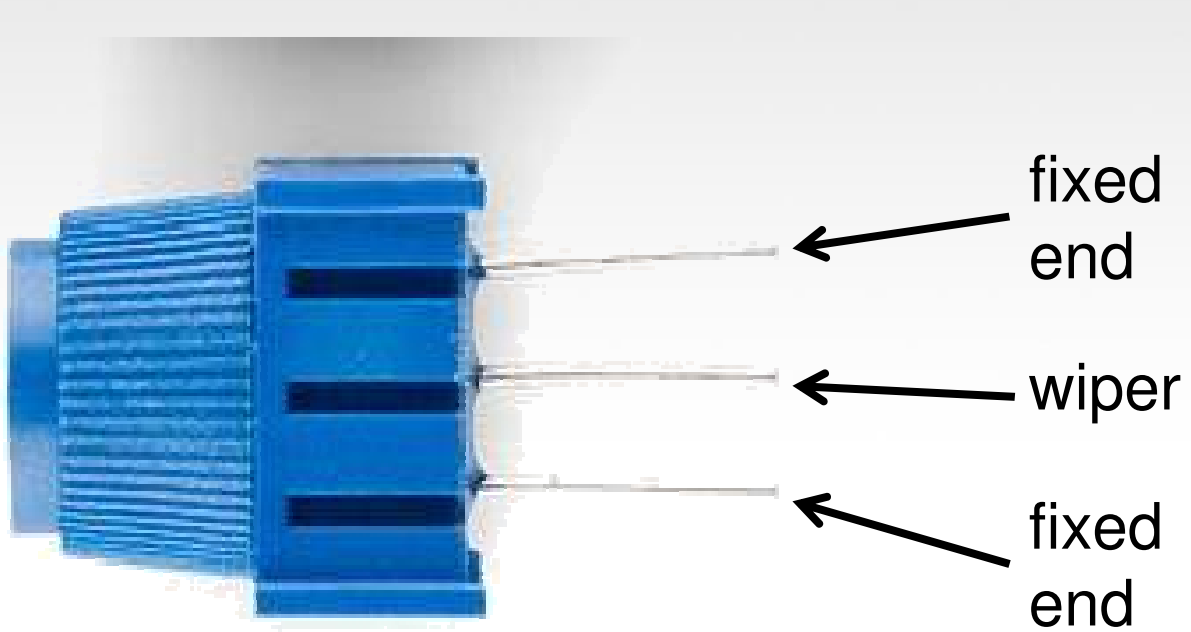
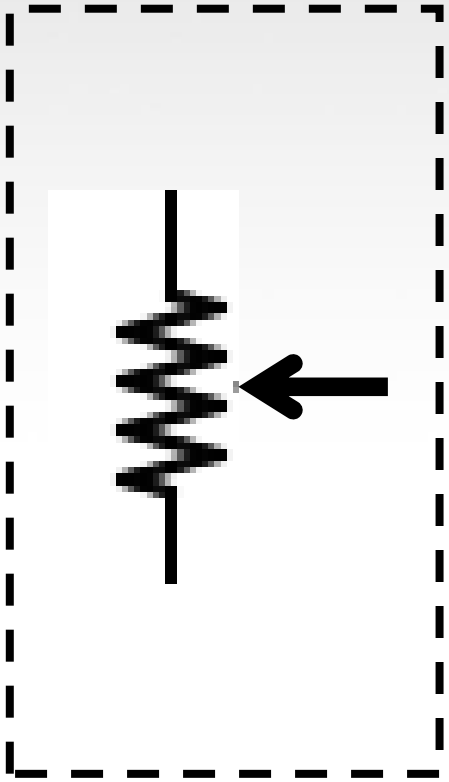
Trimpot (Potentiometer)
Variable Resistor

