

Year 5 DT Electrical Systems Cards

Key Skills

1. To explore, analyse and evaluate greeting cards
2. To experiment and construct a functional series circuit.
3. To create a mood board to help inspire and generate a range of design ideas
4. To create my final electronic greeting card, compete with a functional series circuit.



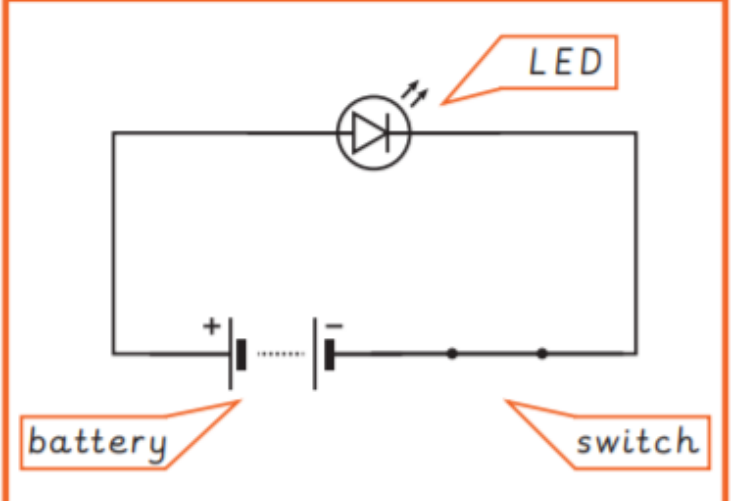
Vocab/Key Words

- Buzzer** - To create my final electronic greeting card, compete with a functional series circuit.
- Circuit** - To create my final electronic greeting card, compete with a functional series circuit.
- Component** - One of several parts of which something is made
- Conductor** - A metal material that is one of the best conductors of heat and electricity. Often used to make wires and pipes.
- LED** - A light emitting diode which lights up as electricity passes through
- Parallel circuit** - An open circuit where the electricity only flows one path

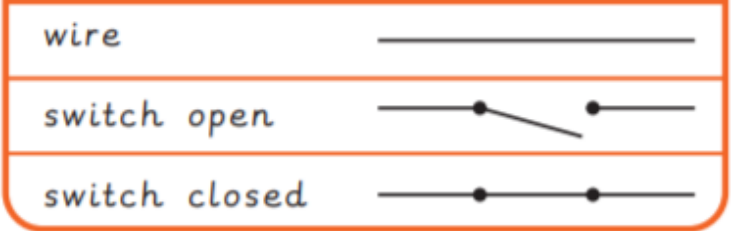
Key Knowledge

Electricity needs a complete circuit to flow around.
Switches work by closing the gap in a circuit.
Bulbs, cells, buzzers, motors and switches are all types of components.

Series Circuit Diagram



More circuit symbols



Previous Learning

- ◆ Torches (Year 4)
- ◆ Static electricity (Year 3)

What I will know/be able to do by the end

- This unit builds on pupils' knowledge of how to incorporate electrical circuits into products from Y4. Children explore how circuits can be adapted to suit different purposes, explore series circuits and recreate one using conductive adhesive tape. They then apply this knowledge to design and create an electronic greeting card.
- I can follow health and safety rules
- I can suggest appropriate design criteria points to fulfil the design brief

Websites/Signposting/Connection to a famous person

<https://www.kapowprimary.com/subjects/design-technology/upper-key-stage-2/year-5/electrical-systems-electronic-greetings-cards/>