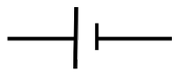
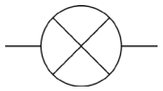
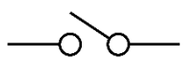
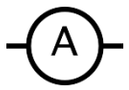
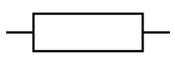
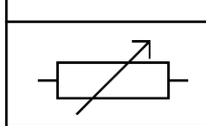
7J Current Electricity- Revision Worksheet

State what each of the following **circuit symbols** represent.

Describe what **current** is.

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State how **current** is measured and the units we use.

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……

Describe what would happen if there was a break in a **circuit**.

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Describe how **bulbs** light up and what would happen if more bulbs were added to the **circuit**.

……

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Draw a **circuit** that has a **battery**, **bulb**, **ammeter** and a **closed switch**.

Describe why scientists use **models** to help explain complicated ideas.

……

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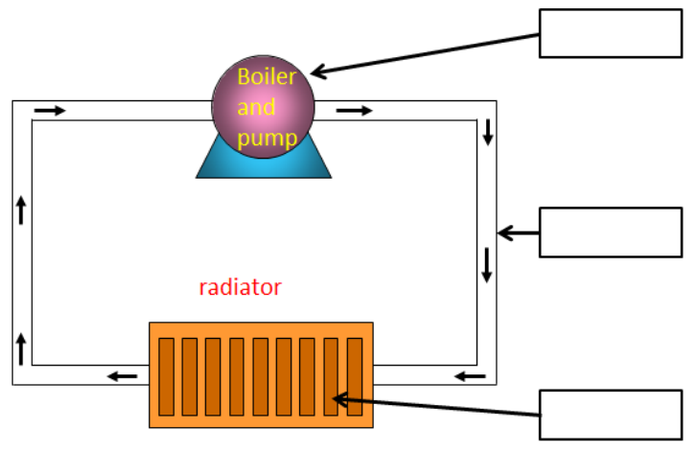
Label what each part of the **model** represents in an **electric circuit**.



Describe the advantages and disadvantages of using the **model** above.

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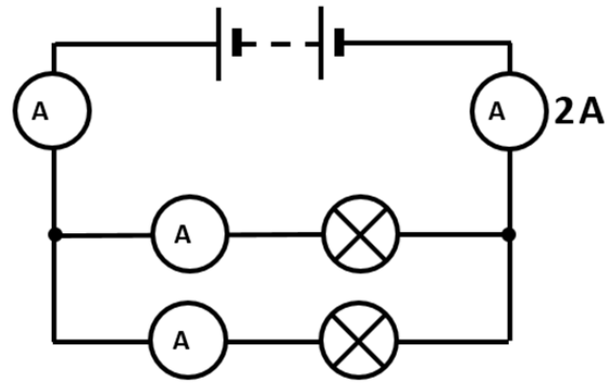
Define the following words.

Conductor	
Insulator	

Complete the following table about different **circuits**.

	Series Circuit	**Parallel Circuit**
What is it?		
What would happen if a bulb broke?		
What would happen if added more bulbs?		
How does current change throughout the circuit?		

State what each of the **ammeter** readings below would be.



Draw a **parallel circuit** that has a **battery**, a **bulb**, a **motor**, an **ammeter** and 2 **switches**.

State how **voltage** is measured and the units we use.

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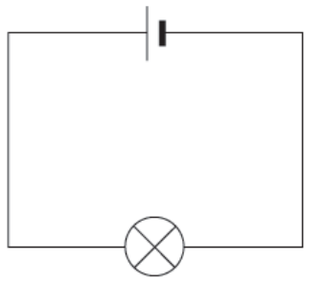
Describe how you decrease the **current** in your **circuit**.

……

……

Draw a **voltmeter** below to show how you would measure the **voltage** across the **bulb**.



Define the term '**resistance**'.

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Describe what a **resistor** is and how it might be used.

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Describe the **risks** of **electricity** to humans.

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Describe what a **fuse** is and explain how it works.

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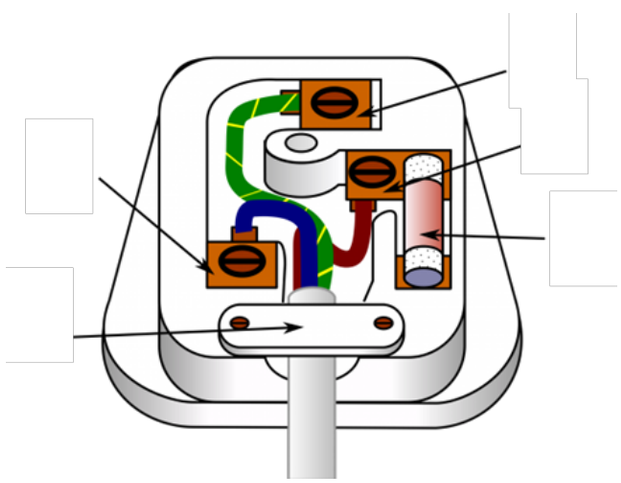
……

Label all the parts of the **plug** below.



Write out five rules for using **electricity safely**.

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-
-

Rate the following on how well you think you can do them:



I can…

- ☐ Explain how switches work.
- ☐ Describe what happens when the number of bulbs in a circuit is changed.
- ☐ Describe what a current is and how it is measured.
- ☐ Identify when physical or abstract models are being used.
- ☐ Identify what the parts of a physical model represent.
- ☐ Plan an investigation to help to evaluate a model.
- ☐ Explain why models are used.
- ☐ Use a physical model to help explain electric circuits.
- ☐ Evaluate a physical model.
- ☐ State what is meant by current.
- ☐ State what is meant by a series and a parallel circuit.
- ☐ Explain how switches can control different kinds of circuits.
- ☐ Describe how changing the number or type of components in a circuit affects the current.
- ☐ Describe the differences in how current behaves in series and parallel circuits.
- ☐ Describe the benefits of organising data.
- ☐ Organise data in a table in a suitable way.
- ☐ Identify qualitative and quantitative data.
- ☐ Describe how a voltmeter is used.
- ☐ Explain why the current increases when the voltage of the supply is increased.
- ☐ Describe the relationship between resistance and current.
- ☐ Explain some safety precautions to be followed when using electricity.
- ☐ Describe the job that fuses and circuit breakers do.
- ☐ Explain how a fuse works.
- ☐ Recall how the different wires are connected in a plug.