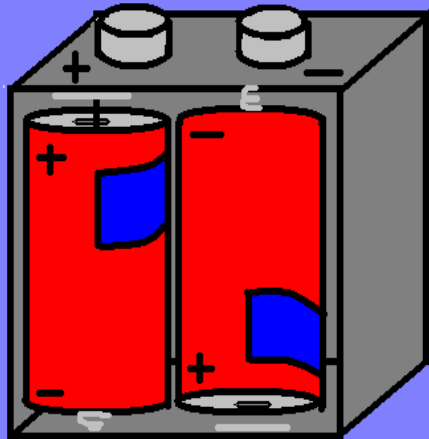


Make a circuit

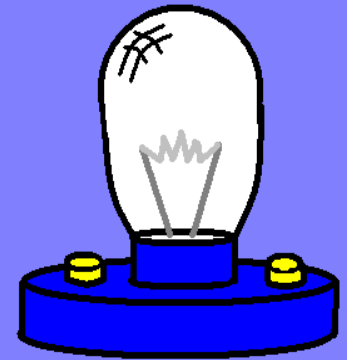
We are going to make a circuit that will make the bulb light up.

To do this we need.....

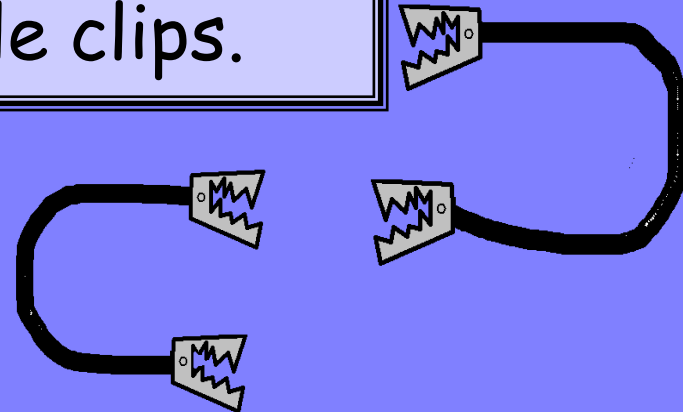


...batteries in a battery box...

...a light bulb...

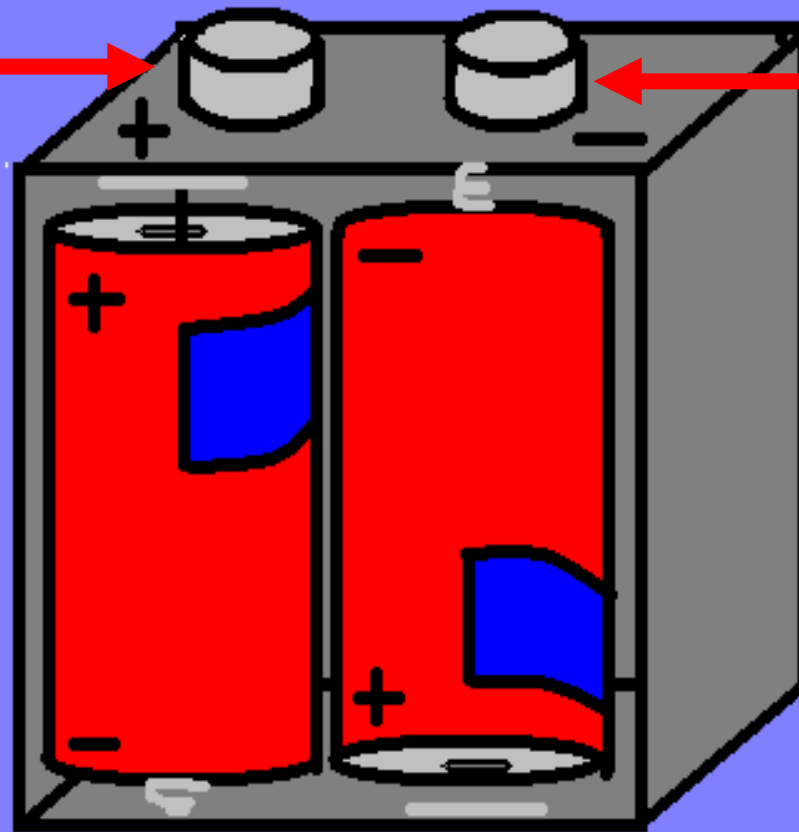


...electrical wires and crocodile clips.



