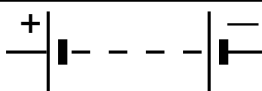
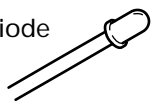



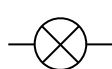
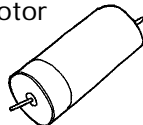
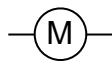


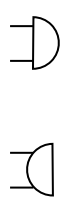


Electric Components Chooser Chart

<i>What the components might need to do</i>	<i>Options</i>	<i>Symbols</i>	<i>Points to check</i>
To provide a power supply	batteries: <ul style="list-style-type: none"> • zinc carbon for low current, infrequent use • zinc chloride for medium current, regular use • alkaline for high current, heavy use 		Make sure voltage of battery is suitable for components in the circuit.
To make light			
To give a signal	a light-emitting diode  a flashing light-emitting diode 		Use protecting resistor. Must be correct way round. Does not need protecting resistor. Must be correct way round.
To provide illumination	a light bulb 		Must match power source.
To give rotary movement	an electric motor 		Must match power source. May need 'gearing'.
To make sound	a bell  a buzzer 		Must match power source. Buzzer must be correct way round.

What to do if the circuit doesn't work

Use this checklist before you ask your teacher.

Must have got something wrong ... where's that diagram?

Check carefully against your circuit diagram.

Maybe the battery isn't connected properly?

Check to be sure.

Might be a dud battery ...

Test it with a light bulb that you know works.



Perhaps it's the solder?

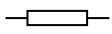



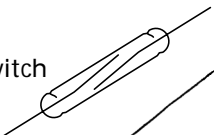
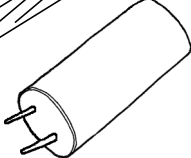
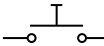
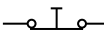
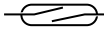



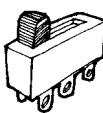

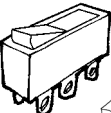
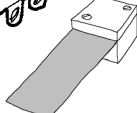
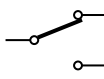

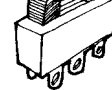

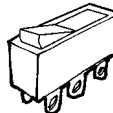
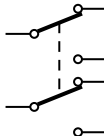
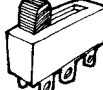

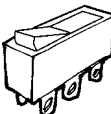
Check for any 'dry' solder joints.

Could be a loose connection somewhere ...

Look carefully to check.

Must be something else not working?

Remove components one at a time and test them in a circuit that does work.

<i>What the components might need to do</i>	<i>Options</i>	<i>Symbols</i>	<i>Points to check</i>
To control current size			
By setting at a fixed value	a fixed resistor	 	Value provides the required current
To switch			
To hold something on or off	<p>a push-to-make switch </p> <p>a push-to-break switch </p> <p>a reed switch </p> <p>a tilt switch </p>	   	Two connections to the switch.
To set something on or off	<p>a single-pole, single-throw switch </p> <ul style="list-style-type: none"> • push switch  • slide switch  • toggle switch  • rocker switch  • bimetallic switch  		Two connections to the switch. Which type will be most suitable for the user?
To turn something on and something else off	<p>a single-pole, double-throw change-over switch </p> <ul style="list-style-type: none"> • micro-switch  • slide switch  • toggle switch  • rocker switch  		Three connections to the switch. Which type will be most suitable for the user?
To reverse direction	<p>a single-pole, double-throw change-over switch </p> <ul style="list-style-type: none"> • slide switch  • toggle switch  • rocker switch  		Four connections to the switch. Which type will be most suitable for the user?