

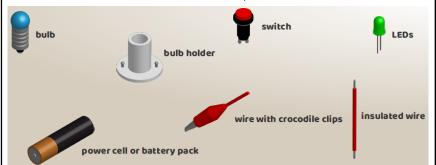
Castlefield School- Design and Technology

Topic: Light up signs Year: Six

Technical knowledge

The first electrical light-up sign using incandescent bulbs was built in London in 1881. Light up or illuminated signs are used to advertise shops, products or places. Very few modern electrical products use traditional incandescent bulbs and use LEDs instead.

Electrical components



Light boxes

A light box is a three-dimensional box with a light source inside it. It could be cuboid shaped, or a completely different 3-D shape. The whole box could be translucent to allow light to glow through it. One or more sides could be translucent. One or more sides could be open, so you can see inside it. One or more sides could have holes to let some light through.









Keeping safe

Avoid loose wires, cables, and connections.
Assume any exposed metal is live with electricity unless

otherwise verified.

Familiarize yourself with all ON/OFF buttons on equipment, circuit breakers, and disconnect switches of a bench.

Key Vocabulary	
Neon	A gas that can be used in lightbulbs.
Translucent	Allows light to pass through a material.
Resistor	Reduces the flow of electricity going to a bulb.
blow	When too much electricity passes through and breaks the circuit.
circuit	A flow of electricity that goes round and round.
solder	A soft metal that is melted to join two metal pieces together.
LEDs	Bulbs that are very bright, very long-lasting, incredibly

Theme: Moving and joining

Famous light up signs

cheap to make and use very little electricity







Questions to think about