The battery box has a positive and a negative terminal. The batteries are not the same way up.

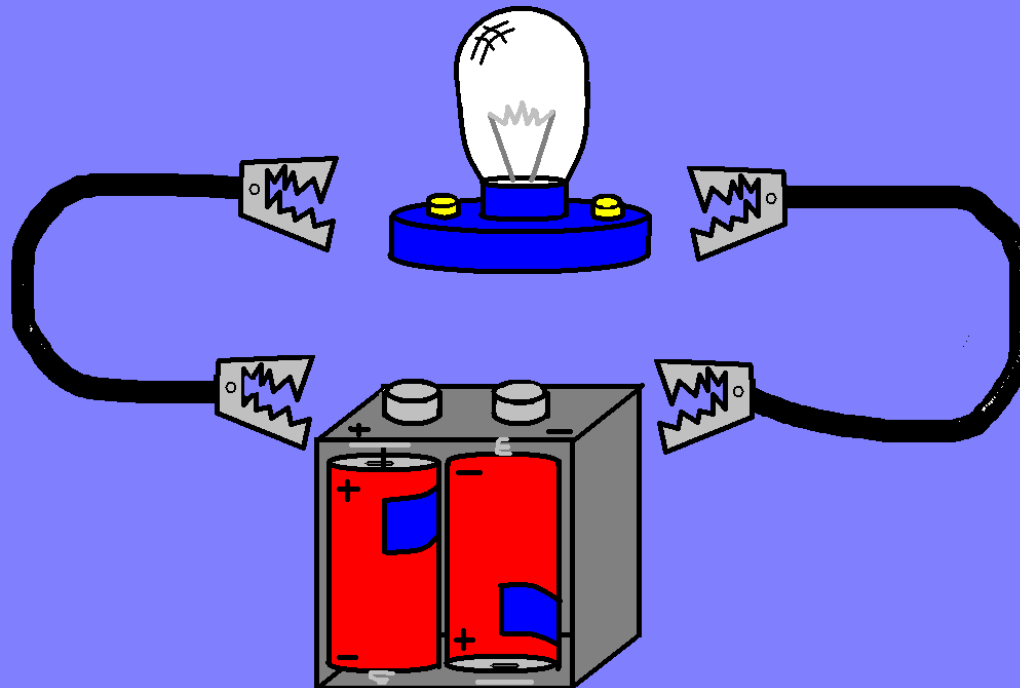
Positive  
terminal

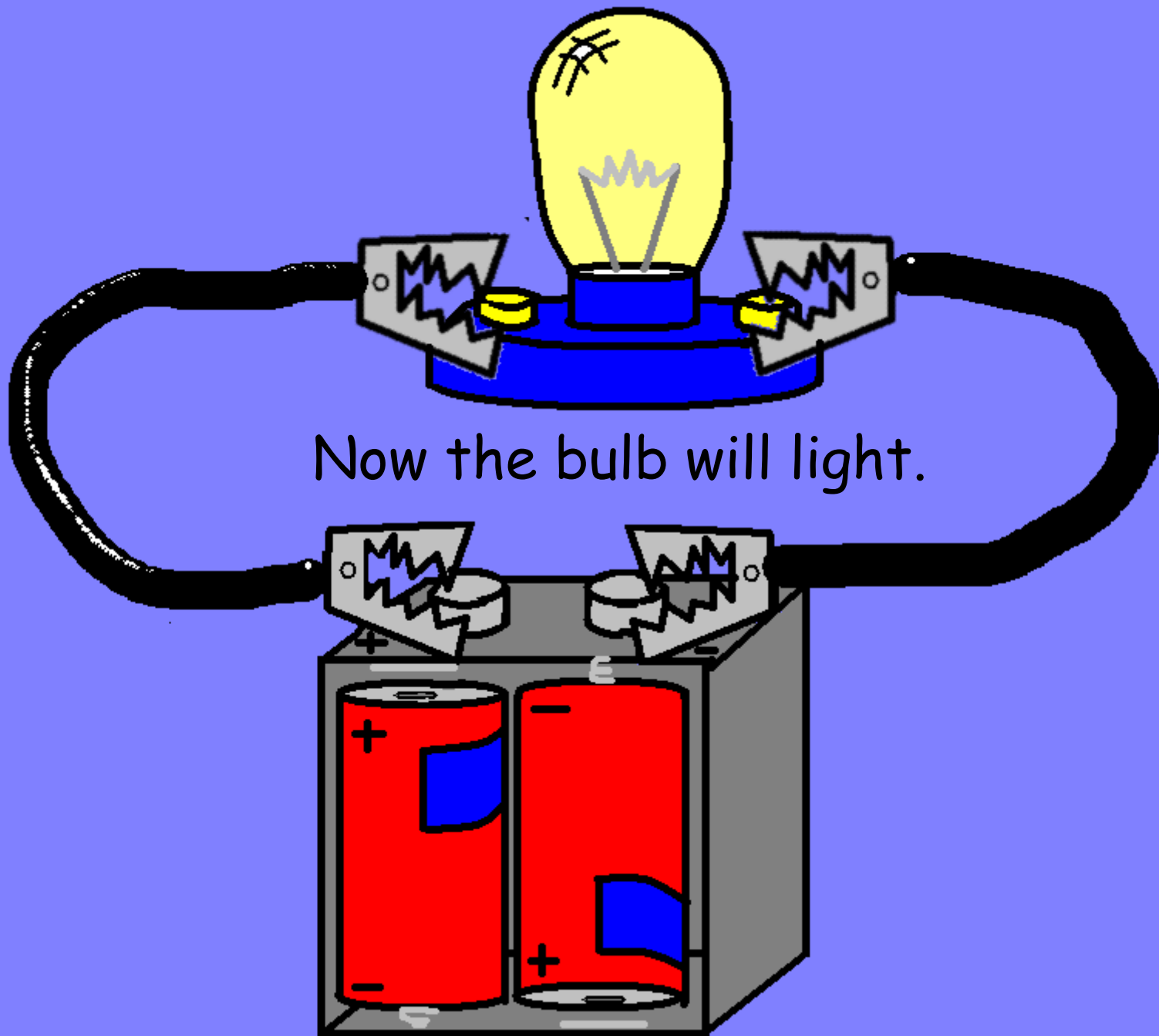


Negative  
terminal

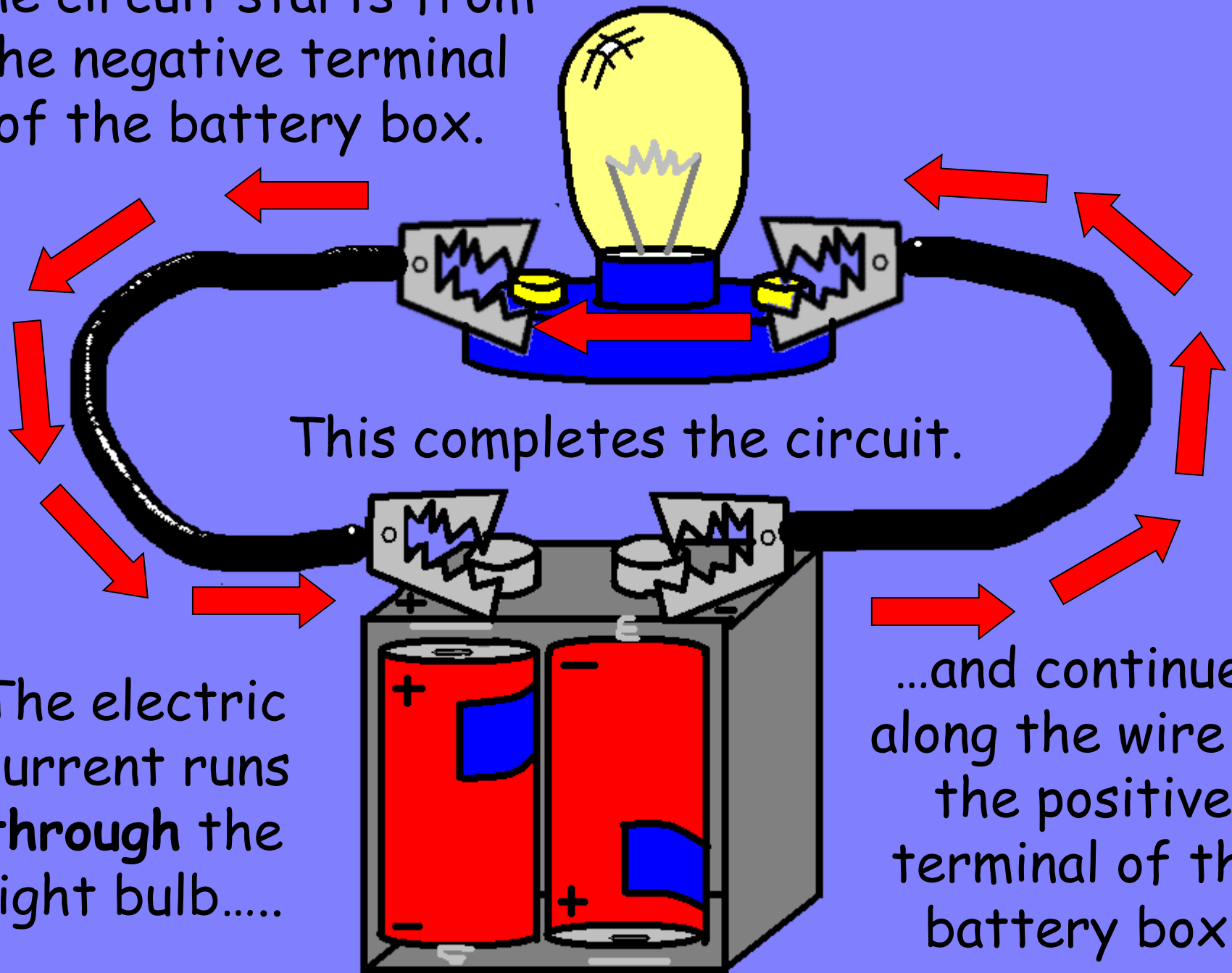
# Make the circuit

When you have collected all of the equipment you can start to make the circuit.



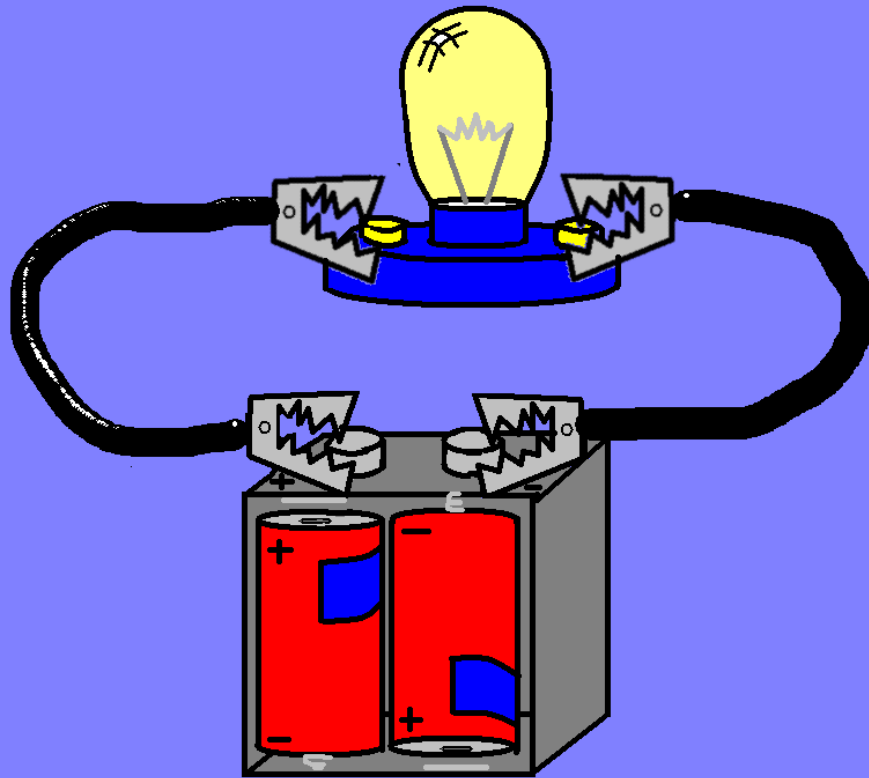


The circuit starts from the negative terminal of the battery box.



The electric current runs **through** the light bulb.....

...and continues along the wire to the positive terminal of the battery box.

