



The Orme (၂) Y7: Design and Technology Knowledge organiser

Block Bot



HARDWOODS

DESCRIPTION: A natural material sourced from Deciduous trees. They have Broad leaves & tend to grow slowly making them more expensive.

Oak	8	Light brown with a tight grain that is very tough, hard and durable.
Beech	N	A dense close grained wood with a fine finish, that is tough and durable.
Ash	A	A pale brown wood that is flexible, tough and shock resistant.
Teak		A dense dark coloured wood that has great durability and water resistance.

SOFTWOODS

DESCRIPTION: A natural material sourced from Coniferous trees. They have needle-like leaves & tend to grow fast which makes them cheaper.

Pine		Pale yellow/brown and lightweight that has a lot of knots and resin.
Spruce	Y	White/cream with a fine, even grain. Easy to work with.
Larch		Pale brown wood that is durable, tough with water resistance.



Drilling machine The drilling is used for drilling holes through materials including a range of woods, plastics and metals. The work can be clamped safely, and the holes drilled 'straight and accurately'



Disk Sander The Disk Sander is used to smooth materials such as woods and plastics. It is also used to remove small amounts of waste material. It is a dangerous machine if safety is ignored.

Tools & Equipment



Tenon Saw A back saw that is used for making straight cuts in timber. It can also be used to cut joints into timber materials



Bench hook A bench hook is used to hold the work securely so that cutting can take place.



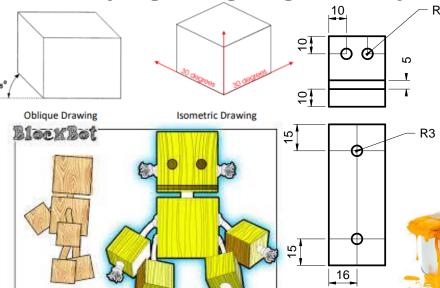
Try square The try-square is pushed against the straight edge of a piece of wood and a pencil is then used to mark a straight line across the material. The line is continued all the way round the wood (all four sides are marked).



Steel rule A steel rule which is used for measuring in mm.

The end of the rule is the start of the measuring.

Developing designing techniques



Surface Finishes

Finishing is usually one of the last stages of making a product. It will usually involve sanding R3 and a applying a surface coating to protect the materials and improve the visual appearance.

Examples Paint Stain Varnish Wax Dip coating