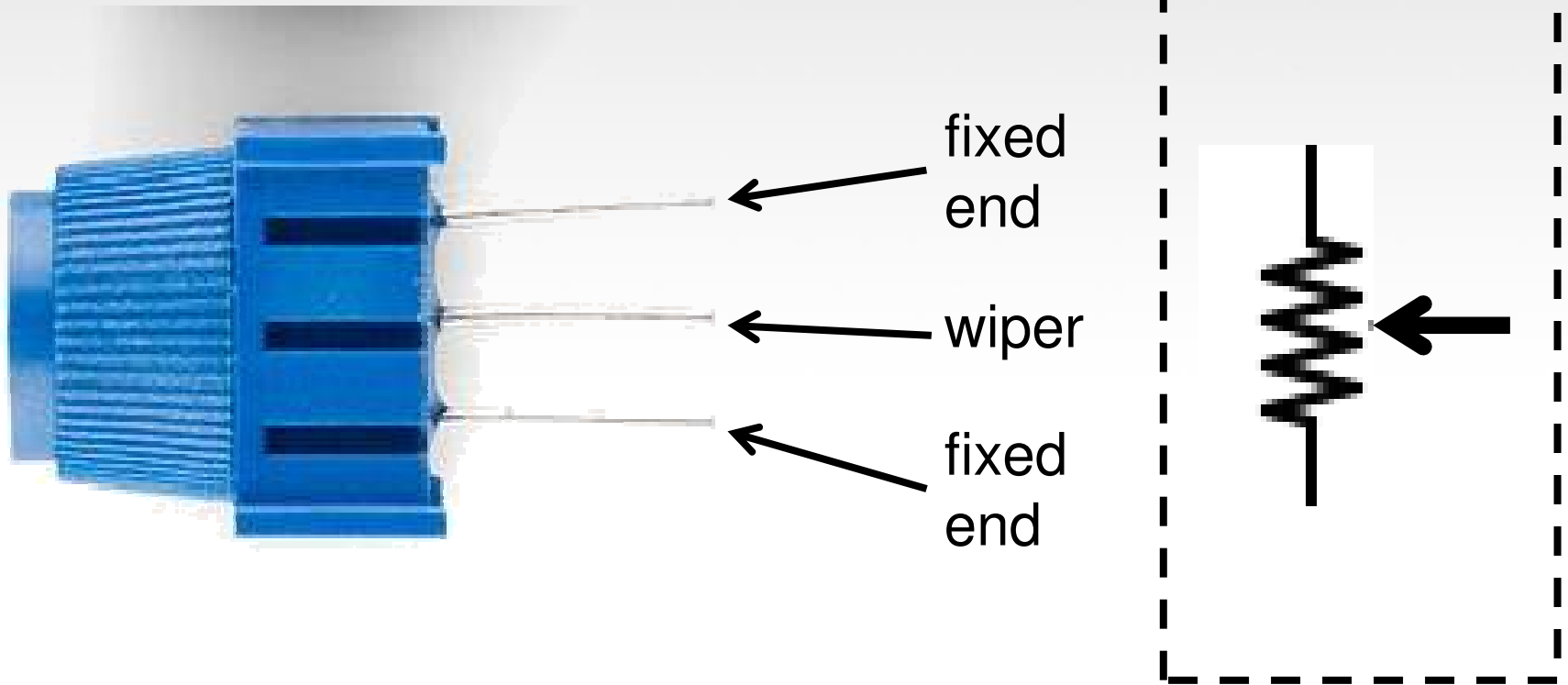


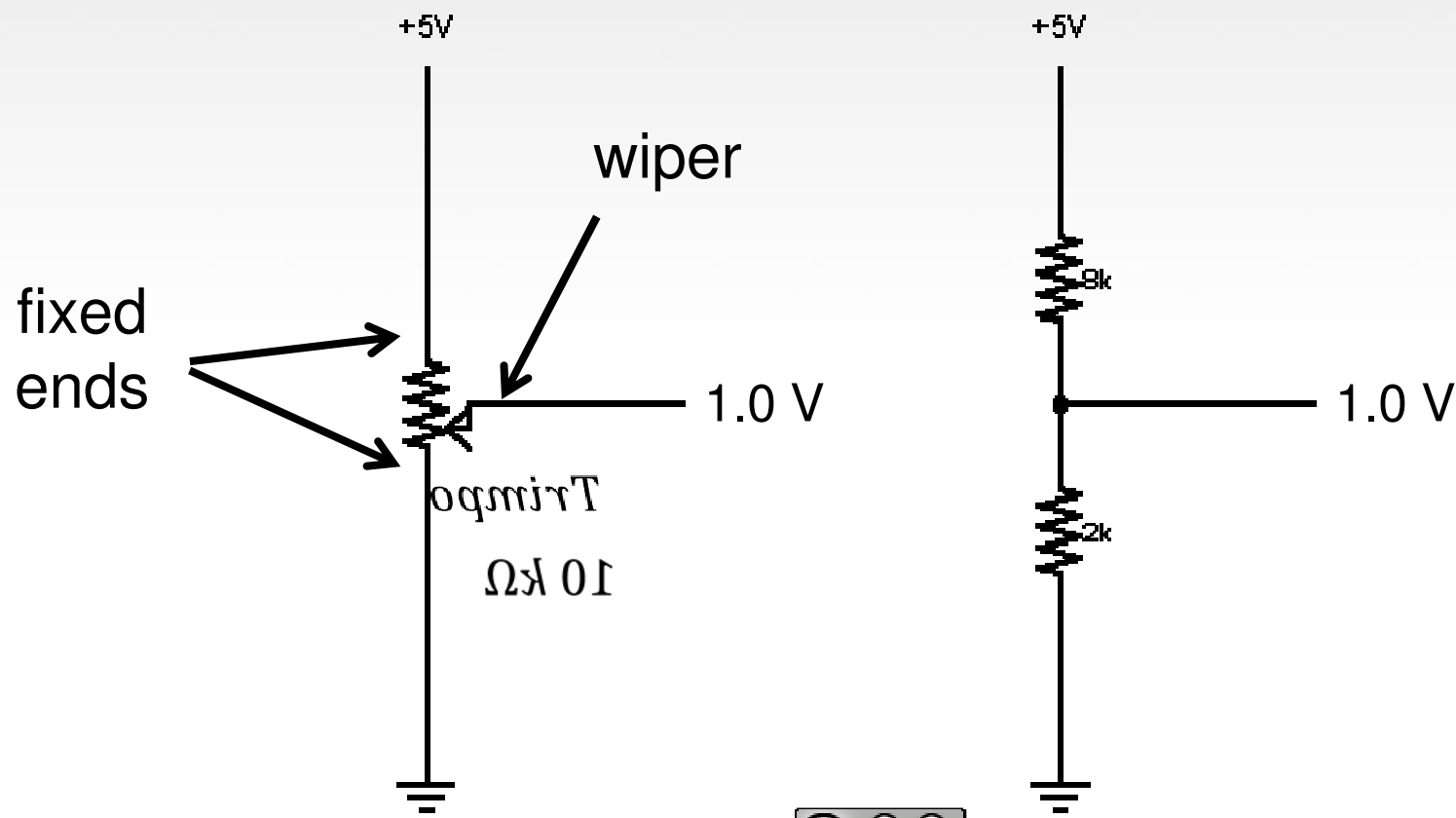
Trimpot (Potentiometer) Variable Resistor



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Analog Sensors

3 Pin Potentiometer = var. resistor (circuit)
a.k.a. Voltage Divider Circuit



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

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

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

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



analogRead()

Arduino uses a 10-bit A/D Converter:

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

Ex:

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



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