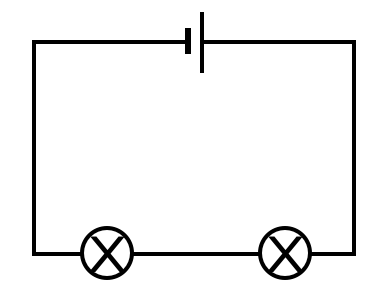
**Lesson 3: Current**

**—**

**TASK 1: MEASURE CURRENT**

1. One person in your group should collect the equipment. You will need:
   1. A battery
   2. 2 bulbs
   3. 5 wires
   4. An ammeter



**1**

**2**

**3**

1. Set up the circuit as shown in the circuit diagram – you will only need 3 wires for this. Check both bulbs light up. If they don’t, try the following:
   1. Check your circuit is a complete loop.
   2. Check wires are connected to both terminals of the battery
   3. Check wires are connected to both terminals of the bulb
   4. Let your teacher know
2. Separately, connect your ammeter to one wire on each side:



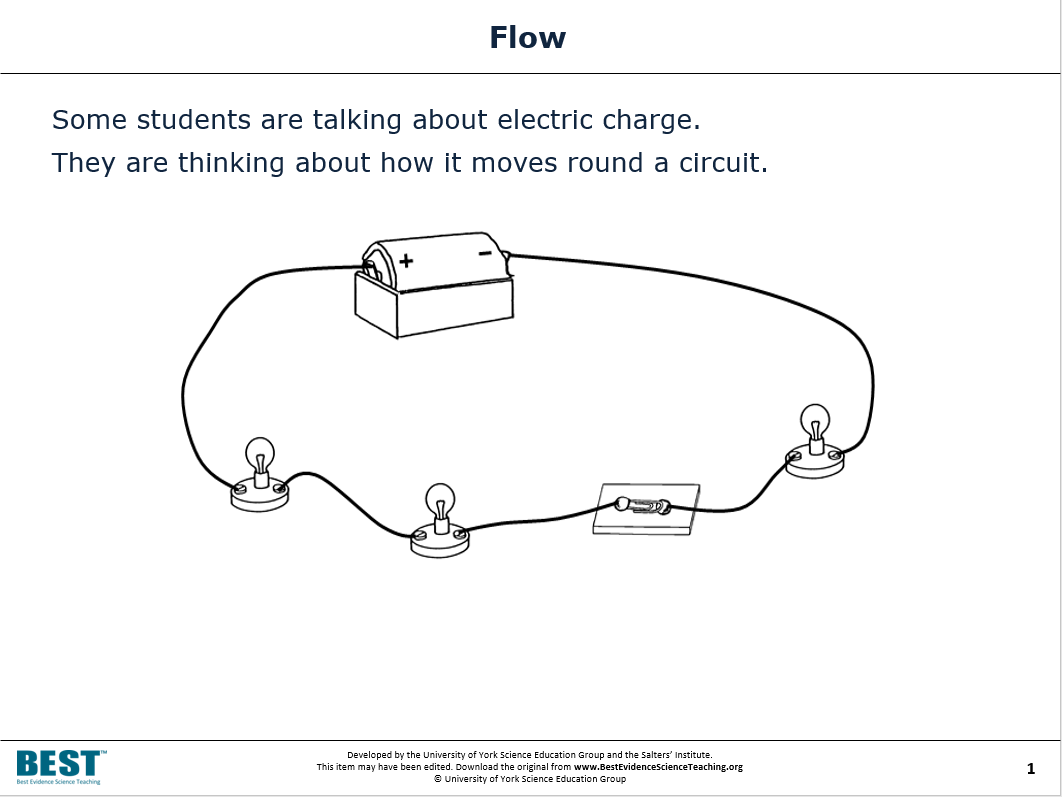
1. One at a time, replace each wire in the circuit with the ammeter, and write down the results in the table below. Once you have written a result down, disconnect the ammeter and replace the wire.

|  |  |  |  |
| --- | --- | --- | --- |
| **Position** | **1** | **2** | **3** |
| **Current (A)** |  |  |  |

**TASK 2: CHARGE & CURRENT**

Some students are talking about electric charge.

They are thinking about how it moves round a circuit.



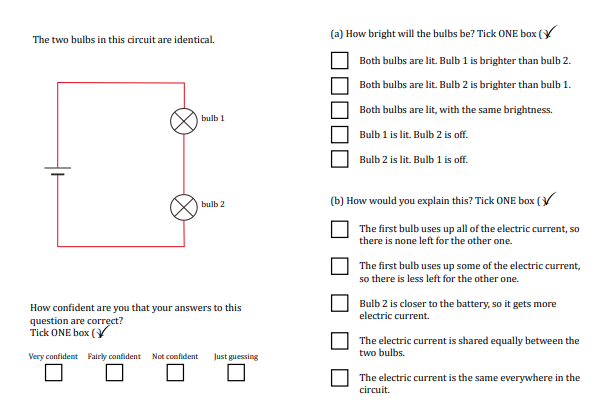
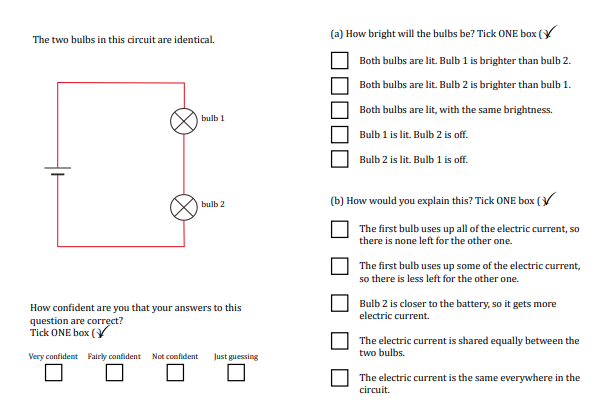
In your books:

1. **Who has not quite understood how electric charge flows?**
2. **Explain what wrong idea they believe.**
3. **What would you say to them to help them understand?**

|  |  |
| --- | --- |
| **Ali**  If charge flows out of the battery it will go round the circuit. The bulbs will light up one after the other. | **Bella**  The charge is already in the wires. When the battery is connected, all the charge starts flowing. This explains why the bulbs all light up straight away. |
| **Chloe**  Charge stays in the wires. If there is a break in a wire it blocks the flow and all the charge stops moving. All the bulbs go out at once. | **Dan**  If something was flowing, it would leak out when you opened the switch. It would be like water coming out of a broken pipe. |

**EXIT TICKET**

Name:

****

Name: