
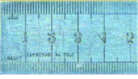




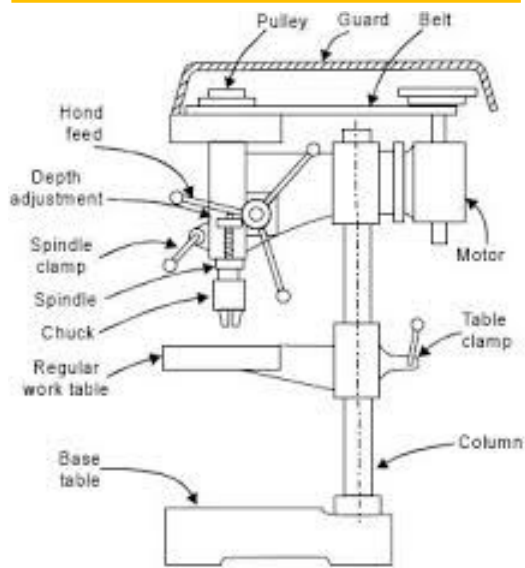


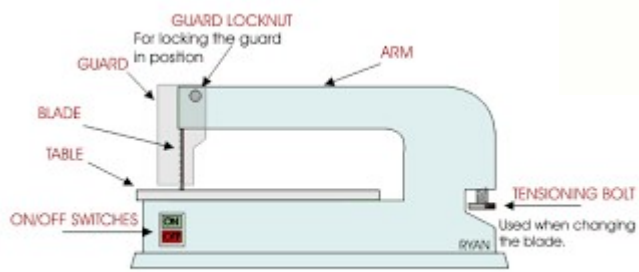
Machinery and Tools in the workshop

| | | |
|---------------------|---|---|
| Try Square |  | A tool that is used to draw 90° degree lines and check materials are square |
| Steel Rule |  | A steel rule is a measuring tool, it differs from a ruler as it starts from zero and is made from metal. |
| Bench hook |  | A bench hook is a piece of equipment that hooks on to a bench and is used to stop wood from slipping when cutting with a saw. |
| Fret Saw |  | A fret saw is a machine used to cut shapes out of wood and plastic. |
| Belt Sander |  | A belt sander is a machine that has an abrasive material on a belt and is used to sand material |
| Pillar Drill |  | A free standing machine that rotates a drill bit to make holes in different materials |

Name the parts of the pillar drill:



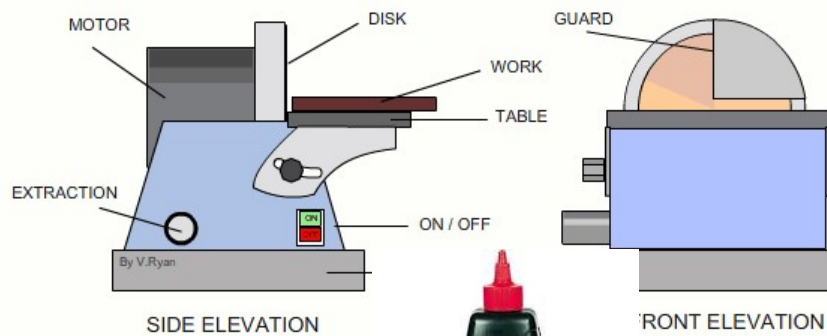
Name the parts of a fret saw



DT Keywords

Research, analyse, design, develop, plan, consider, sketch, annotate, evaluate, render, join, modify, manufacture, health and safety, isometric, Working

Name parts of the belt sander



PVA Glue— Polyvinyl Acetate is an excellent wood glue

- 1mm = 0.1cm
- 10mm = 1cm
- 50mm = 5cm
- 55mm = 5.5cm
- 100mm = 10cm

Basic Skills: Measuring



To convert mm to cm x 10 To convert cm to mm ÷ 10

MEASURING -Measuring in millimetres is more accurate than measuring in centimetres. When measuring in the workshop you will use a steel rule. Always check where the 'zero' is and start measuring from this point. There is an old saying that goes "measure twice, cut once". Always double check your measurements before you cut into your material

YEAR 6 Shipshape

Can you name this hand tool?



Material Knowledge

Hardwood

You can have evergreen hardwood trees which do not lose their leaves and Deciduous trees which lose their leaves in winter. They are usually quite hard. They are broad leaf trees and the seed are enclosed in the fruit that the tree produces. They generally grow in temperate climates including the British Isles. They are slower growing trees it can take 100 years to grow fully. Tend to have a tighter grain. They can be very Expensive. Most evergreens are found in tropical or sub-tropical countries such as South America.



Softwood

They mainly grow in a cooler climate like Canada. These cone bearing trees are called conifers. They have a looser grain structure. They are often used as building material. These are usually softer and easy to work. The trees grow tall and straight which makes it easier for the manufacturer to cut long straight planks of wood. Evergreen trees which means they do not lose their leaves. These grow quite faster and so are cheaper.



Health & Safety Rules

- In an emergency hit the stop button immediately
- Always make sure you know how to use tools and machinery safely and correctly
- Always make sure you are wearing correct protective equipment at all times.
- Make sure that any long hair is tied back, jewellery is removed and sleeves are rolled up.
- One person on a machine at any time.
- Only use equipment for the purpose for which it was designed for.
- When a machine is in use do not cross the black and yellow tape.
- Always keep fingers and hands well away from moving parts of a machine.
- Never remove parts of a machine or guards.



There are 3 types of wood

| | | |
|--|---|---|
| Hardwoods | Softwoods | Manufactured boards (man made woods) |
| Definition | | |
| Hardwoods come from deciduous or broad-leaved trees. These are slow growing trees which can take over a 100 years to grow. | Softwoods come from coniferous trees. These are trees which tend to have needles rather than leaves. They fast growing trees which can be cut for wood after 30years. | Manufactured boards are timber sheets which are produced by gluing wood layers or wood fibres together. They tend to be made using waste wood materials |
| Name of wood | | |
| Mahogany | Spruce | MDF medium density fibre board |
| Beech | Parana Pine | Chipboard |
| Oak | Yellow cedar | Hardboard |
| Teak | Scots Pine | Plywood |