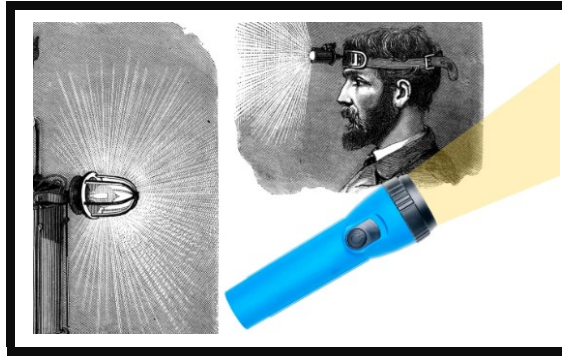


DT Torches Year 4

What I should already know

- Which to base their initial poster ideas.
- Complete design criteria based on a client's request.
- Review their initial ideas against the design criteria and peer feedback, developing a final design.
- Assemble an electric poster, including a functional simple circuit with a bulb, following a demonstration.
- Acknowledge, with a brief explanation, the need to mount the poster using corrugated card.
- Be able to test that the simple circuit works by adding a battery.



Sticky Knowledge

- To understand that electrical conductors are materials which electricity can pass through.
- To understand that electrical insulators are materials which electricity cannot pass through.
- To know that a battery contains stored electricity that can be used to power products.
- To know that an electrical circuit must be complete for electricity to flow.
- To know that a switch can be used to complete and break an electrical circuit.

Technical skills

- Designing a torch, giving consideration to the target audience and creating both design and success criteria focusing on features of individual design ideas.
- Making a torch with a working electrical circuit and switch.
- Using appropriate equipment to cut and attach materials.
- Assembling a torch according to the design and success criteria.
- Evaluating electrical products.
- Testing and evaluating the success of a final product.

Vocabulary

Cell	A single unit that provides electrical energy to power a circuit
Conductor	A material that allows electricity to flow through it e.g metal
Design Criteria	A set of rules to help designers focus their ideas and test the success of them
Electrical item	Objects that need electricity to work such as hair dryers, toasters and kettles
Electronic item	Electrical items that have an element of computer processing in them such a mobile phones and laptops
Insulator	A material that does not allow electricity to flow through it e.g plastic
Series circuit	A closed circuit where the current follows one path.