

Knowledge Mat: D & T – Year 8

Key Knowledge for Year 8

Term 1

- To know the timeline of 20th Century design movements.
- To understand that world events influence the design of objects.
- To know that your first design isn't necessarily going to be your best design (the iterative design process).
- To be able to write a specification.

Term 2

- To have an understanding of moulding processes, vacuum, chocolate and injection moulding
- To be able to communicate designs accurately through sketching and modelling (including CAD).

Term 3

- To understand gravity casting processes
- To know how to design a mould that will fill in a gravity casting situation (manufacturing constraints).
- To further develop CAD skills from Year 7, using a broader range of tools and multiple-layered designs using Copy and Paste
- To be able to communicate advantages of CAD/CAM.

Term 4

- To use the appropriate tools to create an attractive, safe and aesthetically pleasing product.

Wider Experiences / Try To Do...

- Look for sources of inspiration in nature, architecture or art.
- Study graphic images made using CAD that you see outside the school environment.

The **big** questions:

- **What** is a design movement?
- **How do** we deal with manufacturing constraints?
- **Does** my first design need to be perfect?
- **What is** a specification?

Vocabulary

Design

Technology

Iterative

Manufacturing constraint

Genre

Movement

Contemporary

Art Deco

Art Nouveau

Streamlining

Influence

Biomimicry

Abrasion

Edges

Faces

Vertices

Gravity casting

Pressure die casting

Brazing hearth