



My Tool Box



Tenon Saw – Used to cut straight cuts in wood.



Scroll-Saw/Hegner-Saw- Used to cut complicated shapes in thin material.



Try Square – Used to mark out right angles.



Metalwork Vice – Used to secure material while working on it (cutting, filing sanding etc.)



Band facer/Belt Sander Used to sand rough material smooth.



Screwdriver- Used when driving screws into wood.



Pin Hammer – Used to knock panel pins and small nail into wood.

Focused topics

Product analysis is a form of primary research and involves looking at existing products, working out how they were made and seeing what features might be useful to any possible new design. Product analysis can often be referred to as ACCESS FM.

- A** is for **Aesthetics** 
- C** is for **Cost** 
- C** is for **Customer** 
- E** is for **Environment** 
- S** is for **Size** 
- S** is for **Safety** 
- F** is for **Function** 
- M** is for **Material** 

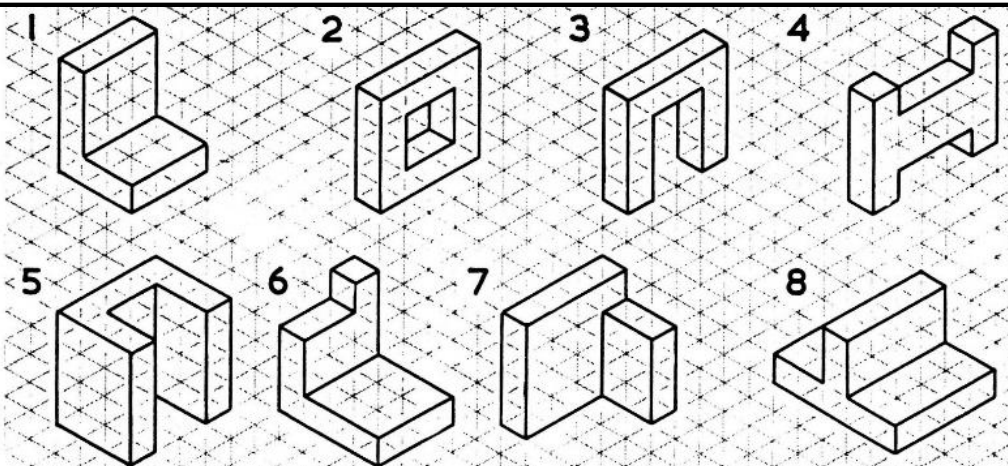
Key Terms

- Aesthetics**- how humans perceive and judge objects according to their attractiveness
- Computer aided design (CAD)** The process of creating a 2D or 3D design using computer software.
- Composite material** - materials composed of two or more component parts.
- Medium-density fibreboard (MDF)** – an engineered wood product made from wood fibres and resin binder (glue)
- Plywood** – is a composite material. It is composed of individual plies/veneers of wood. It is very strong due to the way the plies are put together. The grain of each ply is positioned at ninety degrees to the pieces of ply above and below it.
- Standard component** – an individual part or component, manufactured in thousands or millions, to the same specification

Tasks

- Task 1:** Cover the knowledge organiser then write down all the tools you have learnt. Check and red pen mistakes.
- Task 2:** Do the same as task 1 for Key words & definition.
- Task 3:** Complete a product analysis of a product you have around your home using the ACCESSFM words
- Task 4:** Draw two tools and write what they are for.
- Task 5:** Create a quiz based on task 1, 2 or 3. Get someone to test you.
- Task 6:** Create a mind map for the information you remember and red pen anything you've forgotten.
- Task 7:** Teach it. Create a task that can be used to teach some of the information from here.

Isometric drawing is way of presenting designs/drawings in three dimensions.



To go further: Introduction technical drawing- Exploded drawing



More information about smart, modern and composite materials:

