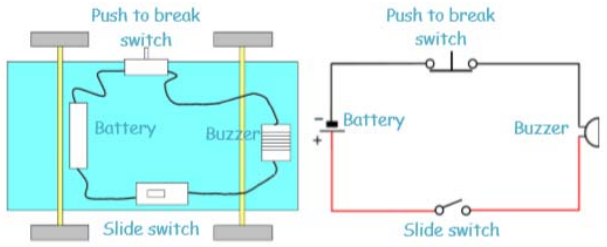
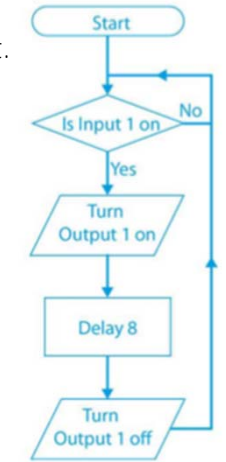
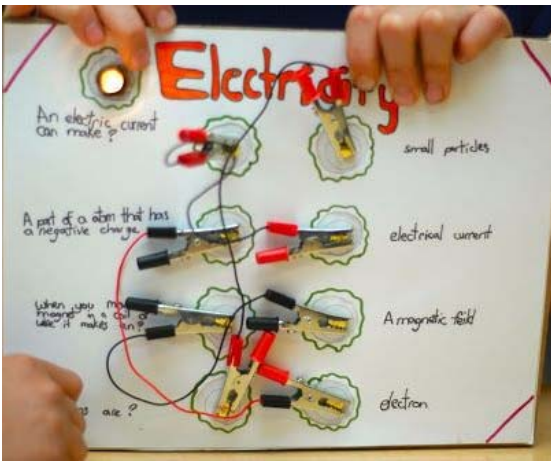


Year 5/6: More complex switches and circuits-How can electrical circuits be used to improve a game?

Subject Specific Vocabulary		Prior Learning Y3/4	Sticky Knowledge
open switch	when a switch is positioned such that electricity cannot flow through it.	Understanding of the essential characteristics of a series circuit and experience of creating a battery powered, functional, electrical product. Initial experience of using computer control software and an interface box or a standalone box, e.g. writing and modifying a program to make a light flash on and off.	
closed switch	when a switch is positioned such that electricity can flow through it.	Future Learning KS3	
normally open	the term used to describe when a switch is in the off position, i.e. the switch is open and no electricity can flow when the button is not pressed.	Understand how more advanced electrical and electronic systems can be powered and used in their products. Select from and use specialist tools, techniques, processes, including computer aided design. Investigate new and emerging technologies.	<ul style="list-style-type: none"> • Test a system to demonstrate its effectiveness. • Research an inventor linked to the topic e.g. Edison • Practise making secure electrical connections. • Create and modify a computer control program to enable an electrical product to work automatically in response to changes in the environment. 
normally closed	the term used to describe when a switch is in the on position i.e. the switch is closed and electricity can flow when the button is not pressed	<h2 style="text-align: center; color: blue; text-decoration: underline;">Electrical Game</h2> 	
input devices	components that are used to control an electrical circuit e.g. switches or sensors.		
output devices	components that produce an outcome e.g. bulbs and buzzers.		
computer control input	when a switch, such as a micro switch, sends a signal to a computer control box to activate a sequence of events such as a buzzer or light being used to attract attention or alert people.		
modelling	to realise and manipulate ideas in a tangible form.		