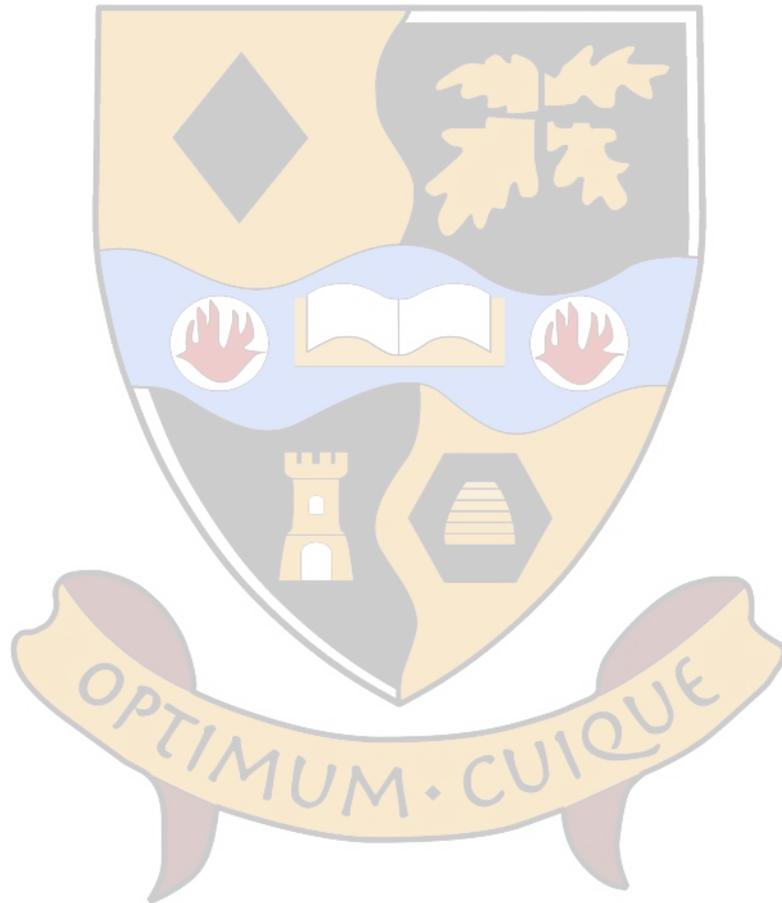


# Lochgelly High School



**National 5**

**Practical Woodwork**

**Worksheets**

# PPE

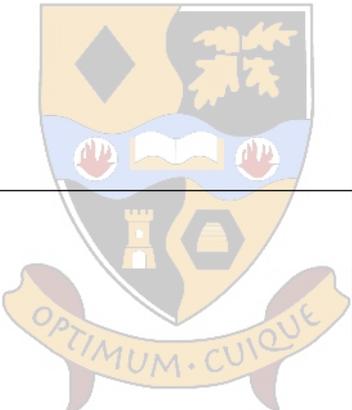
What does PPE stand for?

---

Why do we use PPE.

---

Identify the the PPE and its purpose in the table below.

PPE	Name	Purpose
		
		
		
		
		
		

# Signs

Identify the following types of signs and their purpose.



Identify the type of sign.

Colours: Yellow, black and white.

Shape: Triangle.

Explain the purpose of this sign type.



Identify the type of sign.

Colours: Blue and white.

Shape: Circle.

Explain the purpose of this sign type.



Identify the type of sign.

Colours: Red, black and white.

Shape: Circle.

Explain the purpose of this sign type.

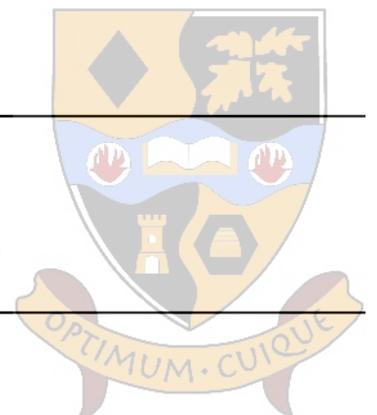


Identify the type of sign.

Colours: Green and white.

Shape: Rectangle or square.

Explain the purpose of this sign type.



# Wood

Complete the table shown using the information below.

Softwood	Name	Properties
		
		
		
		

**Larch** - Heavy, hard, good water resistance. Easy to work with. Used for floors and construction.

**White Pine** - Cheap, light weight, easy to work with. Used for construction, fencing, external cladding and flooring.

**Cedar** - Medium weight, low strength, good water resistance. Used furniture and veneers.

**Red Pine** - Cheap, light weight, easy to work with. Used in construction.



Complete the table shown using the information below.

