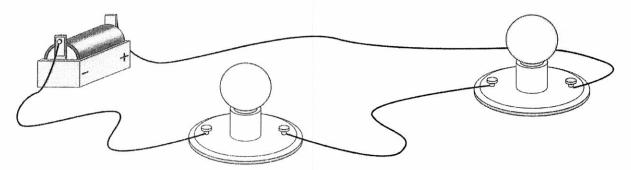
## Series and Parallel Circuits

In a <u>series circuit</u> electric current has only one path to follow. All parts are connected one after another. Electric current flows from the negative side of the battery around in a loop to the positive side.

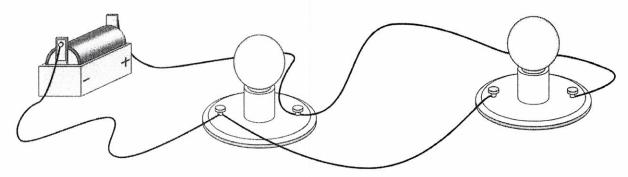
Draw arrows to show the path of electric current in this series circuit.



If a light bulb is missing or broken in a series circuit, will the other bulb light? Explain.

In a **parallel circuit**, electric current has more than one path to follow. The electric current can follow different paths as it flows from the negative side of the battery to the positive side.

Draw arrows to show the different paths electric current can travel in this parallel circuit.

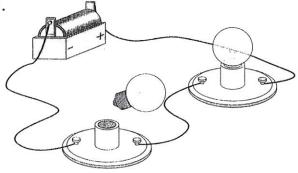


If a light bulb is missing or broken in a parallel circuit, will the other bulb light? Explain.

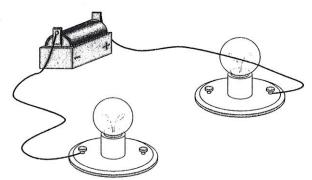
## **Electrical Circuits**

Tell whether the light bulb or bulbs  $\underline{\text{will light}}$  or  $\underline{\text{will not light}}$  based on the circuit.

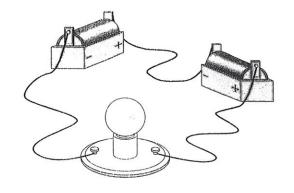
1.



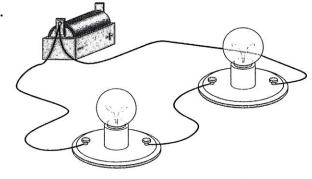
2.



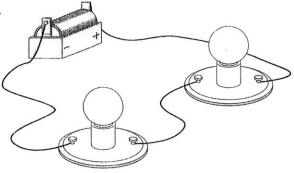
3.



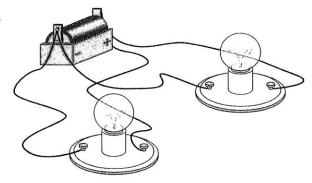
4.



5.

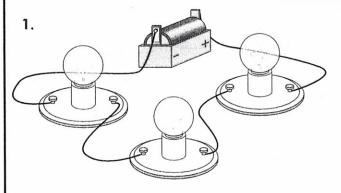


6.

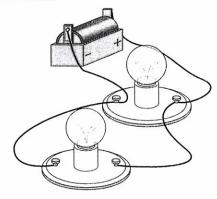


## **Series & Parallel Circuits**

Tell whether each picture shows a series circuit or parallel circuit.

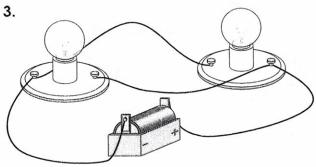


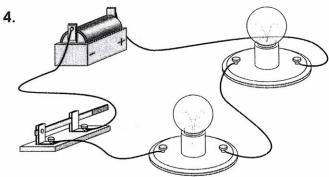
2.



type:

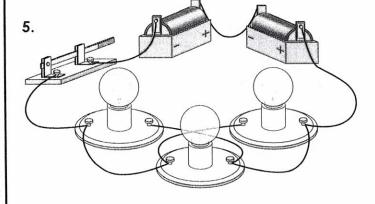
type: \_\_



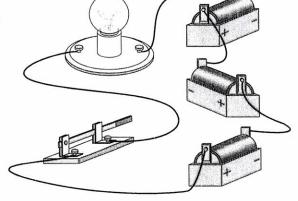


type: \_\_

type: \_\_\_\_\_



6.



type: \_\_\_\_\_

type: \_\_\_\_\_

## What's Wrong With These Circuits?

1.	Explain why the light bulbs won't light in the circuit pictured on the right.	
2.	Explain why the light bulb isn't lighting up in the circuit pictured on the right.	
3.	Explain why the light bulb isn't lighting up in the circuit pictured on the right.	