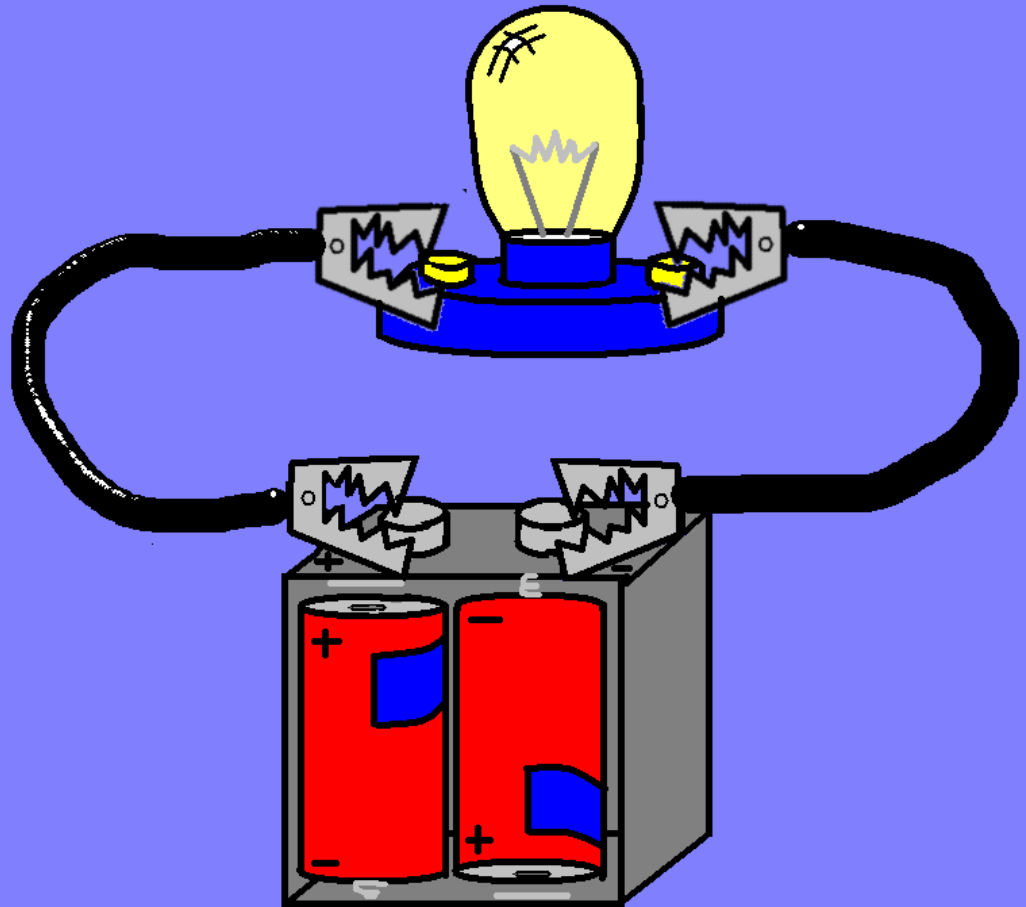


The circuit only works when everything is connected correctly.

Look at the next few pictures. See if you can guess whether the circuits will light up or not. Can you see what might be wrong with them?

Will this  
circuit  
light?

This circuit  
will not light  
because the  
wires are not  
all connected.