Hardwood	Name	Properties
		
		
		
		

**Ash** - Expensive, strong. Used for furniture and veneers

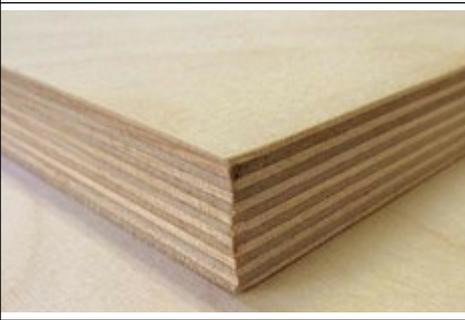
**Oak** - Heavy, hard and strong. •Used for barrels. Expensive.

**Beech** - Hard and heavy. Good for machining. Used for furniture, ladders, sports equipment and tool handles.

**Mahogany** - Strong, good water resistance. •Easy to work with and machine. •Used for furniture and veneers.



Complete the table shown below.

Man made	Name	Description
		
		
		
		
		

Word Bank

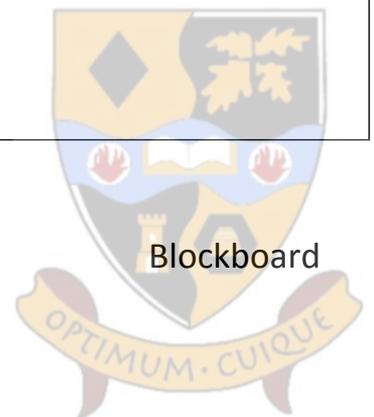
MDF

Chipboard

Plywood

Hardboard

Blockboard



# Wood Classification

Name the 3 classification groups of wood.

○

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○

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○

---

Name the type of trees hardwood comes from. \_\_\_\_\_

Name the type of trees softwood comes from. \_\_\_\_\_

Where does the wood for man made boards come from.

---

Name four examples of hardwood.

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---

---

Name four examples of softwood.

---

---

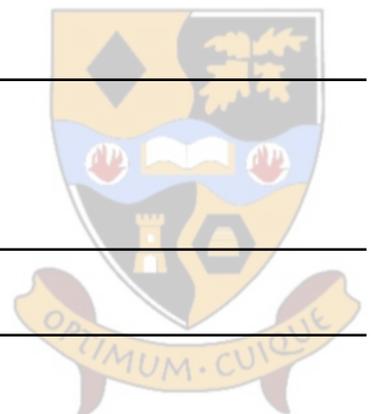
---

Name four examples of man made board.

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Complete the blanks in the paragraph using the word bank below.

There are two classifications of natural wood; hardwood and softwood.

Hardwood comes from \_\_\_\_\_ trees. Softwood comes from \_\_\_\_\_ trees, commonly known as evergreens. \_\_\_\_\_ boards are produced from off cuts.

Hardwoods have \_\_\_\_\_ leaves which they lose during winter months. Softwoods have \_\_\_\_\_ leaves which they keep all year allowing an even growth, this means they grow much \_\_\_\_\_ than hardwoods. Hardwoods are more \_\_\_\_\_ than softwood because of this.

Word Bank

**Cheaper**

**Expensive**

**Deciduous**

**Man-made**

**Needle like**

**Quicker**

**Conifers**

**Broad flat**

**Slower**

Describe what the term 'grain' refers to in wood.

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Explain how using the 'grain' can improve the quality of finish on your wood.

---

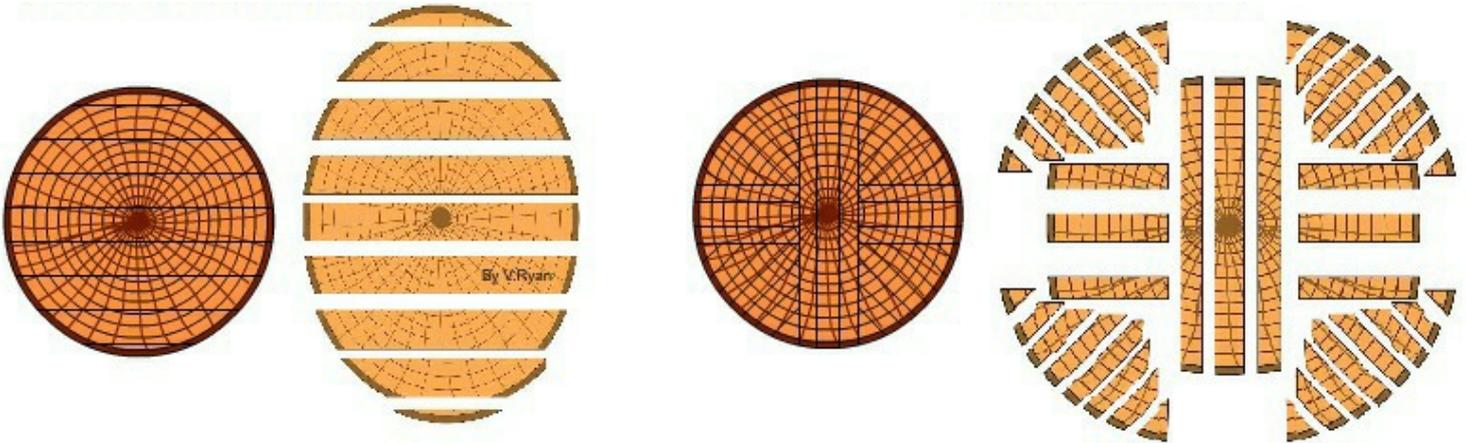
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# Timber Supply

