

Power Sources and Electric Circuits

Electrical Engineering

Wolfgang Neff

Power Sources (1)

- Some impressions of power sources



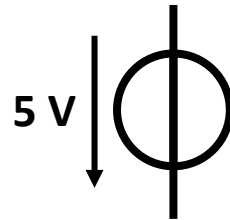
Power Sources (2)

- Real and schematic DC voltage sources

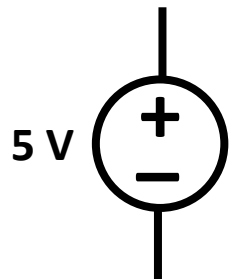
Object



Symbol



EN-60617
(European)

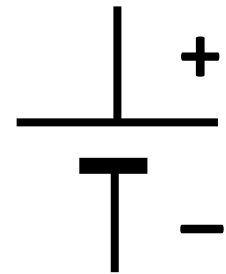


IEC 60617
(American)

Object

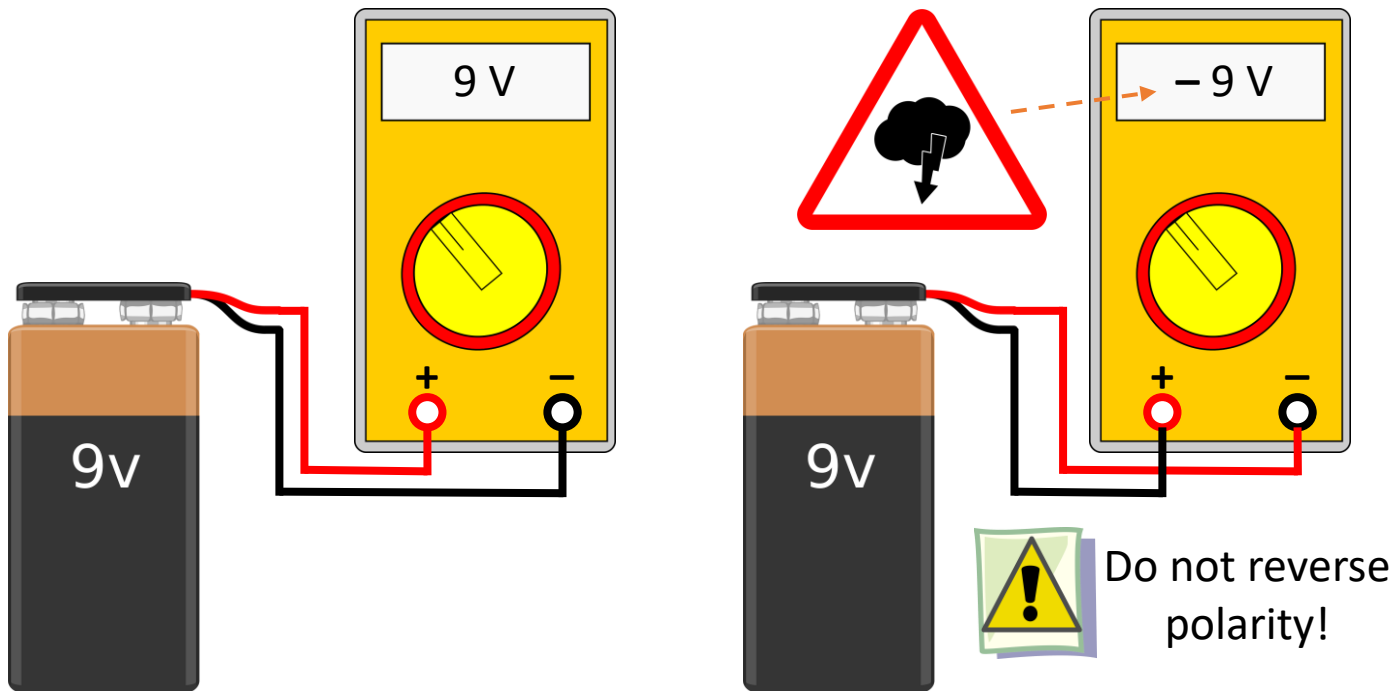


Symbol



