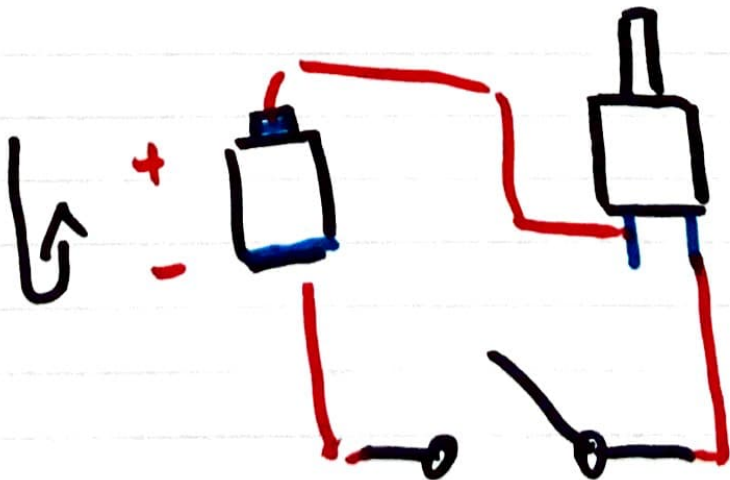


LO2 - Sensation

Sept 14/21

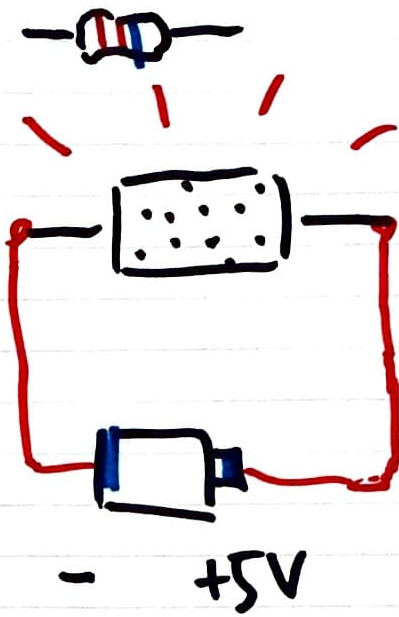
mindful practice :

Depict / describe the sensations around you / in your body using physical / colour etc. metaphors. Try drawing where in your body the sensation is. Eg:

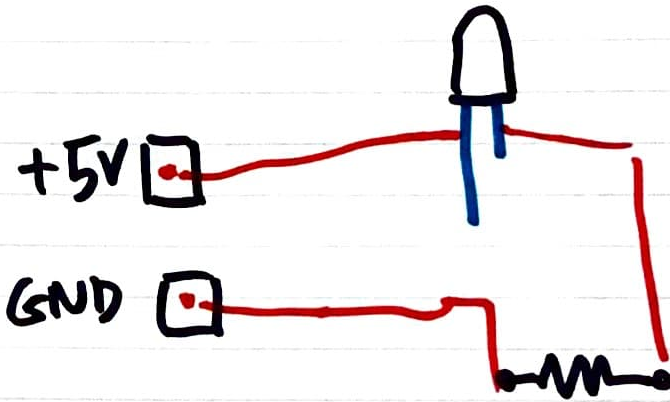


Resistors

$$220 \Omega = 0.22 \text{ A}$$



current



$$V = IR$$

resistance

$$V = IR$$

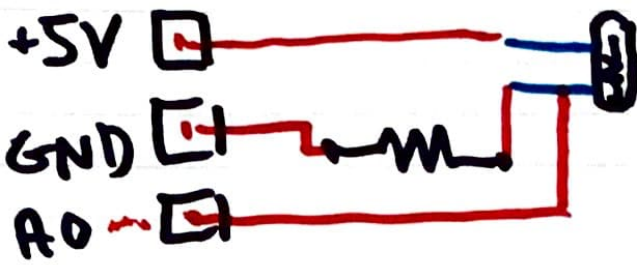
$$5V = xA \cdot 220\Omega$$

$$\frac{5V}{220\Omega} = \frac{1}{44} A \approx 200 \text{ mA}$$

↓
1

5 A

• photo resistor



more light
 =
 lowers
 resistance
 =
 higher voltage

Analog to digital converter

↓
 continuous

↓
 discrete



010101 44 kHz

uncountable

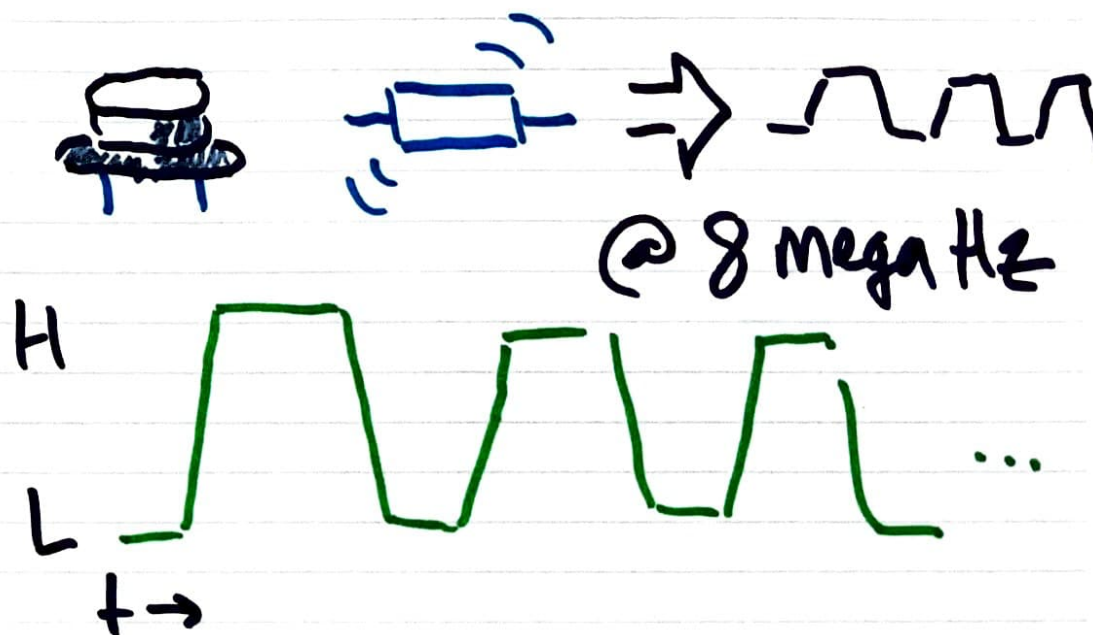
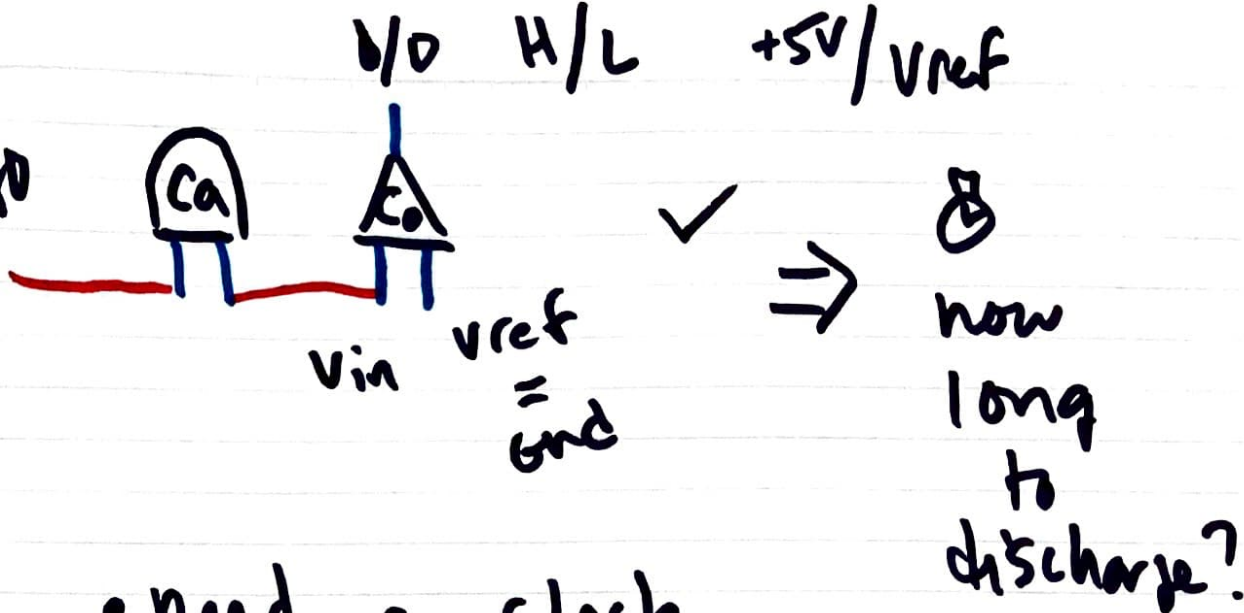
countable

3.1459...

