

Reference Card: Circuit Symbols

A printable circuit-symbol reference card for Lessons 10–12. Shows the four conventional symbols (cell, wire, globe, switch) with a labelled diagram and a note on what each component does, so students can draw circuits the standard way scientists do.

Scientists everywhere draw circuits the same way, using **conventional symbols**. Learn these four and you can read any circuit diagram.



cell



wire



globe



switch (open)

Cell: long line is +, short line is –. Globe: a circle with a cross. Switch: a line that lifts to break the loop.

Component	Its job
Cell (battery)	The energy source — pushes the current around
Wires	Carry the current between components
Globe (lamp)	Transforms electrical energy into light
Switch	Opens or closes the loop to turn it on or off

A "battery" really means **two or more cells** joined together. A single AA is technically just one cell!