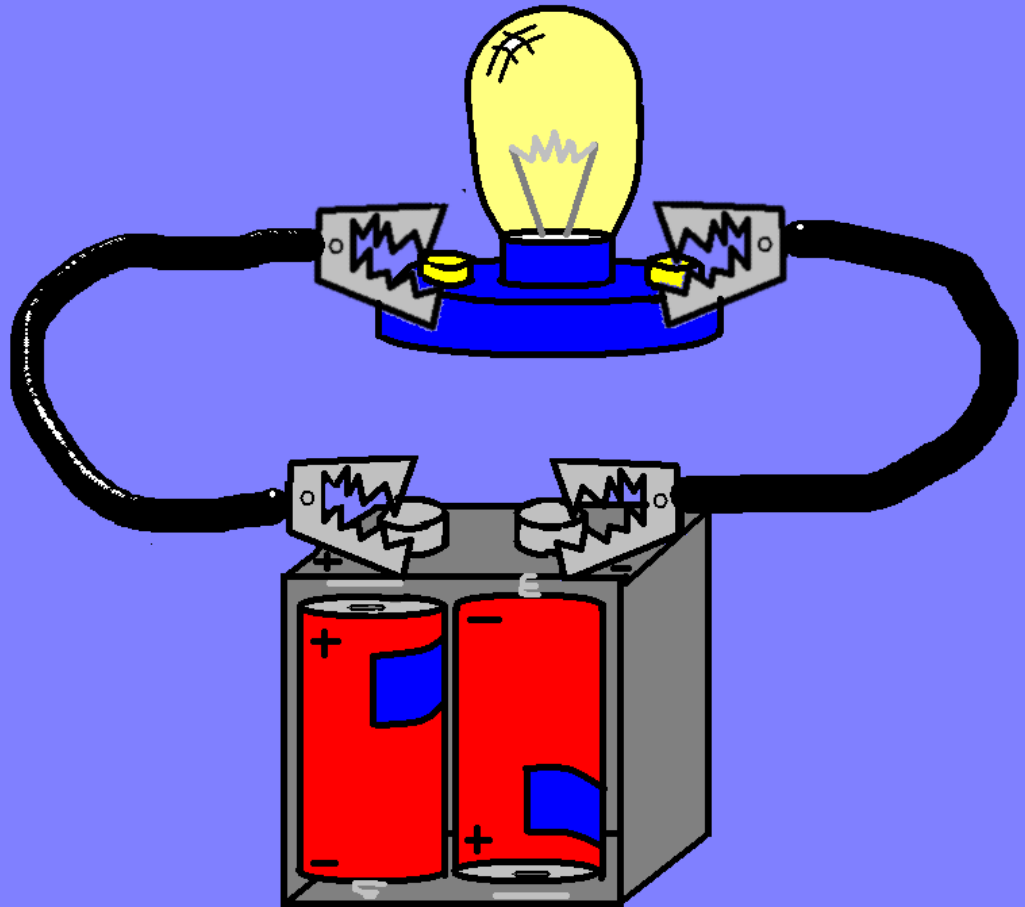


When the wires are all connected the  
circuit will work.



Will this  
circuit  
light?

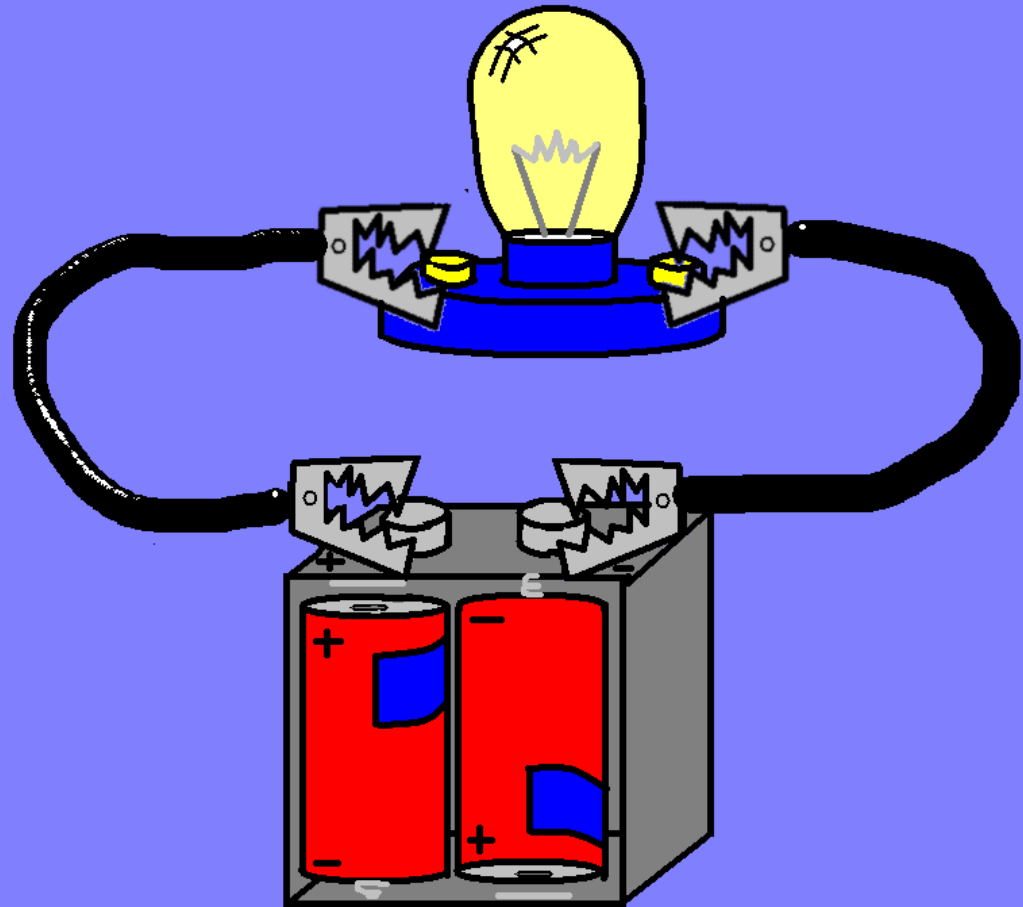
This circuit  
will light  
because  
everything is  
connected  
properly.



