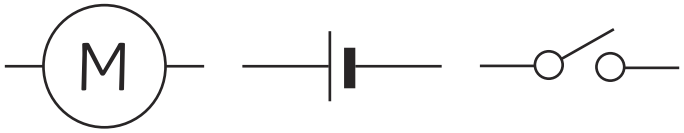
Series and Parallel Circuits

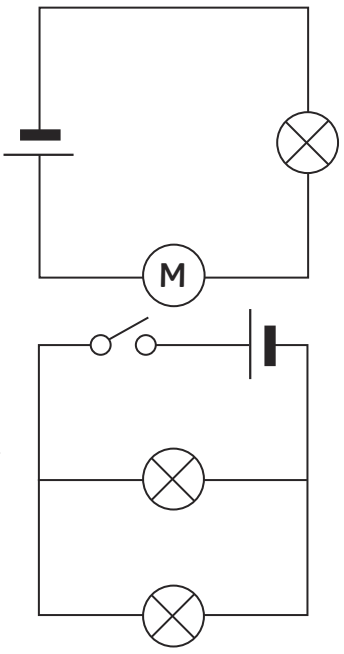
In a series circuit, the components are connected end to end in a loop. If one bulb breaks, the whole circuit will go out and none of the bulbs will light as the circuit is no longer complete.

In a parallel circuit, the components are connected side by side. This gives the current several different paths for it to flow around. If one bulb blows, the other bulbs will remain lit as the other pathways in the circuit are still complete.

1. Using the component symbols below, draw a series circuit in which a switch can be used to turn a motor on and off.

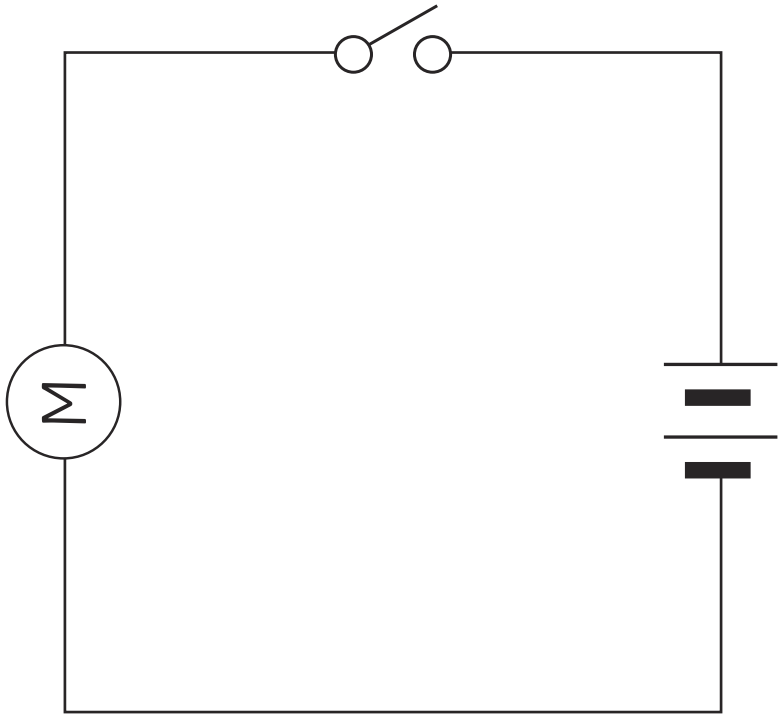


2. If one of the bulbs breaks in a series circuit and one in a parallel circuit, what will happen?



Series and Parallel Circuits Anwers

1. Using the component symbols below, draw a series circuit in which a switch can be used to turn a motor on and off.



2. If one of the bulbs breaks in a series circuit and one in a parallel circuit, what will happen?

   If one of the bulbs breaks in a series circuit, the whole circuit will go out and none of the bulbs will light as the circuit is no longer complete. In a parallel circuit, the components are connected side by side. This gives the current several different paths for it to flow around. If one bulb blows, the other bulbs will remain lit as the circuit is still complete.