Year 6 Design Technology

Electrical systems

Sticky Knowledge

Methods of dealing with criminals have changed over time.
The Guillotine used to be classed as a humane method of dealing with criminals, but is now seen as a violation of human rights.

A pulley works with a wheel on a fixed axle with a groove and guide a rope or cable.
Evaluation can help us make sense of complex processes and outcomes. It is a good way of exploring options and figuring out what might need to change. It provides evidence-based judgements about the effectiveness of the process or product.

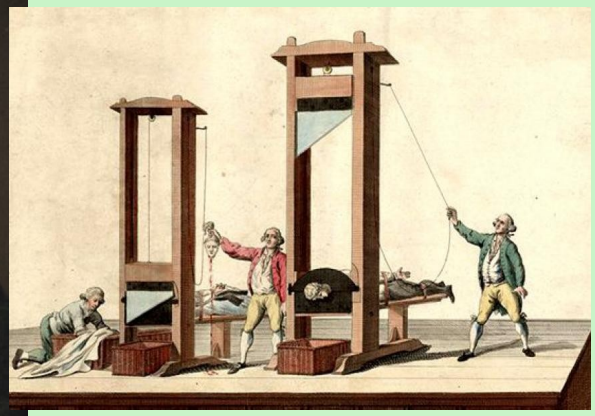
Information must be gathered, ordered and judged in a systematic and methodical way.

Famous Person

Dr Joseph-Ignace Guillotin (1738-1814)

Dr Joseph-Ignace Guillotin was a French physician and politician who proposed (on 10th October 1789) the use of a device to carry out death penalties in France. He declared it as a less painful method of execution.

At the time, beheading in France was typically done by axe or sword, which did not always cause immediate death. Guillotine wanted a system that provided a more humane and less painful method of execution, hoping it would be the first step toward a total abolition of the death penalty.



Key Vocabulary

Electrical Systems

Design

Purpose: what your product will be used for
Preferences: features you prefer
Research: find out what works well now and what could be better on current products
Innovation: something new that hasn't been used before
Annotated sketches: clearly labelled diagrams
Cross-sectional diagrams: what the product would look like if we 'cut-through' it
Exploded diagrams: clearly showing every part in close-up detail
Prototypes: early versions of your product
Detailed designs/step-by-step plan: every part of your product is thought about and shown in the order it will be built order
Computer aided design: designs created on a computer program
Design proposal: what you think your product will look like, the materials it will be made from, how much of everything you will need (a **detailed list**)

Make

Materials/components: what you will make your product from
Tools/equipment: things to help you to make your product
Accuracy: making things carefully
Measure/mark out: use a ruler
Cut/shape: things you will do to make your product (making sure everything fits together)

Investigate/monitor: check everything works as you want it to
Control: the movement must be precise and controlled

Switch/pulley/cams/levers/linkages/gears: things to include on your product to ensure it moves in the correct way
Functional properties: the parts of your product that have a job to do

Evaluate

Critically compare and evaluate products: really identify how much your product matches your design

Original design: the designs you began the whole process with

Improvements: what went well and what could be better?