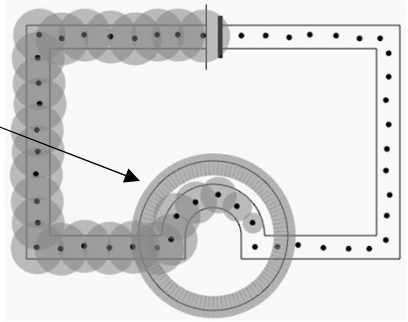
Power – how quickly energy is shifted

The faster the energy circle expands, the higher the power

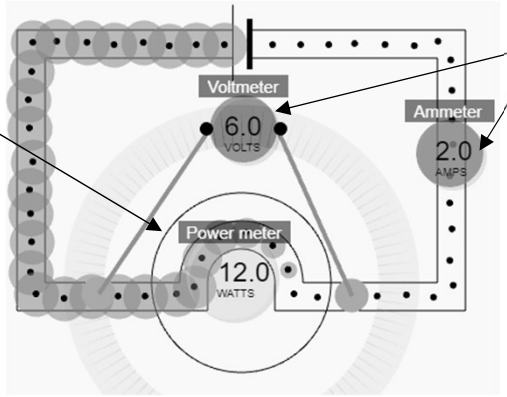


Charges arrive at the bulb faster, and they lose more energy

😎 The higher the power, the brighter the bulb. Power depends on both the current through the bulb and the potential difference across it. Increasing the battery voltage increases both current and potential difference.

Calculating power – current x voltage

Power in watts is equal to…



…current in amperes x potential difference in volts

😎 There aren't really simple power meters like in our simulation.

If you change the battery voltage, that changes both current and potential difference. If you keep the battery voltage the same and swap the bulb for one with a different resistance, only the current changes - big resistance, smaller current, lower power.

power = current x voltage (for a component)

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