

Y10 Wood and Plastic Jewellery - Knowledge Organiser

Wood

Wood

Softwoods

- Coniferous
- Needles
- Evergreen
- Fast growing
- Rougher grain
- More knots
- Less dense

Hardwoods

- Deciduous
- Not always harder
- Slower growing
- More expensive
- Good variety

Manufactured boards

- Engineered
- Composite materials
- Cheaper
- Off cuts or veneers
- Fewer irregularities

Hardwoods

OAK MAHOGONY CHERRY CHESNUT

WALNUT BEECH ROSEWOOD BALSAM

TEAK HICKORY



Softwoods

FIR REDWOOD CEDAR SPURCE

ASH HEMLOCK BIRCH PINE



Manufactured boards

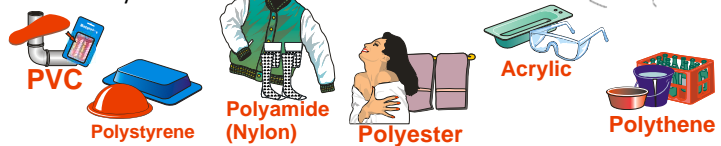
MDF PLYWOOD HARDBOARD

CHIPBOARD BLOCKBOARD STERLINBOARD



Plastics (Polymers) Synthetic

Thermoplastic can be reheated and reshaped. Can be recycled.



Thermoset are cured (set) using heat. Cannot be reshaped once cured. Harder to recycle.



Elastomers can be either thermoset or thermoplastic. They have a stretchy and rubbery quality.



Plastics (Polymers) Natural

Amber is fossilised tree resin and is found in lumps which can be carved for jewellery and other decorative products.



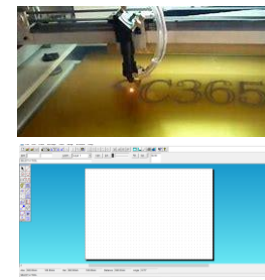
Latex is rubber particles dispersed in water. Usually found in a milky liquid or heated to form a foam.



CAD/CAM

Computer Aided Design
Computer Aided Manufacture

Using the laser cutter with 2D design



HAND TOOLS

Workbench, Bench hook, Tennon saw, Coping saw, Files, Pillar drill, Sandpaper, Steel ruler, Centre punch, Hammer, Tri square, Vice, Screwdriver, Mallet and Chisel.



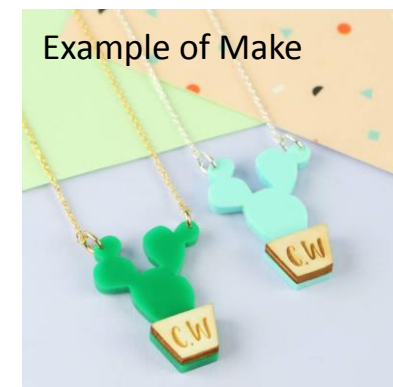
Alternatives to Plastics

Made from renewable resources such as wheat, maize and lactic acid.

Biodegradable / Compostable



Example of Make



| Type of finish | Description | Example |
|---------------------|---|--------------------------------|
| Paints | Divided into three main groups oil based paints, water based paints and solvent based paints. | Decking, furniture, panelling, |
| Veneers | A thin layer of wood that is applied to a manufactured board to give it the appearance of real wood | Tables, wardrobes, coffins |
| Varnish and lacquer | available in oil, water and solvent based types. | External/Internal wood- |
| Oil | Oil provides an improved appearance for wood by enhancing the grain. Vegetable oil can also be applied to wood which comes in contact with foods. | Wooden spatulas, salad servers |
| Wood Stain | used to improve the colour of the wood. Wood stain if used on its own only colours the wood and so and requires a coating of wax or varnish to make it weather proof. | Benches, sheds, fences, etc. |