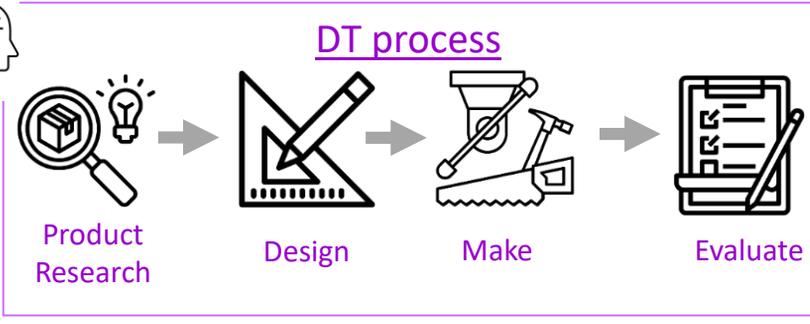


Strand of DT

Structures



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AIMS OF EDUCATION

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REST, PLAY, CULTURE, ARTS

Vocabulary	
Strong	Something that is able to withstand force, pressure, or wear.
Stable	Something that does not topple over easily when acted upon by a load.
Moulding	The material used for the exterior of a picture frame.
Glaze	The layer behind the moulding which is transparent and protects the picture.
Mat board	The layer between the glaze and picture providing a border around the image.
Backing board	Supports and protects the picture from behind.

Skills

measuring, sawing, joining

What?

- The **quality** of a product depends on how well it is **made** and how well it meets its **intended purpose**.
- A picture frame is made up of **multiple parts**: the moulding, the mat board, the glaze and the backing board.

- Wood frames** can provide **strength**, be **shaped** in a broad range of profiles, and allow a variety of **surface treatments**.
- Wood can be joined together with a range of **joints**, such as a butt, mitre and halving joint.
- Joints** and **stands** should be **strong** and **stable**.
- Stands** should be **angled** to provide a **straight** and **stable position** for the frame.



Design criteria:

- Can stand up supported only by its stand.
- Can display a photograph.
- Is attractive to the audience (Tudors).
- Is suitable for recipient (Henry VIII) - fits the Tudor design brief.

- A **scale** drawing means that each element in that drawing is in the same **proportion** to the real object.

- Production plans** include the **equipment** and **materials** needed to make a product.
- Production plans must be **detailed** and be in **chronological order**.

- Measure** and **mark** your wood where you'll be making your cut and clamp the wood in place.
- Grip the handle of the saw with your dominant hand.
- Hold the wood in place with your other hand on the other side of the clamp so that injuries are avoided.
- Start the cut by applying **little pressure** onto the saw and pull back to make a groove in the wood. Angle the tip of the saw down.
- Lightly press down on the saw and keep cutting through the wood.
- Slowly move the saw back and forth, towards the body and away from it.
- Continue the sawing motion until the piece of wood is ready to break off. Slow down and apply less force towards the end, to avoid cracking or splintering the wood.
- Card triangles** can be used to **reinforce joints**.

- Designs and production plans should be used in the making stage but can be **adapted**.
- Health and safety** procedures must be adhered to when using equipment which could pose a risk of **injury**.
- Decorations** can be added to products to make them **appealing** to an audience.
- Different materials can be used make different patterns and textures.

- A successful structure should match the **design criteria**.
- Designers evaluate their finished products or prototypes in order to test whether they work well and if the design can be **corrected** or **improved**.