

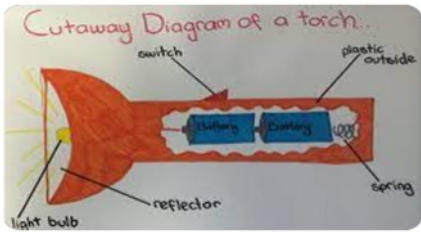


# Make a torch with a switch (Electrical systems)

We are learning to connect electrical components together to make a torch that lights up

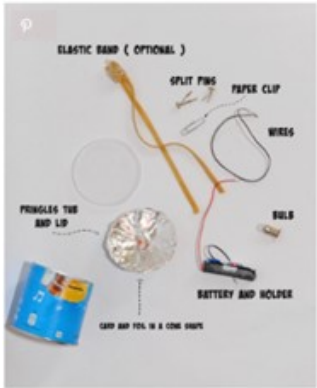
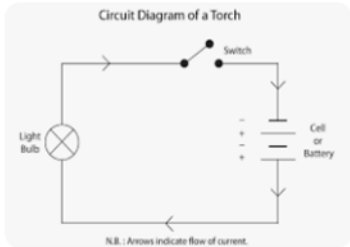
Materials that allow electric current to pass through them easily, called conductors, can be used to link the positive and negative ends of a battery, creating a circuit.

**What have we already learnt?**  
 The children have had previous experience of making a circuit in science. They have also used items with switches such as torches. They have learnt to make their products aesthetically pleasing for their user and fit for purpose communicating their designs by sketching and annotating.



A circuit is a complete path around which electricity can flow. It must include a source of electricity, such as a battery.

Vocabulary	Definition
Circuit	A complete route which an electrical current
Switch	A small control to turn a device on and off
Battery	A small device providing power
Bulb	The glass part of an electric lamp
Insulator	A material that stops electricity transferring
Conductor	A material that electricity can pass through



Every circuit is comprised of three major components: A conductive "path," such as wire, or printed etches on a circuit board; a "source" of electrical power, such as a battery and a "load" that needs electrical power to operate, such as a lamp.