Sensors in your kit to explore:

Lab 5:

Think about how these kits could be used in the environment around your home. Invent a device relevant to your daily life using the above parts. What does it help you do? What are the possible use cases for this device? What interactions does it afford the user? Design or sketch an enclosure, and include a video of the circuit working (or a tinkercad link). Feel free to be inspired by the above readings.

[PIR Motion Sensor](https://learn.adafruit.com/pir-passive-infrared-proximity-motion-sensor/using-a-pir-w-arduino)

Household use: burglar detector, wildlife detector for camera

Helps with: security, automated images

Interactions: Movement

[Ultrasonic Sensor](https://www.tutorialspoint.com/arduino/arduino_ultrasonic_sensor.htm#:~:text=Advertisements,or%201%E2%80%9D%20to%2013%20feet)

Household use: fridge door, lighting

Helps with: better living, laziness

Interactions: Movement

[IR LED / IR Receiver](https://learn.sparkfun.com/tutorials/ir-communication/all)

Household use: Remote control

Helps with: laziness, ease of use

Interactions: Press buttons

[Light Dependent Resistor](https://create.arduino.cc/projecthub/sumanbargavr/working-with-light-dependent-resistor-ldr-1ded4f)

Household use: Automatic light dimmer, camera lightmeter

Helps with: ambient lighting, photography

Interactions: Minimal

[TMP36 Temperature Sensor](https://learn.adafruit.com/tmp36-temperature-sensor/using-a-temp-sensor)

Household use: digital thermostat, oven heating

Helps with: accurate automatic heating

Interactions: button

[Tilt Sensor](https://learn.adafruit.com/tilt-sensor/using-a-tilt-sensor)

Household use: accelerometer for phones, earthquake detector

Helps with: automatic orientation, safety

Interactions: turning device

[Force Sensing Resistor (circular)](https://learn.adafruit.com/force-sensitive-resistor-fsr/using-an-fsr)

Household use: scales

Helps with: accurate weight measurement

Interactions: standing/pressing