3.1459

3.3333 3 1/3

1024 levels
 of sensitivity

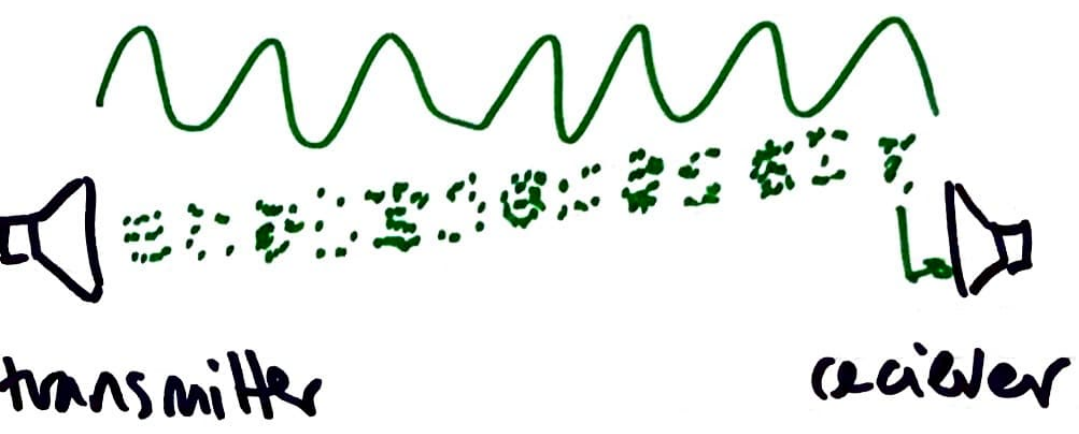


n clock ticks $\sim x$ volts

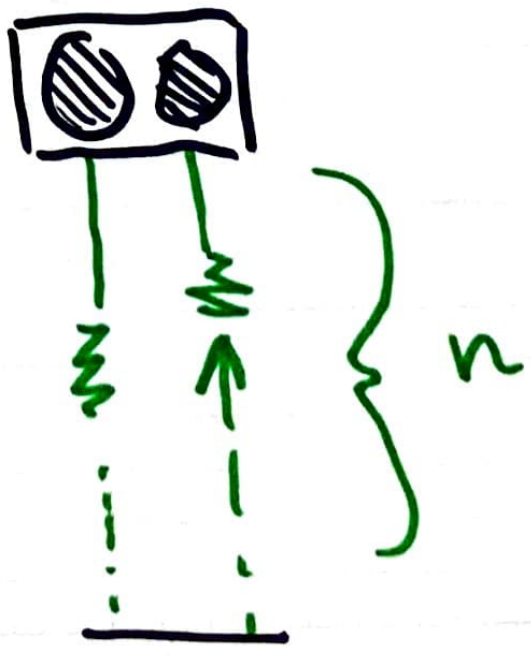
- space vs. time trade offs.

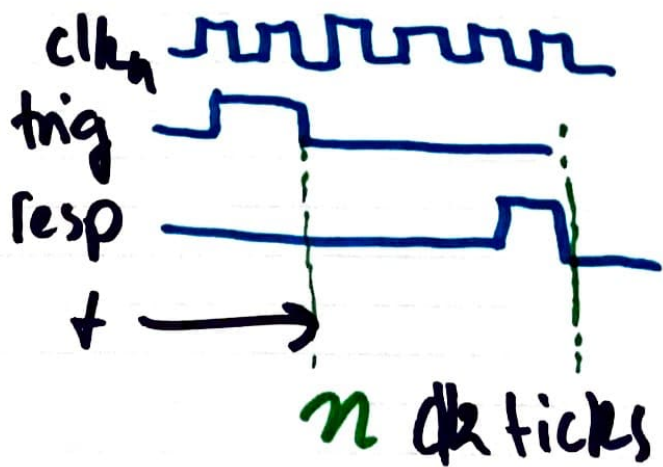
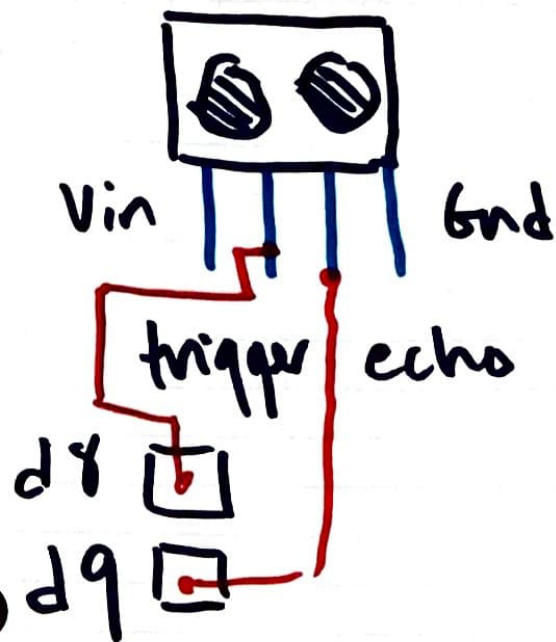


