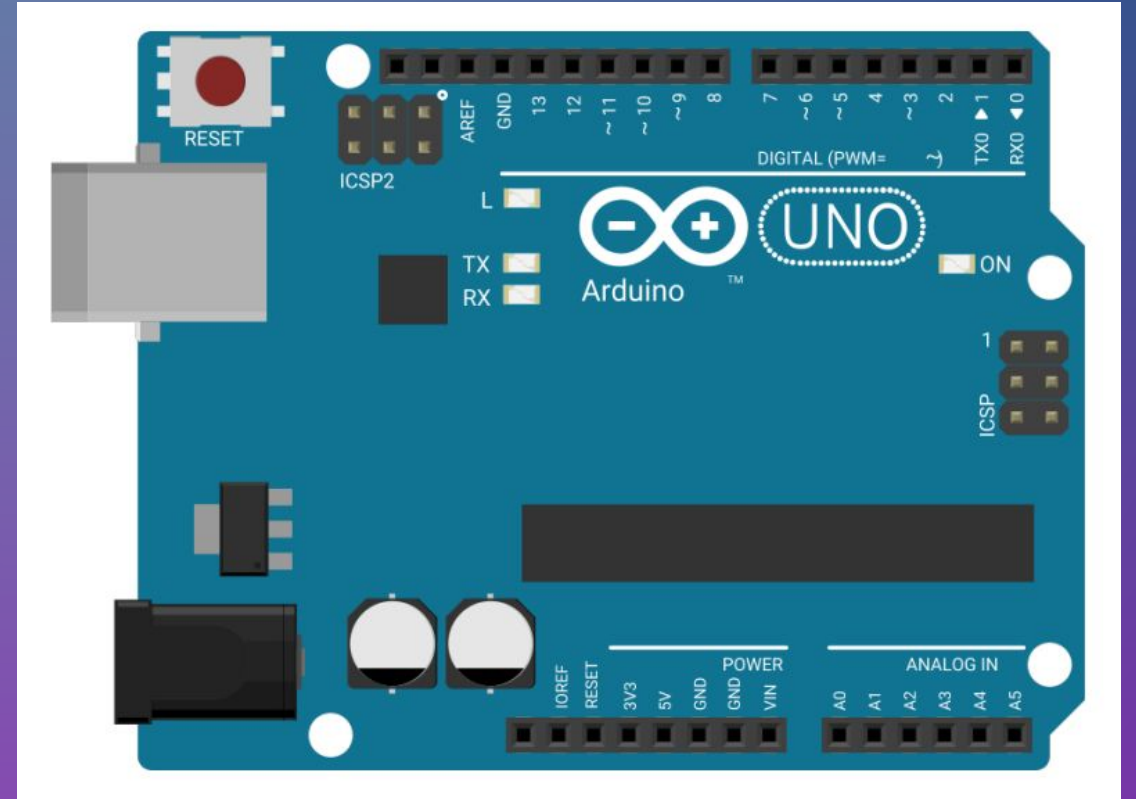
The background features a gradient from dark blue at the top to purple at the bottom. Stylized circuit lines in light blue and white are positioned along the left and right edges, with small circles at various points.

Welcome to the Arduino Workshop!

Interstellar Odyssey Hackathon 2022

What is an Arduino Uno?

