

**Tier 3 Vocabulary**

Purpose	The reason for something
Product	Something that is manufactured
User	Someone who uses something
Materials	The thing or things that an object is made from
Design Criteria	A checklist for when something is made
Switch	Something used to turn on an electrical circuit
Compact	Cleverly designed so it takes up little space
Sturdy	Strong and firm
Appealing	Something you like or find interesting
Dim	Something that is not bright or clear
Crocodile clip	A metal clip which is used for creating electrical circuits
Decorate	Make something look more attractive by adding colour or extra items to it
Improve	Make something better
Evaluate	Decide how good something is thinking carefully about it

**D&T skills****Design**

Describe the purpose of their products.

Gather information about different types of light

Design a night light

**Technical knowledge**

Know how to make to make a simple circuit with a bulb and switch

**Making**

Measure, mark out and cut a hole in a cardboard base

Shape materials using paper mache

Assemble and join the 2 parts of the night light together

Apply a range of finishing techniques including paint and sequins

**Evaluating**

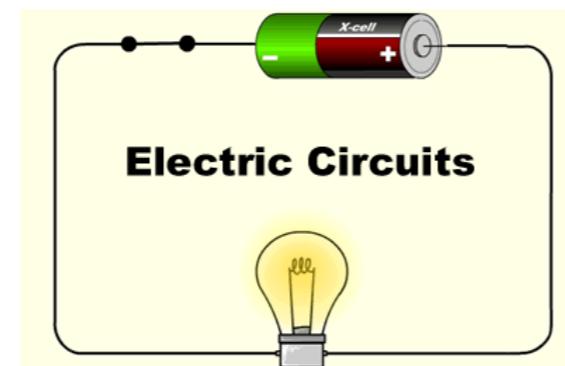
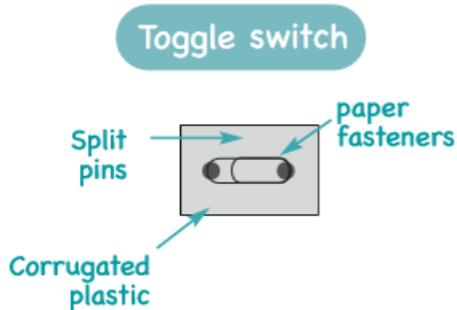
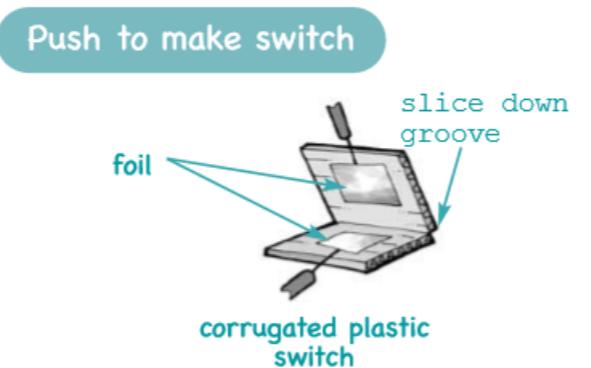
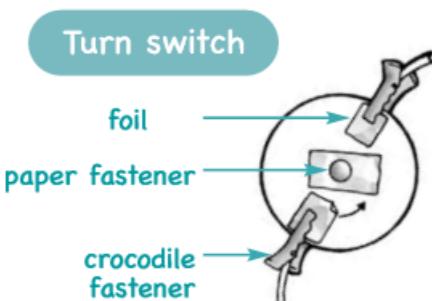
Evaluate the purpose, appeal and effectiveness of the night light

Evaluate their night light against their original design

Use your success criteria to evaluate your product.

**Key Facts**

Night Light	A lamp providing a dim light during the night
Electricity is	A form of energy caused by moving electrons that is used for lighting and heating.
A night light should be	compact so that it does not fall over, visually appealing and sturdy
A night light designer should	consider health and safety issues such as no sharp edges.
A night light designer should	Decide how the light will be controlled
A circuit is	The complete path that electrical current can flow around
A toggle switch is	A switch that is operated by moving a lever up and down
A turn switch is	A switch that is operated by turning something round
A push switch is	A switch that is operated by pushing something down
A Current is	The movement of electricity through a wire
A Wire is	A long thin, flexible piece of metal
A Bulb is	The glass part of an electric light that lights up when you switch it on

**Pictures and Diagrams**

Granville T Woods was the first black electrical engineer after the civil war. He held more than 50 patents in the US.