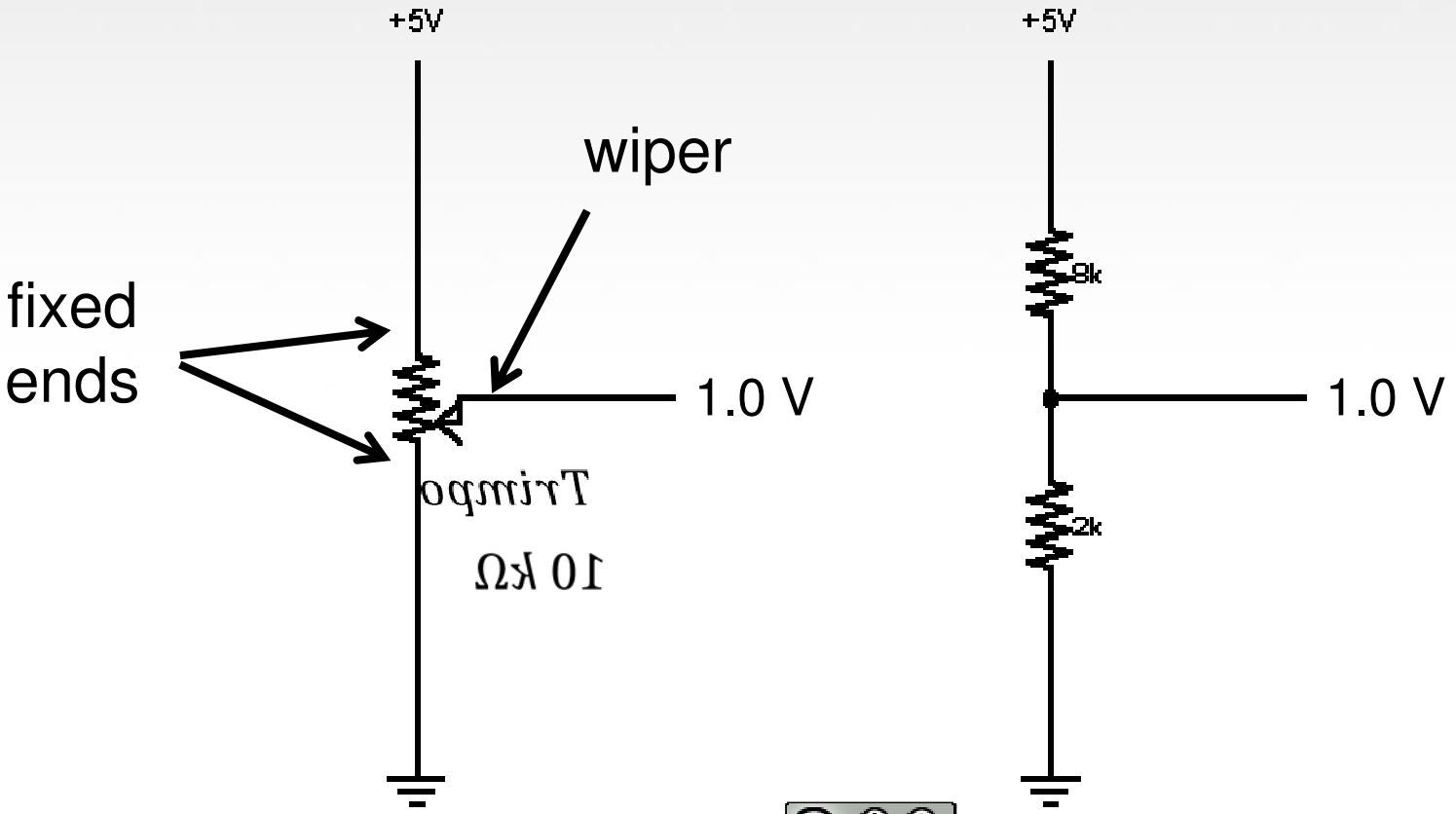




Analog Sensors

3 Pin Potentiometer = var. resistor (circuit)

a.k.a. Voltage Divider Circuit



Ohms Law… (just the basics)
Actually, this is the “voltage divider”

$$V_{R1} = V_{CC} \cdot \left(\frac{R_1}{\mathrm{R}_{Total}} \right)$$

$$V_{R2} = V_{CC} \cdot \left(\frac{R_2}{\mathrm{R}_{Total}} \right)$$

$$R_{Total} = R_1 + R_2$$

analogRead()

Arduino uses a 10-bit A/D Converter:

- this means that you get input values from 0 to 1023
  - 0 V → 0
  - 5 V → 1023

Ex:

```
int sensorValue = analogRead(A0);
```