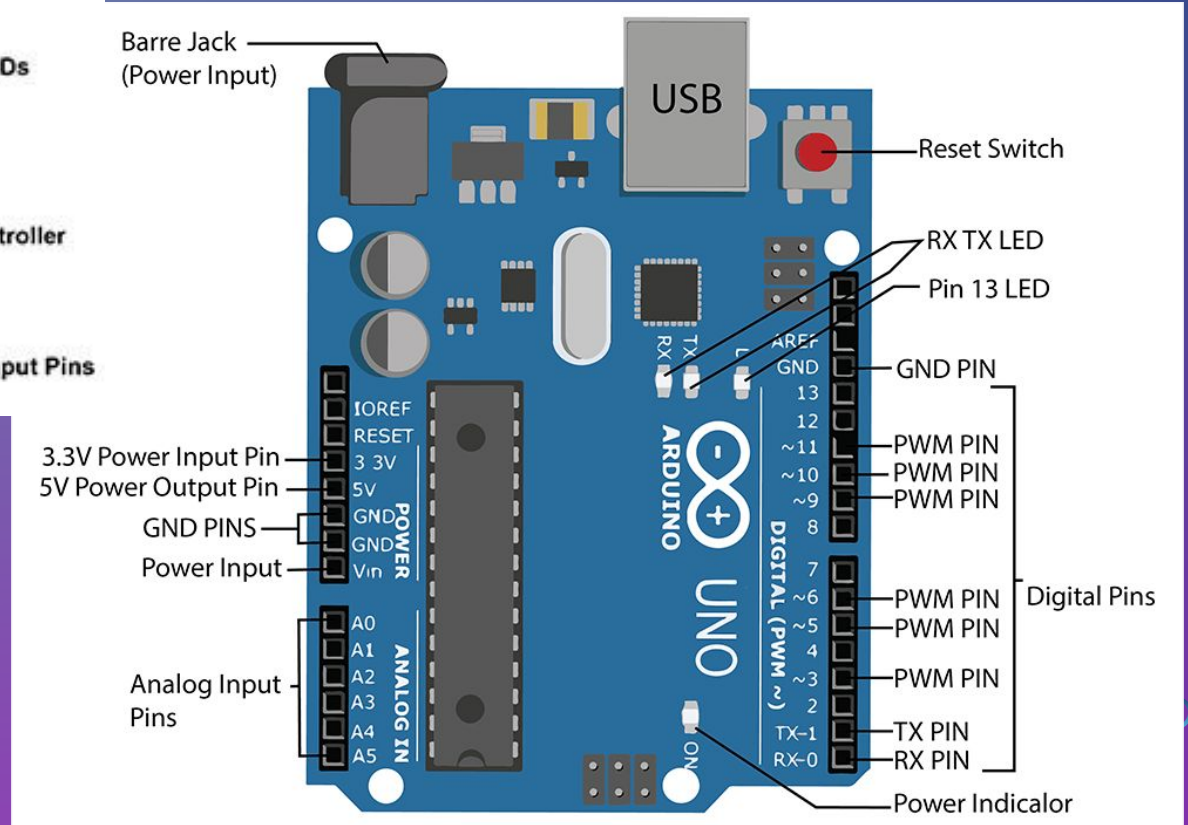
- What can you see?
- What do you think the abbreviations mean?



Explanation Time!



Google any words or abbreviations that you are unfamiliar with



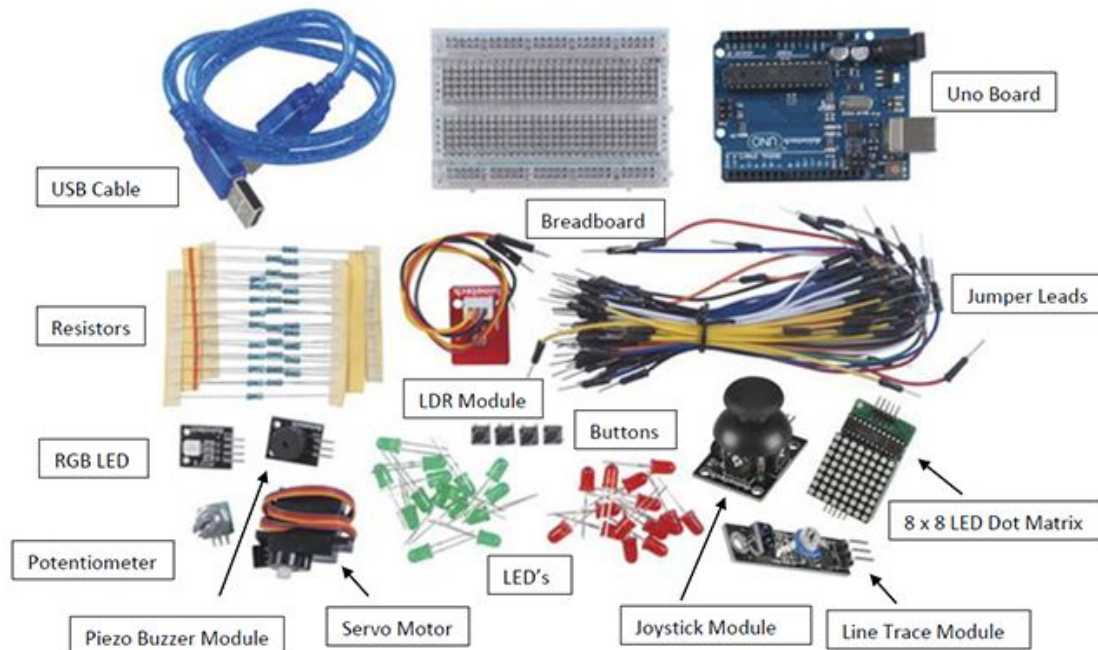
What's in the Box?