- ultrasonic sensor
- sound waves.

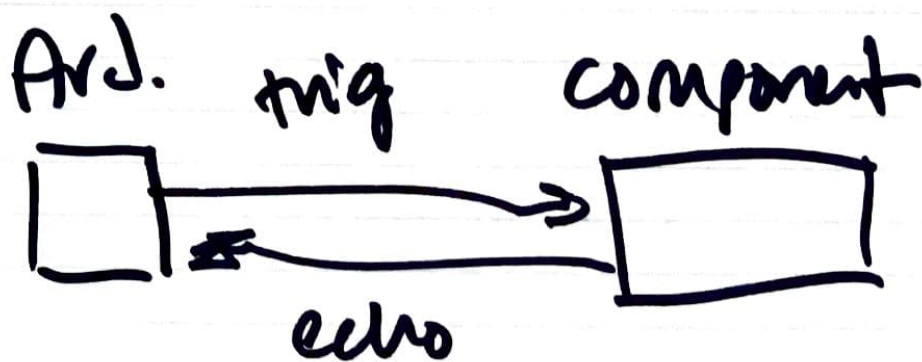


time \sim distance
 n clock ticks $\sim x$ cm





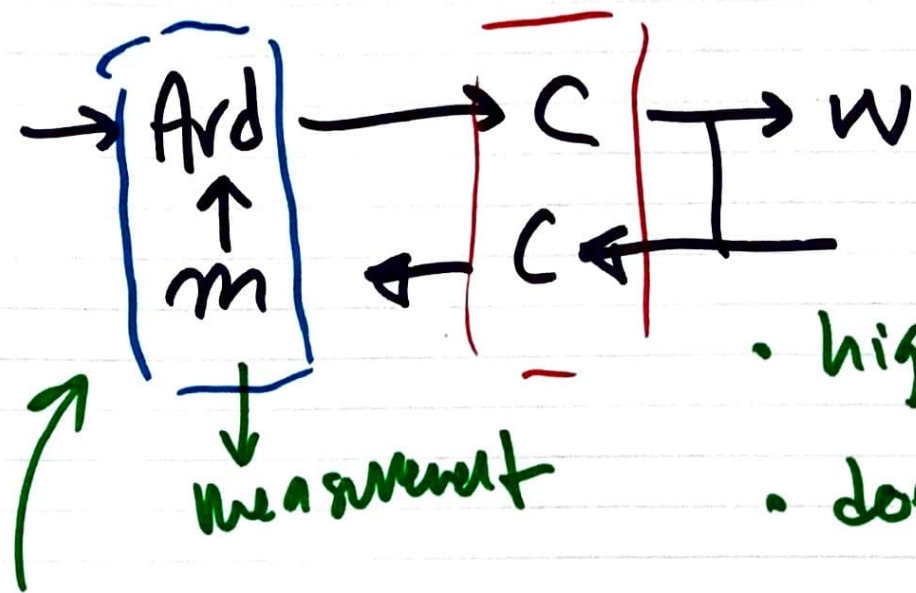
digitalWrite(d8, HIGH)
 delay(10)
 pulseIn(HIGH, d9)



"brain"

 "finger"
 fast Meissner corpuscle.

"Subsumption architecture"



- lower hz
- only sees data

- higher hz
- does stuff

Ard.

"doesn't know about"

speed sensor ?

$$d_2 - d_1 = v$$

remember d_1 t_1 d_2 t_2

Why aren't muscles,
eyes, + other
organs part of
the brain?
Should they
be?

Paul todo:
include refs for
components.