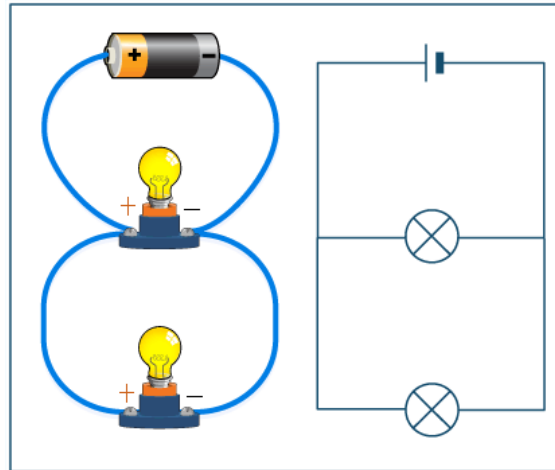


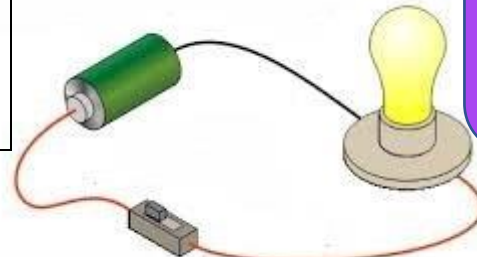
Simple electrical circuits and computer programs can be used to create functional products which move, light up and respond to the environment around them.

Electrical Systems – Year 5 Summer










In a **parallel circuit**, all components are connected across each other, forming exactly two sets of electrical output.

In a **series circuit**, all components are connected end-to-end, forming a single path for current flow.



Key vocabulary

Input device of a computer program	Devices where information is inputted/ entered e.g. keyboard, webcam, computer program.
Output device of a computer program	Devices where information is outputted e.g. screen, speaker.
Current	Flow of electricity.
Electrical components	Parts of electrical system.
Program	To set an electrical system to follow a series of commands.
Monitor	When a component of an electrical system responds to the environment and changes the function of the system.
Control	Using programming and monitoring to make an electrical system follow specific instructions.

Components in an electrical circuit;		
Wire with crocodile clips		Links all components of electrical system by clipping onto metal contact point.
Bulb		Filament encased in glass which lights up with electrical current.
Battery		Power source for an electrical circuit.
Switch		Breaks or joins a circuit by switching electrical current on or off.
Motor		Spins when electrical current passes through.
Buzzer		Makes a buzzing noise when electrical current passes through.
Sensor		Senses changes in the environment and responds by changing action of an electrical system.