

D&T - Resistant Materials

Materials

Softwood Pine

Softwoods come from gymnosperm trees, such as conifer (**evergreen**) trees. These trees like pines, cedars and spruces have needle-like leaves that usually remain green year-round.

Dowel

Dowels are commonly used as structural reinforcements in cabinet making and in numerous other applications, including: Furniture shelf supports. Moveable game pieces and **axels and wheels for traditional wooden toys**.

Hardboard

Hardboard, also called high-density fiberboard (HDF), is a type of fiberboard, which is a pressed wood or engineered wood product. **It is relatively cheap and can be machined well on a laser cutter.**

PVA – Polyvinyl Acetate

PVA glue is the best wood glue, it is an easy-to-use adhesive that is **colourless and odourless**, and which can be used for both interior and exterior projects however it can **take a while to dry**.

Health and Safety

The workshop rules must be adhered to at all times.

- **Safety Glasses**
- **Protective Clothing**
- **Hair Tied Back**
- **Tools and equipment training.**
- **No food or Drink.**
- **No Running.**
- **Always listen and follow instructions.**

These rules are in place to keep everyone safe when working in a practical environment.

Tools and Equipment

- **Tenon Saw** – used for cutting straight lines only.
- **Coping Saw** – curved cuts – small intricate components.
- **Hand Files** – used after cutting to shape your product.
- **Sandpaper** – final process before applying a finish.
- **Pillar Drill** – used with a drill bit to drill holes.
- **Wood Vice** – holds materials in place whilst manufacturing

Key words and Vocabulary

Research, Investigate, Design, Technique, Manufacturing, Template, Joining, Equipment, Development, Quality, Prototype, Client, Softwood, Hardboard, Tenon Saw, Coping Saw.

Pupils will need to articulate their process using key words and technical vocabulary.

Finishes

Finishes is a term we use to apply a finish to a product such as paint, wax or varnish.

Water based paints

Safe for use on most products, easy to clean, and good to work with.

Varnish

Varnish is a clear transparent hard protective coating that ensures your product is durable.

Toy Safety

Toy safety must be considered as the product is aimed at a young child.

- No sharp edges.
- Solid construction
- Non-toxic
- Sustainability for client.

You will learn how to use a range of tools and equipment in the workshop correctly. safely and independently.