

Energy - electricity



Year 6



How can we control electricity?



Key scientist - Nikola Tesla

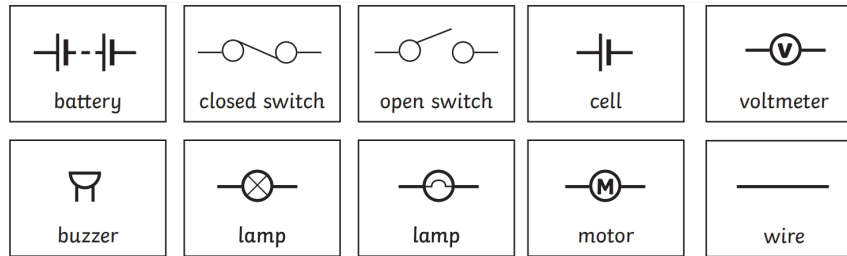
He was a Serbian-American inventor who worked on electrics and radio technology. He discovered that electrical machines work better using alternating current (AC), which means the electricity reverses back and forth.



Key learning



- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit
- compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches
- use recognised symbols when representing a simple circuit in a diagram.



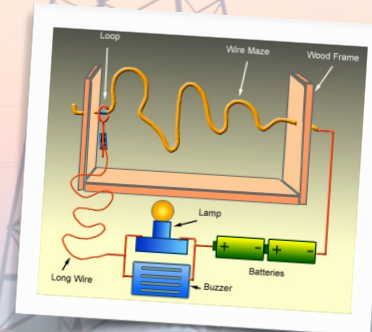
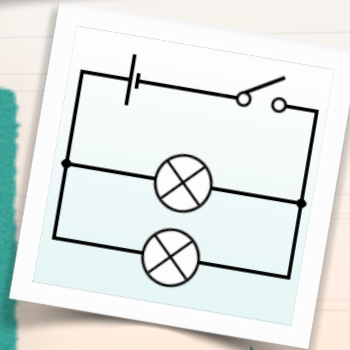
Key vocabulary



battery	A collection of two or more cells joined together to create more power
bulb	A component that turns electricity into light
buzzer	A component that turns electricity into sound
cell	A portable device that stores energy
circuit	A complete circular path that electricity flows through
components	Parts of an electrical circuit
correlation	A relationship between two sets of data
electrical conductor	A material that allows electricity to flow through it
energy	The power to make things move and work
electrical insulator	A material that does not allow electricity to flow through it
output	the amount of something produced (e.g. brightness of a bulb)
switch	A gap that can be closed to allow electricity to flow or opened to stop the flow
voltage (V)	The force that makes electricity move around a circuit
wires	Thin pieces of metal which electric currents flow through, usually covered in plastic

Working scientifically concepts

- Making predictions
- Scientific enquiry
- Recording data



Energy - Electricity - Our Learning Journey



Year 4

- Identifying electrical appliances, identifying parts of a circuit
- Recognising common electrical conductors and insulators

Year 6

- Explore the impact of varying voltage in a circuit

Ethics



Is electricity a human right?