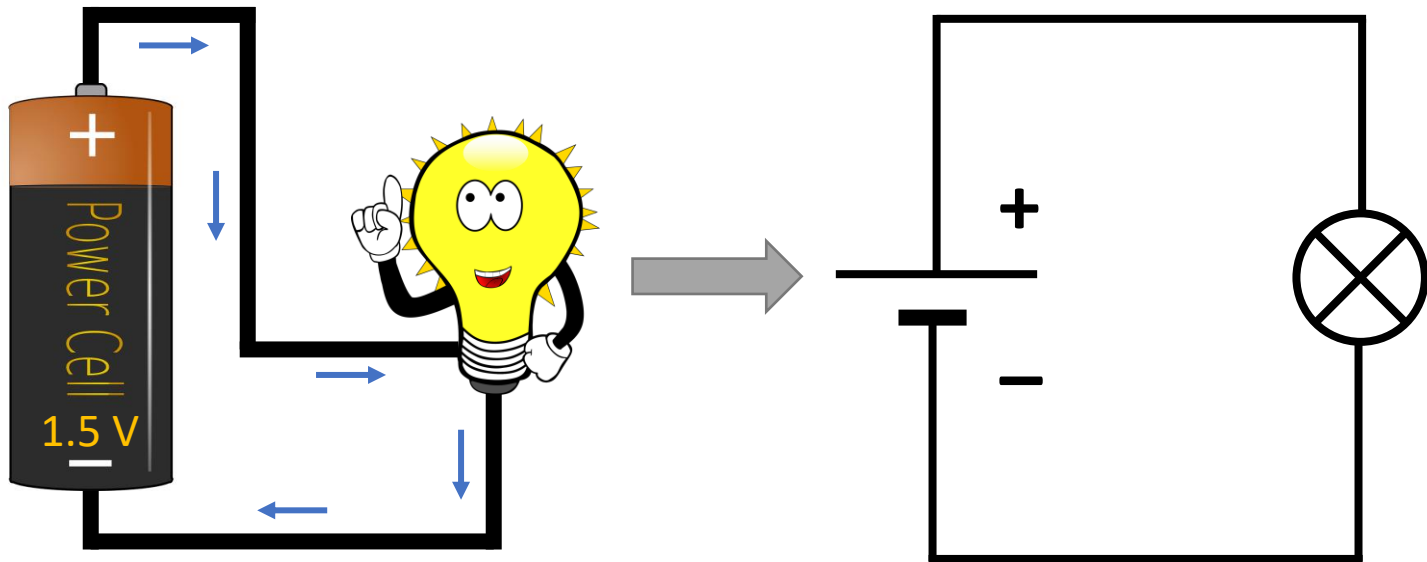
Power Sources (3)

- Direction is important. Color, too.



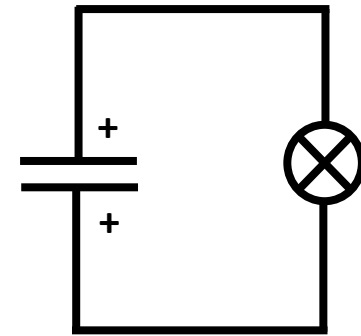
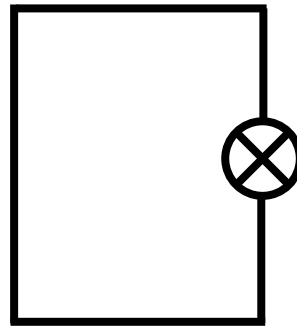
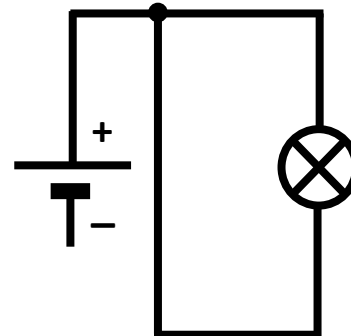
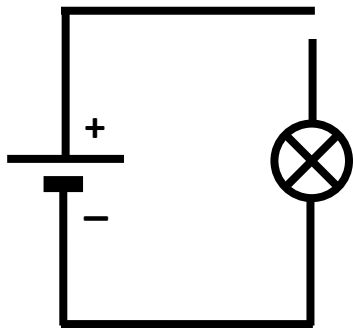
Electric Circuits (1)

- Real and schematic electric circuits



Electric Circuits (2)

- Broken circuits do not work well



Electric Circuits (3)

- Short circuits mean danger and heat

