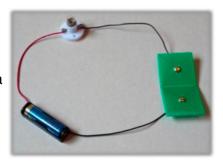


Year 4 DT - Electrical Systems: Simple Circuits and Switches

Key vocabulary	
circuit	A path through which electricity passes
conductor	A material which allows electric current to pass through it
insulator	A material which does not easily allow electric current to pass through it
prototype	A model made to test whether a design will work
push-to-break switch	A switch turned off by pressing it
push-to-make switch	A switch turned on by pressing it
reed switch	A switch operated by a magnet
toggle switch	A switch operated when a lever is pressed
system/	A set of related parts or components that achieve an outcome
output devices	Components that produce an outcome e.g. bulbs or buzzers
input devices	Components that are used to control an electrical circuit e.g. switches

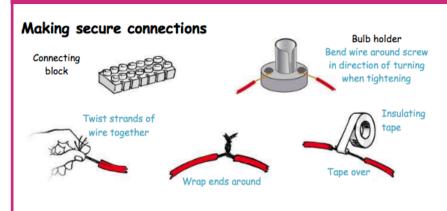
A simple electoral circuit with a handmade switch

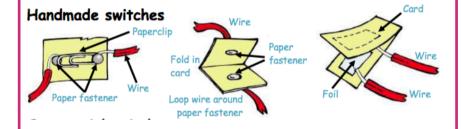




An example of a final product. A working torch has been made. The circuit has safely been stored inside the product outer

Examples of switches





Commercial switches





The switch is off while the button is pushed, but returns to its 'on' position when button is released.



Push-to-make switch

When you push, the electricity flows through the circuit, but when you release it the circuit is broken and the switch is off.



Reed switch

Activated by a magnet - this closes the contacts and completes the circuit.



Toggle switch
Simple on/off switch