Identify the two types of cutting timber, shown below, to prepare for use.



Before using timber, what process needs to happen due to high water content.

Wood can be supplied in different forms, identify the forms below and over page. State what classifications of wood, these forms are predominately made from.



Identify the form of wood.

---

---

Wood classification.

---



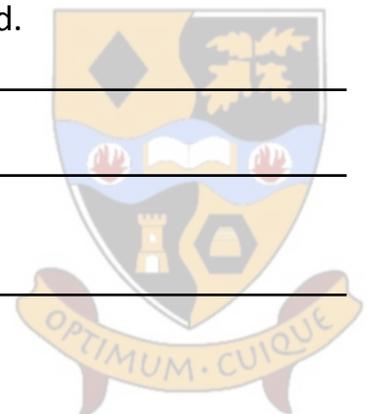
Identify the form of wood.

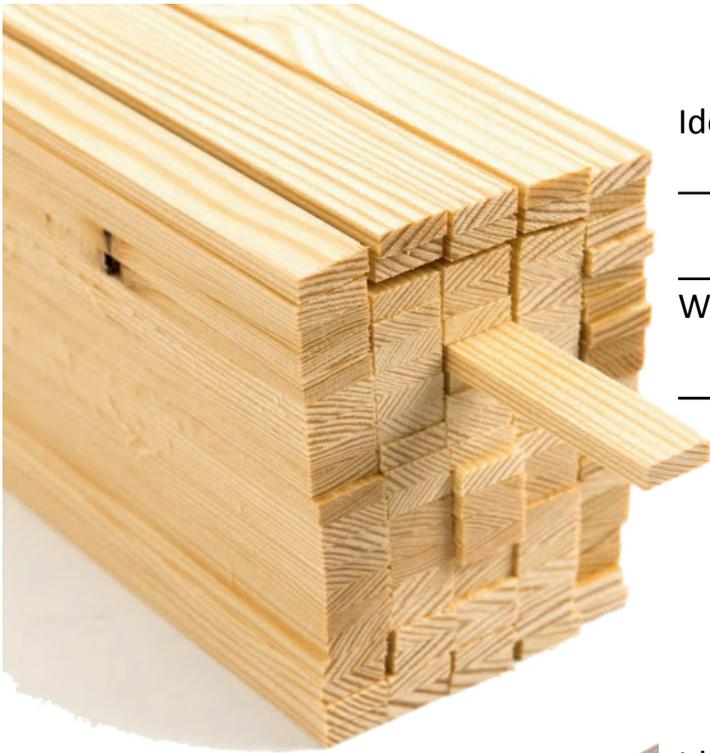
---

---

Wood classification.

---





Identify the form of wood.

---

Wood classification.

---



Identify the form of wood.

---

Wood classification.

---

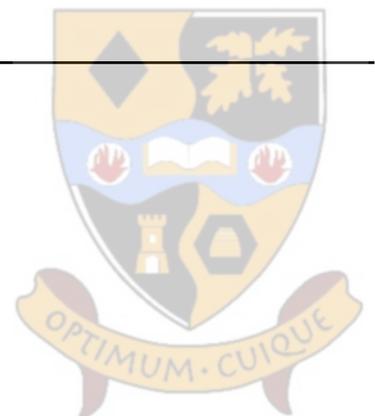


Identify the form of wood.