This keeps the circuit working properly.

Will this  
circuit  
light?

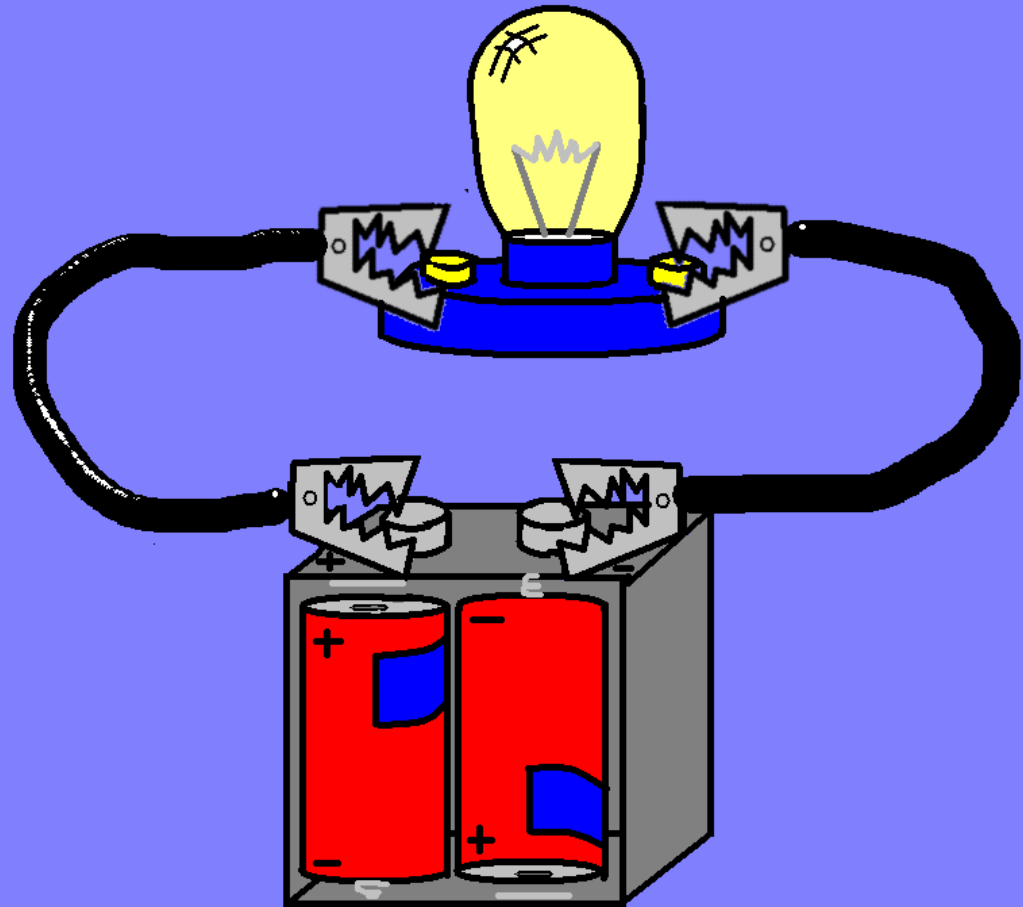
This circuit  
will not light  
because the  
batteries are  
facing the  
same way up  
in the battery  
box.



