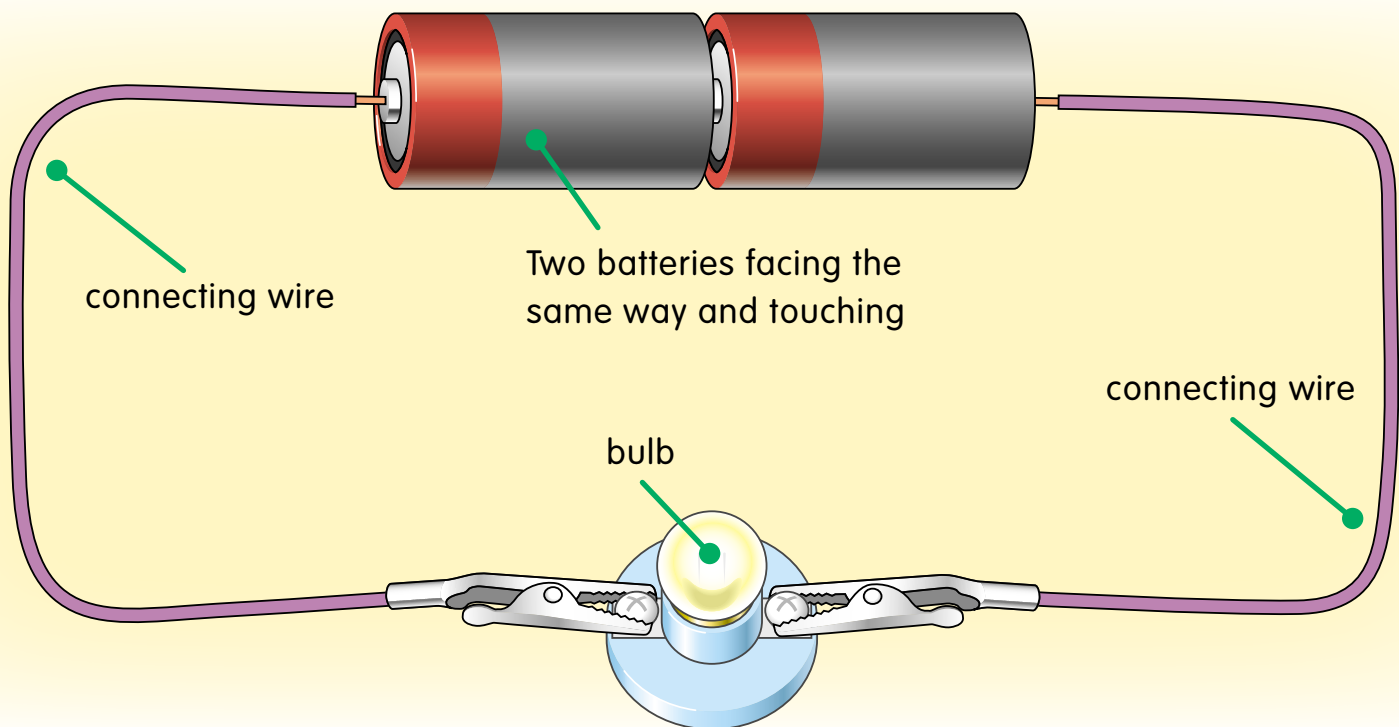# Circuits that don't work
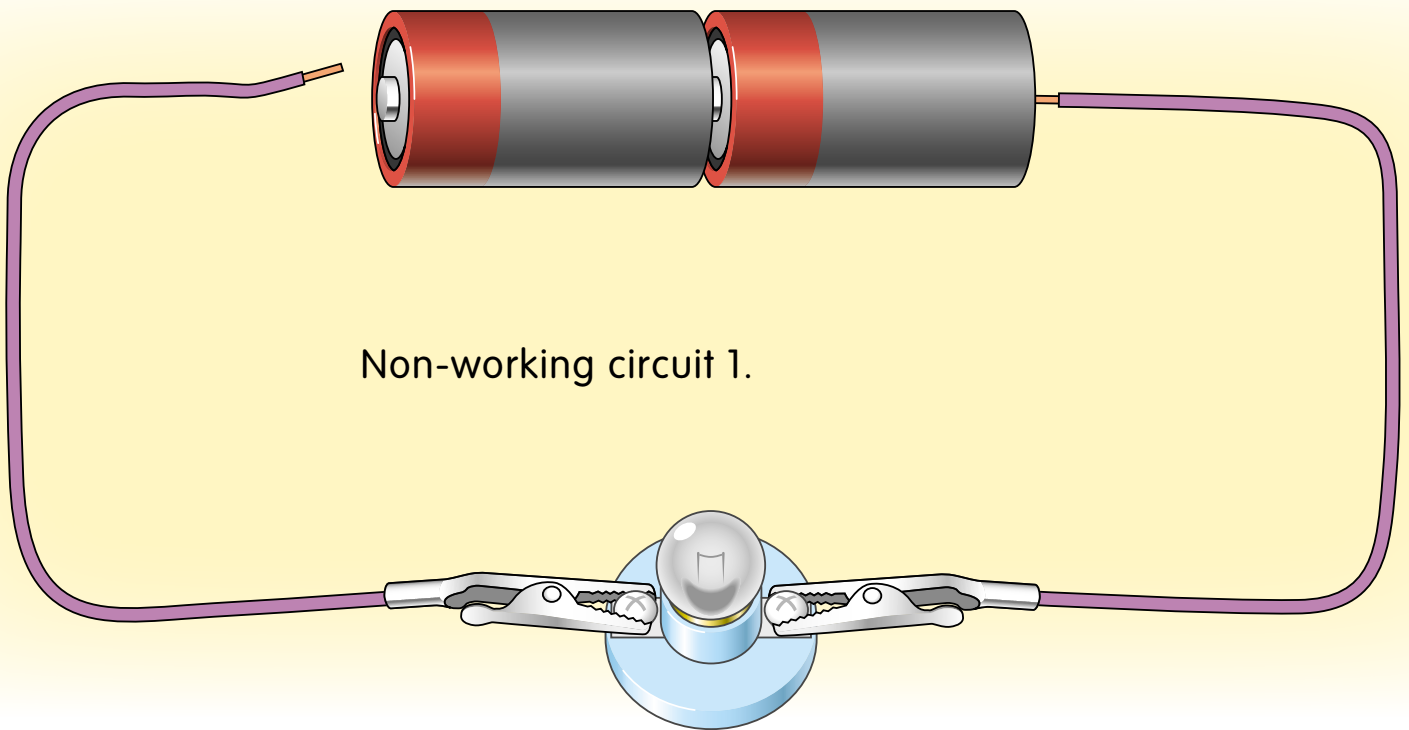
Circuits need to be joined in a loop or they don't work.

