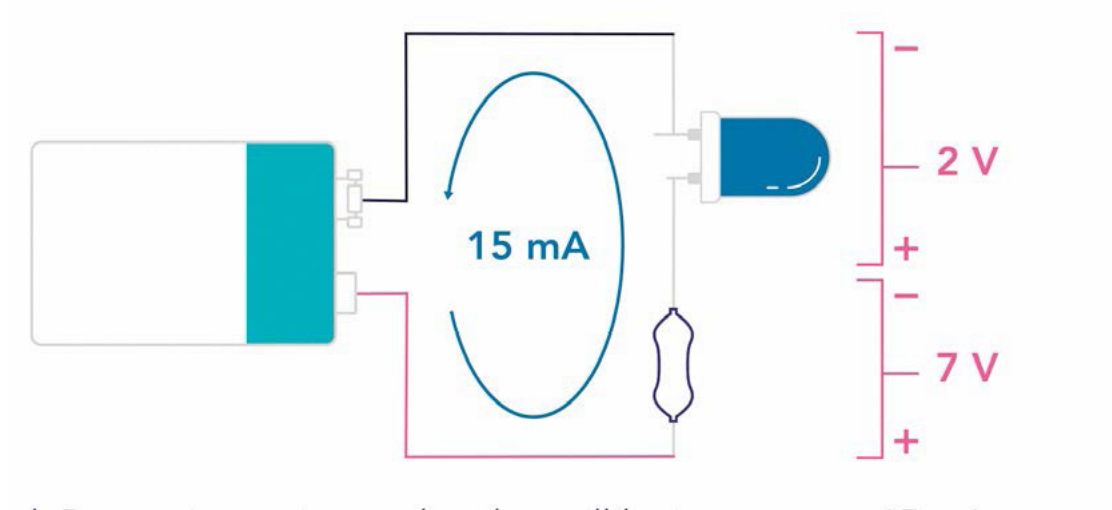


Challenge

Challenge: Choose the resistance value to limit current

LED Characteristics

- Very little resistance—pretend “0 Ω ”
- Target current = 15 mA
- Voltage drop = 2 V



Goal: Determine resistor value that will limit current to 15mA

$$V = I \cdot R$$

$$7V = 15mA \cdot R$$

$$R = \frac{7V}{15mA}$$

$$R = 466.7 \Omega$$

Round Up to the closest Resistor $\Rightarrow 470 \Omega$