When the batteries are the right way  
round the circuit will work.

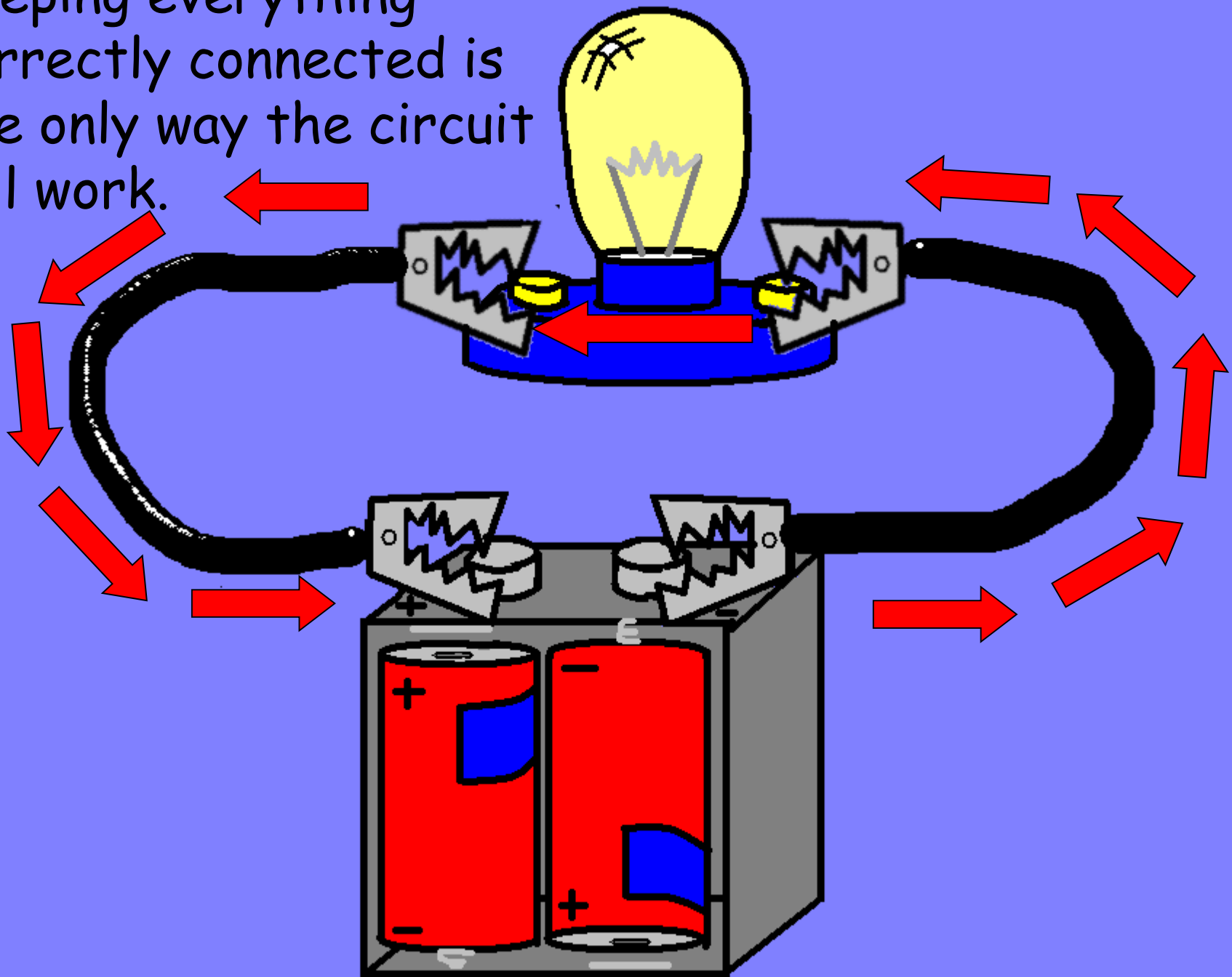
Will this  
circuit  
light?

This circuit  
will not light  
because one  
of the wires  
is attached  
to the glass  
part of the  
light bulb.



When the wire is properly  
connected to the battery terminal  
the circuit will work.

Keeping everything correctly connected is the only way the circuit will work.





# COMMUNICATION 4 ALL