Everything in a circuit has to be in a loop that starts at one end of a battery and finishes at the other end. Batteries always have to face the same way. Otherwise the circuit will not work.
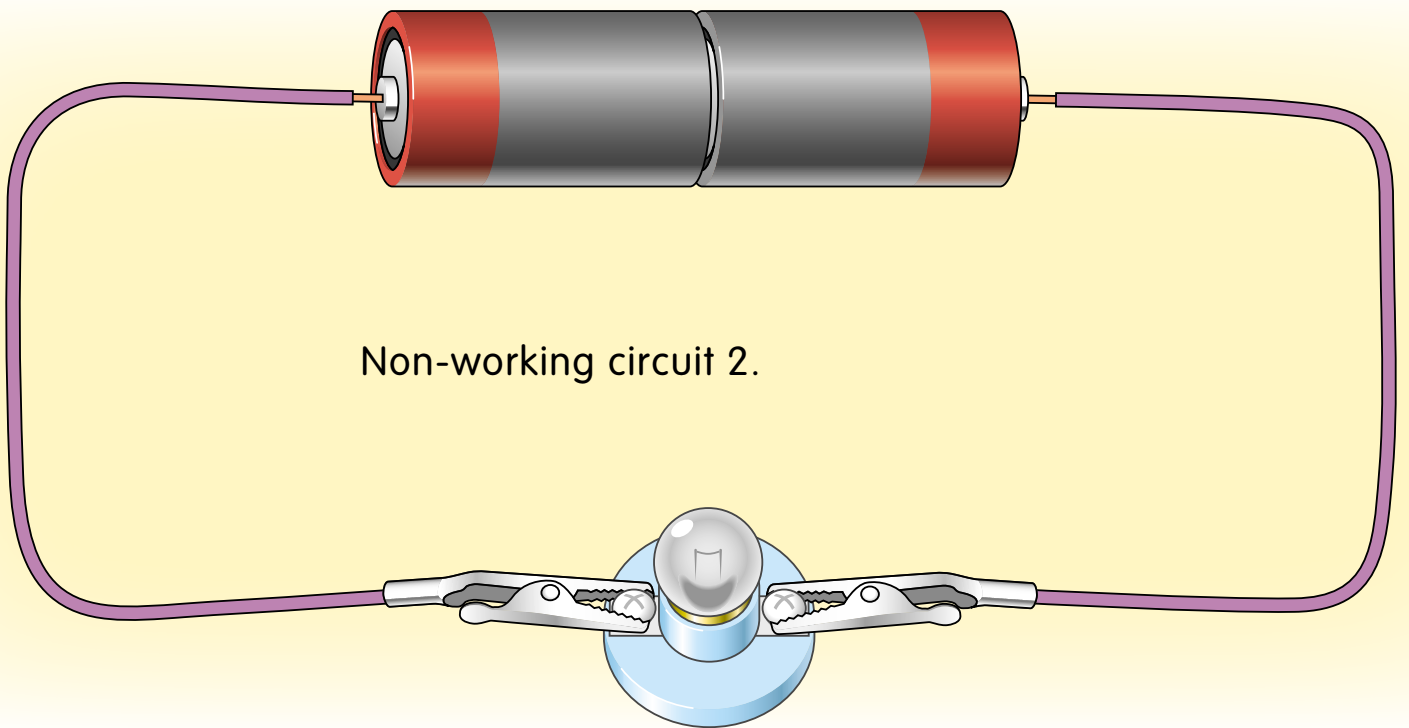
connecting wire

Two batteries facing the same way and touching

connecting wire

bulb

This circuit works and the lamp lights. Here is why:

1 Everything is in a loop.

2 The batteries face the same way.

3 The wires touch the batteries and the bulb.

Non-working circuit 1.

Non-working circuit 2.

Why does the bulb not light in these two circuits?