



## DT – Year 2

### Electrical Glowing Lantern : Spring 2

(Previous knowledge – sdsfsd Year 2)

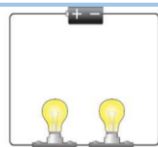
#### Vocabulary

Tier 1	Tier 2	Tier 3
Wire	LED	Modify
Battery	Electrical	Component
Light	Target audience	Construct
Circuit	Plan	Series Circuit
Design	Conductor	
Bulb	Switch	

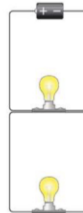
#### Useful Resources

<https://www.pinterest.co.uk/crafts4kids/kids-night-lights>

[https://www.youtube.com/watch?v=o\\$NIDt5O4GA](https://www.youtube.com/watch?v=o$NIDt5O4GA)



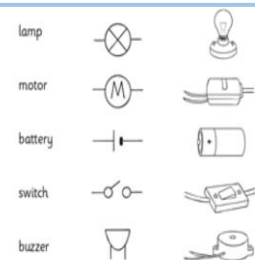
This is a diagram of a **series circuit** – the electrical current flows through every **component** in the circuit – the switch, battery and bulbs.



This is a diagram of a **parallel circuit** – this has two or more paths for the electrical current to flow through. If one loop is disconnected then the other still has power.

*Which type of circuit will you use in your electronic greetings card?*

*Which types of materials will you use to conduct or insulate your product?*



Circuit Symbols

## Electrical Lantern

### What is a Lantern?

A lantern is a sculpture (usually 3D) that lights up. Most modern lanterns are constructed for their aesthetic qualities and are used as decorations, or in celebrations across the world, such as Chinese New Year and Diwali – The Hindu Festival of Light.

### What is electricity?

Electricity is a type of energy. It is used to power lots of things. Electricity can flow through circuits. Electricity travels at the speed of light, that's 300 million metres per second! However, the electricity that flows through your home and appliances you use is much slower, about 1/100 th.

### What is a simple circuit?

A simple circuit is a closed loop of a conductor material, E.g. wire, in which electricity can travel in a current. In order for it to be a closed circuit, a power source e.g. battery/cell is needed (input device), and something that is powered by the electricity, e.g. light bulb (output device). A switch can be used to break the circuit (turning the output device off).