

Knowledge Organiser:

Night Light



Domain of Knowledge: Product Design

Focus Skill: Incorporating electrical components.

Design Process:

Innovate



Plan and Design



Create



Evaluate

Key Vocabulary

Stable Structure—Object that holds it shape.

Simple Circuit—A circuit with one loop.

_ED--Light Emitting Diode.

Customer—Who we are making it for.

Key Skills

Joining—Joining materials for the structure.

Measuring-Ensuring all materials are cut accurately.

Wiring—Creating a simple circuit.

Testing— Does it power on and support its shape?

Diagram Simple Circuit Cell for source of power. _.E.D. to illuminate. Switch to control the circuit.

Real Life Image



Starry Sky Nightlight Produced to recreate the night sky

Linked Engineer



Warren de la Rue (1848-Guernsey) Inventor of first functioning lightbulb.



Knowledge Organiser:

Photo Frame

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Domain of Knowledge: Product design

Focus Skill: Stable frame with moving part

Design Process:

Explore and Plan



Design



Create



Evaluate

Key Vocabulary

Stable — A structure unlikely to give way or overturn.

Rigid—unable to bend or be forced out of shape.

Components— different parts of the photo frame.

Easel backed picture frame— Frames that have a fold out arm which the frame can lean against.

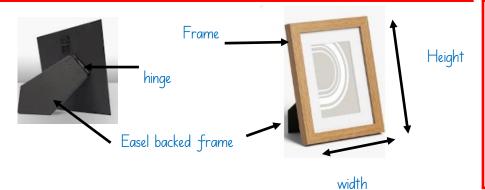
Key Skills

Measuring—Accurate measurement of frame components.

Joining—Attaching sides of frame so they are stable.

Testing— Does the frame stand up?

Diagram



Real Life Image



Linked Engineer

Brampton Picture Framing

Frame Makers & Framing Materials Suppliers

Frame makers

(Chester field)



Knowledge Organiser:

Roman Purse



Domain of Knowledge: Product Design

Focus Skill: Textiles—sewing material.

Design Process:

Innovate



Plan and Design



Create



Evaluate

Key Vocabulary

Thread—Object that holds it shape.

Material—A circuit with one loop.

Stitch—A thread running through material.

Customer—Who we are making it for.

Key Skills

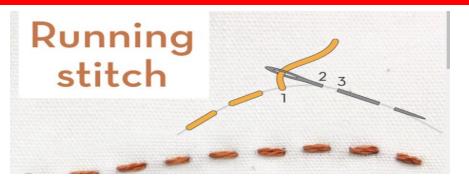
Joining—Joining materials together.

Measuring-Ensuring all lengths are cut accurately.

Stitching—Using a needle to join materials.

Testing—Does it hold together and maintain its shape?

Diagram



Real Life Image



Roman Purse

Replica of a Roman style purse

Linked Designer

Ruly Shoo

Ruby Shoo (Local Comppany)

Staffordshire based Bags & Purses.