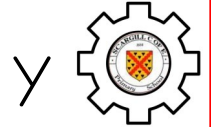




Knowledge Organiser:

Saxon Footwear

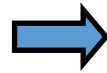


Domain of Knowledge: **Product design**

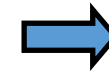
Focus Skill: **Textiles—Sewing**

Design Process:

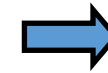
Explore and Plan



Design



Create



Evaluate

Key Vocabulary

Pattern —. A template from which parts of a garment are cut out.

Piece—a single piece of a pattern.

Stitch— a turn or loop of thread or yarn.

embellishment— a decorative detail or feature to make it more

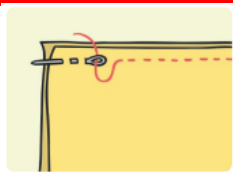
Key Skills

Measuring—Accurate measurement of pattern to ensure the pieces fit together.

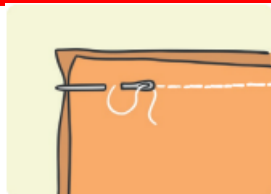
Joining—Using an appropriate stitch to join pieces of a pattern securely.

Testing— Does the shoe hold together with no gaps or holes?

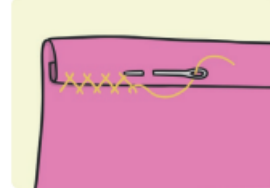
Diagram



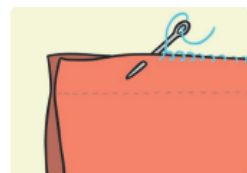
running stitch



backstitch



catch stitch



overcast stitch/whipstitch

Real Life Image



Linked Engineer

William Lennon & Co.

English Bootmakers since 1899

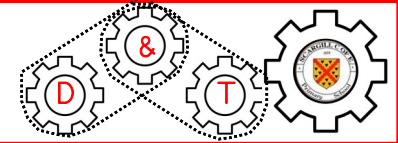
Derbyshire boot makers.



Knowledge Organiser:

Fairground Models

Y5/6

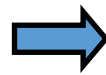


Domain of Knowledge: **Product Design**

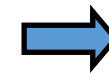
Focus Skill: **Moving Mechanical Structures.**

Design Process:

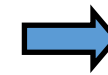
Innovate



Plan and Design



Create



Evaluate

Key Vocabulary

Stable Structure—An object that holds its shape.

Simple Circuit—A circuit with one loop. (Switch operated)

Pulley—Equipment for changing the direction of a force.

Gear—A toothed wheel that can alter speed in components.

Key Skills

Balancing—Ensuring the motion is **equal** and **smooth**.

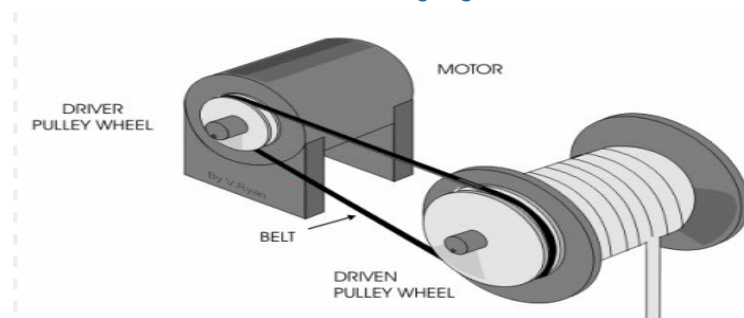
Measuring—Ensuring all **materials** are sized **accurately**.

Drive—Appropriate **power** to moving **components**.

Testing— Does it **power on** and **move correctly**?

Diagram

Pulley System



Real Life Image



Steam Gallopers / Carousel
Howards Funfair, Derbyshire.

Linked Engineer



Oscar Banker (1965–Armenia)
Inventor of the automatic gearbox.



Knowledge Organiser:

Food on a Budget

Y 5/6

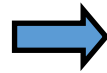


Domain of Knowledge: **Food Design**

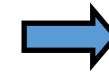
Focus Skill: **Preparation and Portions**

Design Process:

Explore and Plan



Design



Create



Evaluate

Key Vocabulary

Budget—A small food product (not a main meal).

Costing—How much items cost (in total)

Profit—A positive return on the cost (if sold).

Portion—A suitable serving size.

Key Skills

Portioning—Creating an appropriate serving size.

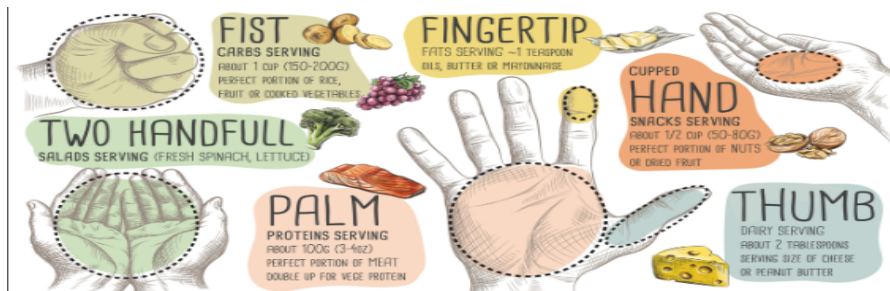
Measuring—Identifying the weight of an ingredient.

Estimating—A sensible guess for an appropriate size.

Sampling—Testing the flavour of the ingredients.

Diagram

Portion size —a guide to creating a rough estimate for measuring ingredients.



Real Life Image



Rationed Plate

How a budget/ration looked in WW2

Eatwell Plate



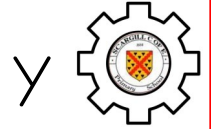
Main Food Groups

Showing suggested proportions



Knowledge Organiser:

Victorian CAM toy

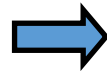


Domain of Knowledge: **Product design**

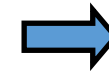
Focus Skill: **Computer aided design**

Design Process:

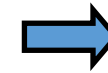
Explore and Plan



Design



Create



Evaluate

Key Vocabulary

Cam toys—Toys that use hand powered mechanisms to create cylindrical motions that move an object.

Cams— Convert and ordinary rotation into a more complicated pattern of motion

Follower —. The rotating part of a mechanism that follows the movement of the cam by direct contact.

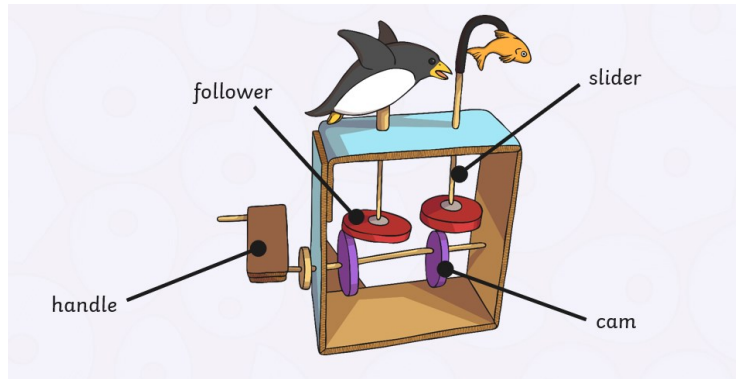
Key Skills

Explore—Use different shaped cams and explore how these change the movement of the toy.

Computer Aided Design—Using computer aided design to create one element of the design

Testing— Does the toy move as expected.

Diagram



Real Life Image



Linked Engineer



Jean Tinguely—kinetic artist