

## Electric Circuits (Revision Questions)

Name: \_\_\_\_\_

1. a) What is an electric current ?

\_\_\_\_\_

- b) Give the names of 2 *good* insulators and 2 *good* conductors of electricity.

Insulators

conductors

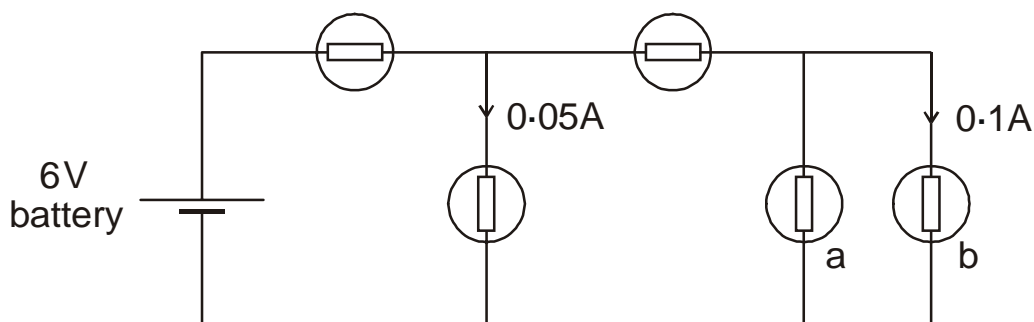
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. In the circuit shown below, the two bulbs a and b are *identical*.



Calculate how much current will be flowing through the battery.

The current flowing through the battery is \_\_\_\_\_

Explain how you calculated your answer.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

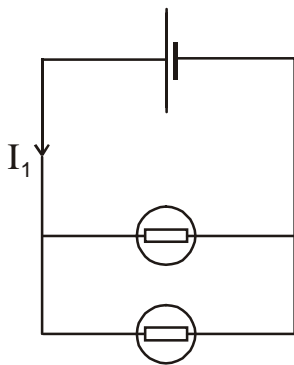
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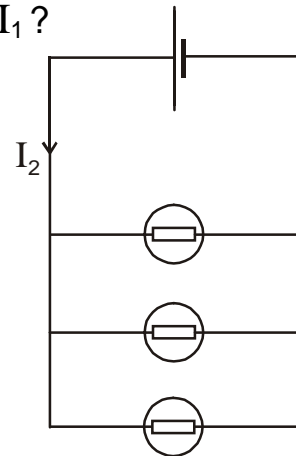
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3. In circuit 1 below, the current flowing through the battery (cell) is  $I_1$ . In circuit 2 the current is  $I_2$ . The two batteries (cells) are identical and all the bulbs are the same type.

Is  $I_2$  greater than  $I_1$ , less than  $I_1$  or equal to  $I_1$ ?



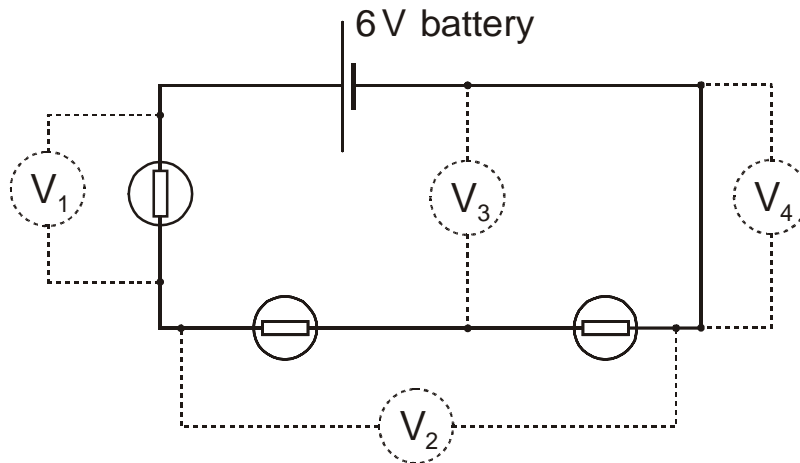
circuit 1



circuit 2

Answer \_\_\_\_\_

4. In the circuit shown below, *all* the bulbs are identical.



Write down the readings of the voltmeters.

$V_1$  will read \_\_\_\_\_ volts     $V_2$  will read \_\_\_\_\_ volts

$V_3$  will read \_\_\_\_\_ volts     $V_4$  will read \_\_\_\_\_ volts

5. A small light bulb is labelled "6 V 0.1 A ". Explain *precisely* what this tells us about the bulb.

The 6 V tells us \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The 0.1 A tells us \_\_\_\_\_

\_\_\_\_\_