<https://www.jaycar.com.au/arduino-learning>

duinotech

Learning Kit

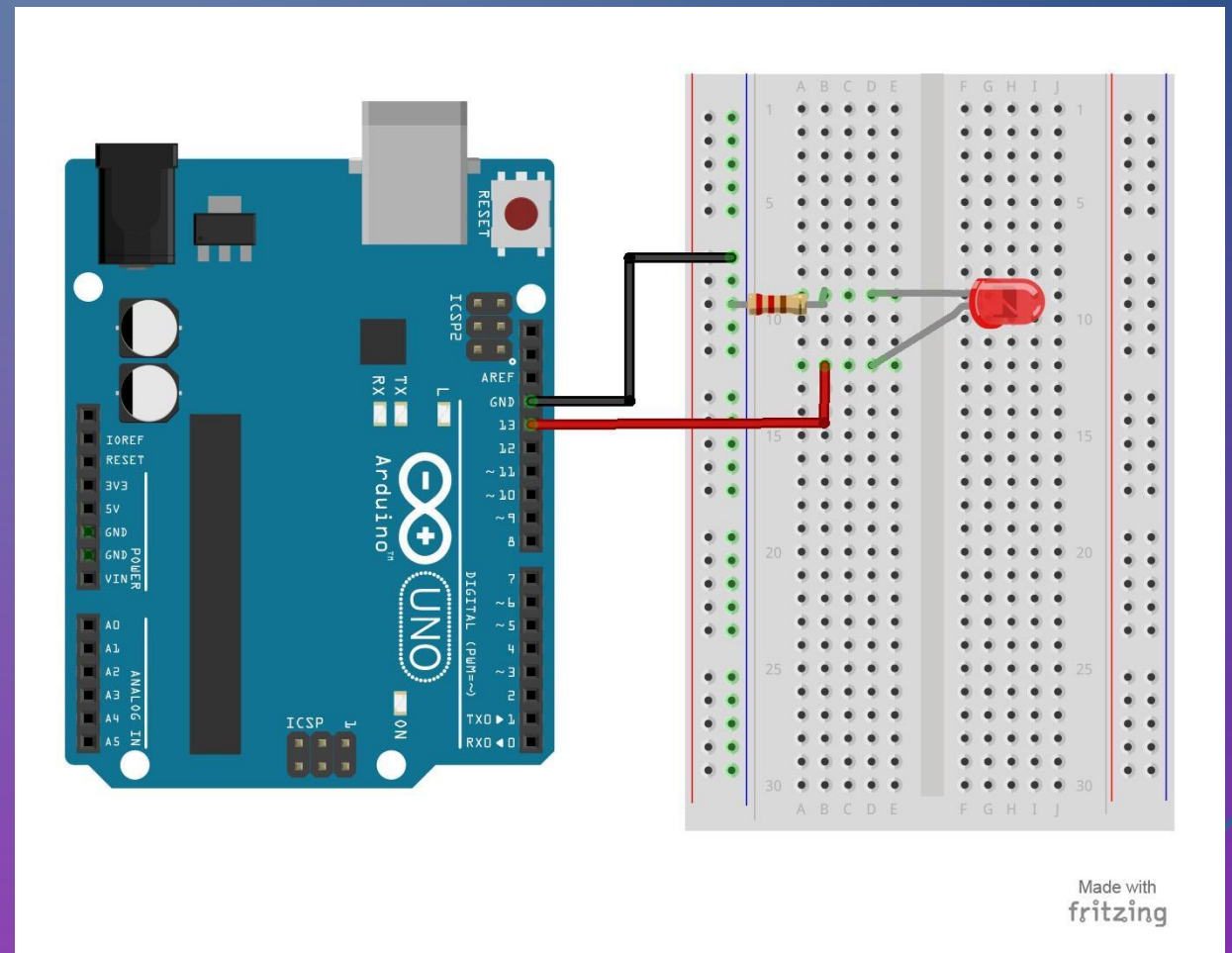
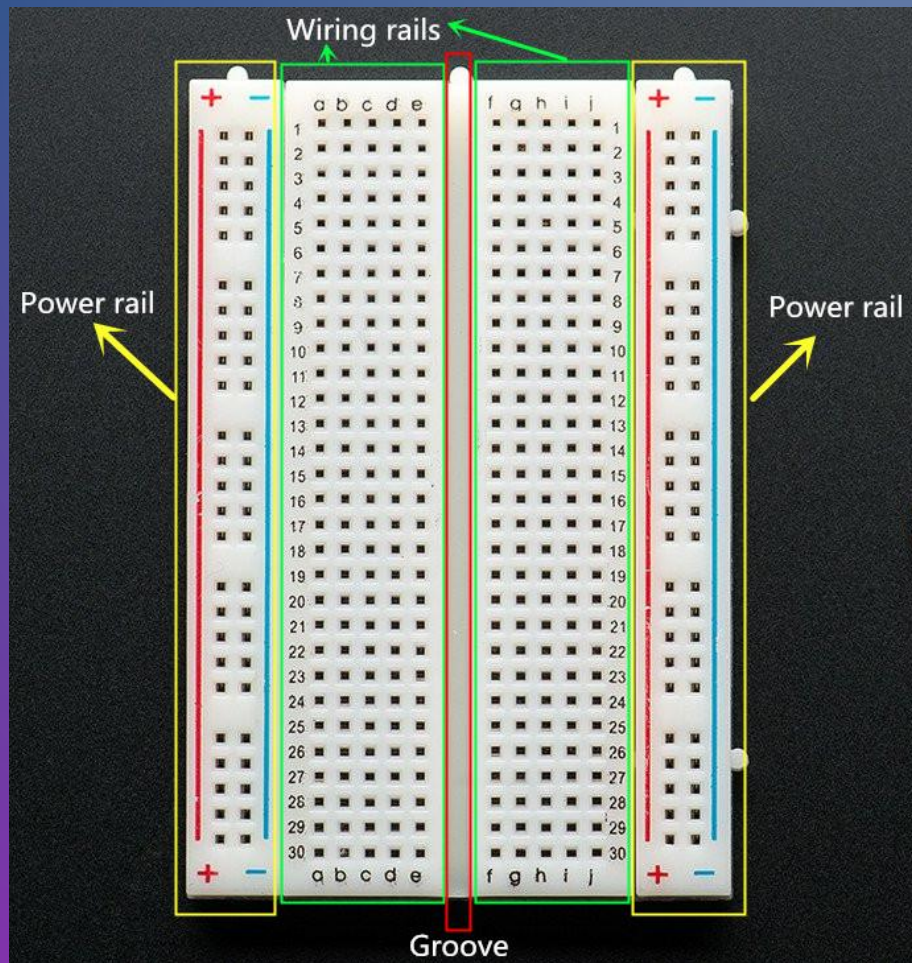
SHOP ONLINE ►



Are you familiar with these items?

