	Design and Technology	
Word	Definition	
copper	A reddish metal material that is	
	good at letting heat and electricity	
	flow through it. It is often used to	
	make wires and pipes.	
graphite	A conductive, black carbon material	
	that is used to make pencil leads.	
innovative	Introducing or using new ideas or	
	ways of doing something.	
LED	A light emitting diode which lights	
	up as electricity passes through.	
modify	Changing something to improve	
	or fix it.	
parallel	An open circuit where the current	
circuits	follows two or more paths.	
component	One of two or more parts of which	
	something is made.	
product	A thing that is the result of a	
	process.	
client	A person or company who has	
	requested a service or job from	
	someone to complete a specialist	
	task.	

Well equipped or well suited for its

designated role or purpose.

fit for

purpose

## Year 5 Autumn 2 1

## Focus Themes: Electronics

## How can we make Christmas cards light up Key Knowledge and Concepts





Electricity needs a complete circuit to flow around.

Switches work by closing the gap in a circuit.

Bulbs, cells, buzzers and switches are all types of components.

In a graphite circuit, if the battery is moved away from the LED, the brightness weakens,

A design should suits its intended recipient.

An LED should be placed with the positive legs nearest the positive side of the battery.

lamp (lighting)	wire	open switch
— I—	<b>⊢ -</b>   <b>-</b> battery	closed switch

You will learn about electrical circuits and how to integrate these into a Christmas card that you have developed for purpose.