Subject: Physics	Year 7	Term: Autumn	Topic: Electricity

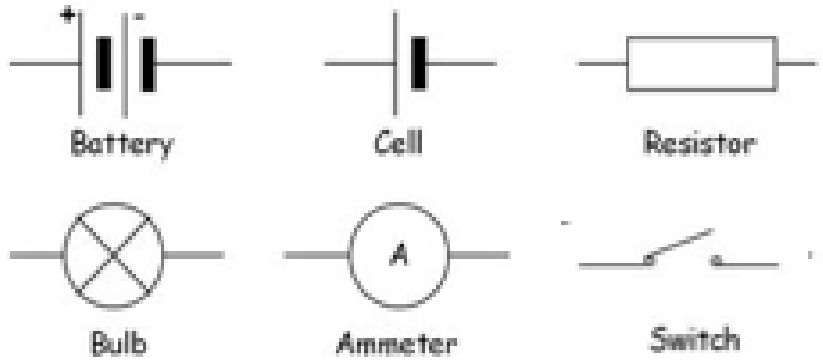
1. Key Words

1	Electron	Tiny particles which carry electrical charge
2	Current	A measurement of how quickly electrons are flowing around a circuit
3	Potential difference	The driving force pushing electrons around a circuit
4	Resistance	A measurement of how difficult it is for electrons to pass around a circuit
5	Conductor	Materials which allow electrons to flow through them
6	Insulator	Materials which do not allow electrons to flow through them
7	Static electricity	The build up of electrical charge on insulating surfaces
8	Shock	When electrons flow through a person
9	Component	A device placed in an electrical circuit e.g. a bulb or ammeter

2.) Command words

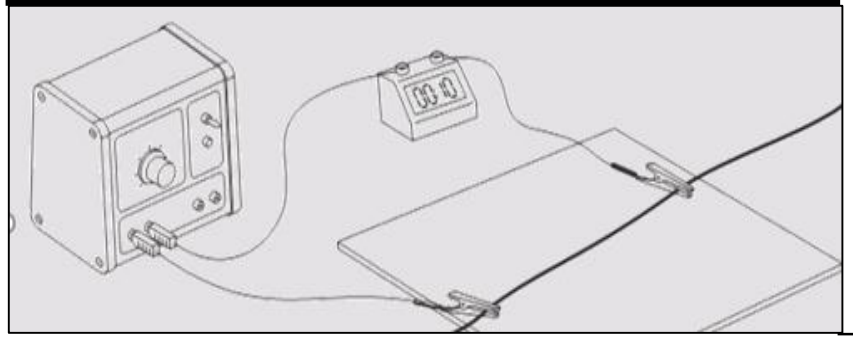
1	Describe	Report details about something
2	State	Clearly say what something is
3	Explain	Make an idea clear to someone by revealing relevant facts about it
4	Construct	To make or put something together whether something physical (like an electrical circuit) or a diagram or table.
5	Conclude	Arrive at a judgement about something; for example how successful an experiment has been

3.) Circuit components and their symbols



-A cell stores electrical charge. Two or more cells connected together are known as a battery
-Resistors limit the flow of electrical charge
-Bulbs (lamps) contain a wire which glows when charge passes through it
-Ammeters measure the current
-Switches complete or break the circuit

4.) Measuring the resistance of a wire



Equipment needed: 1m wire, meter rule, ammeter, power pack, connecting wires, crocodile clips

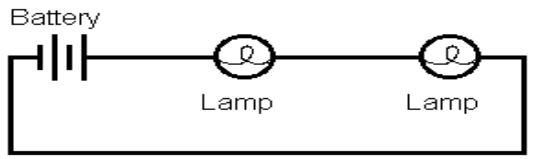
Method:

A.Set up the circuit as shown in the drawing
B.Clip the crocodile clips onto the wire 10cm apart
C.Switch on and read the ammeter. Switch off again
D.Move the crocodile clips until they are 20cm apart, and repeat step C
E.Keep moving the crocodile clips 10cm apart and measuring until you have completed the table

5.) Series and parallel circuits

-Components can be connected in series or in parallel
-Components in series are connected in a row, next to one another
-Components in parallel are connected in parallel loops
-To check if something is a parallel circuit, trace round the circuit with your finger. If your finger can take more than one path, your components are in parallel
-Bulbs connected in series will get dimmer as you add more bulbs
-Bulbs connected in parallel will keep their brightness even when more circuit loops are added

SERIES



PARALLEL