- LEDs - why are the legs different lengths?
- Buttons
- Piezo Buzzer
- Servo Motor
- Potentiometer
- LDR Module
- Joystick
- Resistors
- Jumper Leads
- Breadboard

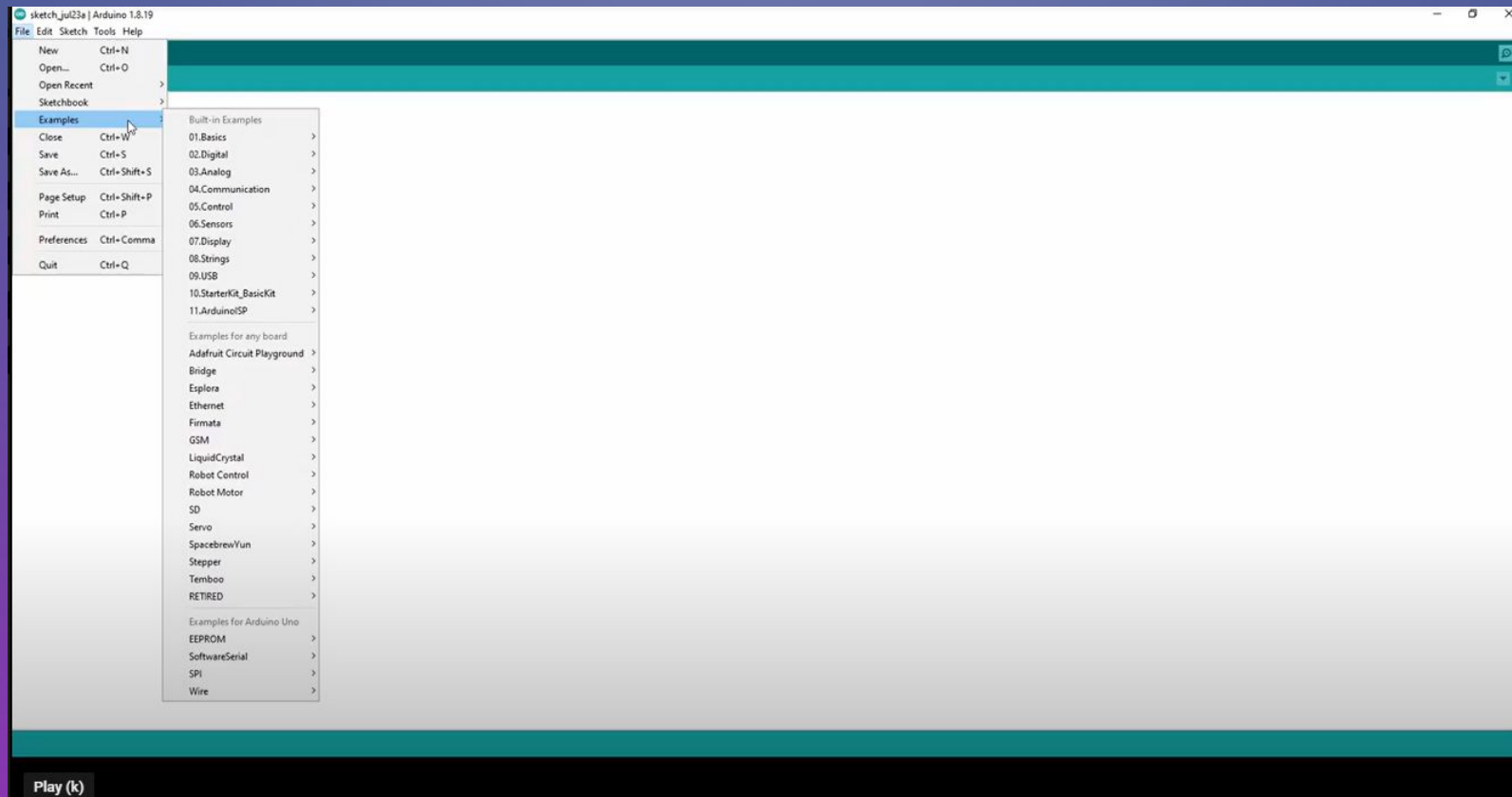
Electronics - Breadboard



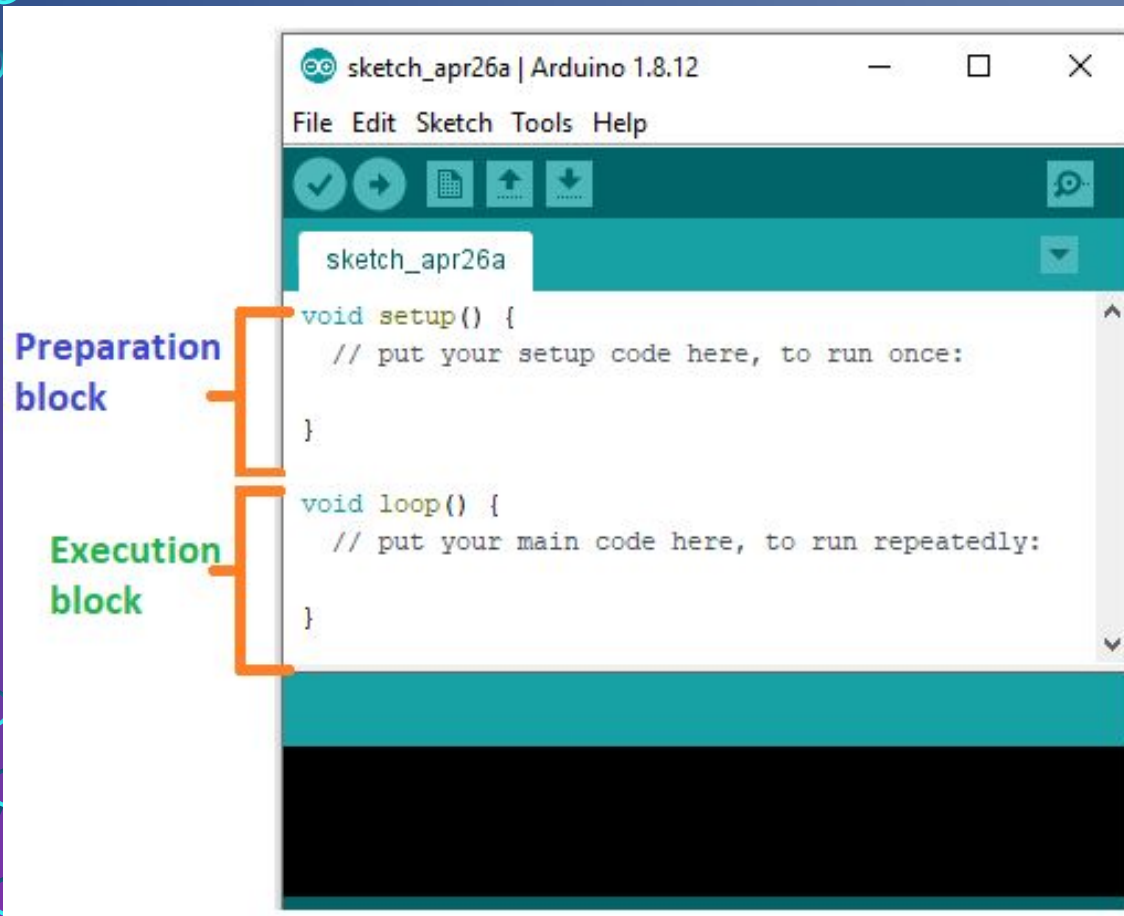
Arduino IDE

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

- Online or Desktop (desktop recommended)



Arduino Code



- Simplified C++
- Add in comments to your code – using //

Blink Project

Read through the workbook and attempt this project for yourself!

If you're up to it, change some of the settings in the code and see what happens!

What if...

- We changed the Highs and Lows?
- We change the Delay time?
- We added more Blink sequences?
- What if we wanted to add more lights?

Kits Available During Hackathon

Few rules:

- Kits can't be taken out of the venue
 - This includes individual parts
- Up to 1 kit per team ***maximum***
 - Kit usage will be recorded
- Must speak to an organiser beforehand

Tips for the Hackathon

- Only covered basics today
- Arduinos can be difficult / infuriating - also rewarding
- Google is your best friend, so is coffee
- Have fun!!

The background is a gradient from dark blue at the top to purple at the bottom. In the corners, there are decorative white lines resembling circuit traces or a stylized tree structure, with small circles at the end of the lines.

If you want to buy your own Duinotech Learning Kit:

<https://www.jaycar.com.au/arduino-compatible-duinotech-learning-kit/p/XC3900>