---

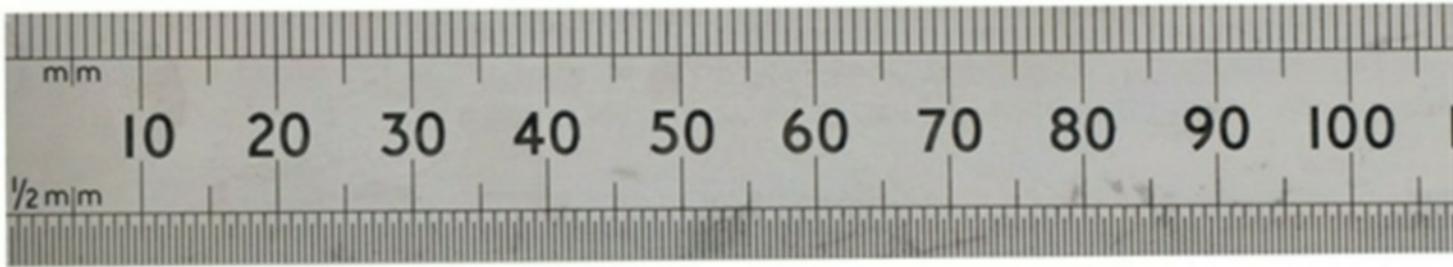
Wood classification.

---



# Steel Rule

A steel rule is used for marking out.



What units does a steel rule use \_\_\_\_\_

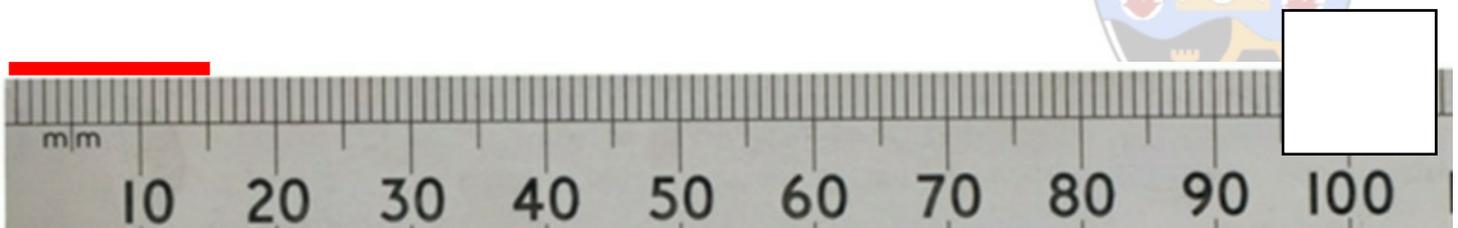
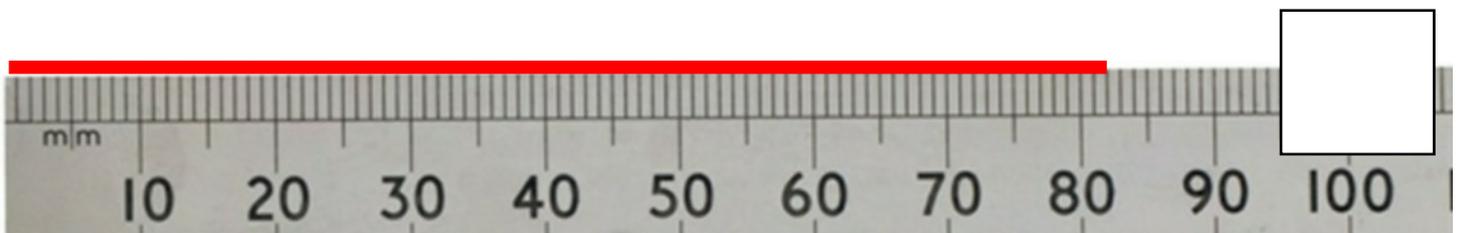
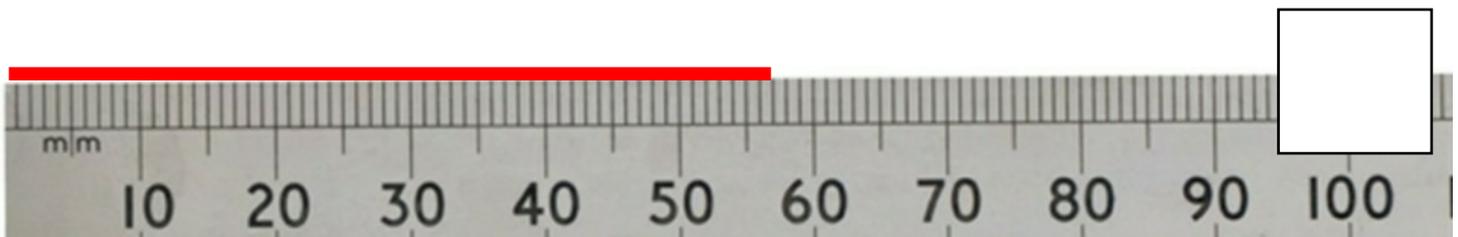
Describe the difference between a steel rule and a ruler.

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---

Identify the measurements shown below.



Measure the length of the lines below using a steel rule.



# Try Square

A try square is shown below.



State the angle of the corner \_\_\_\_\_

The purpose of this tool is \_\_\_\_\_

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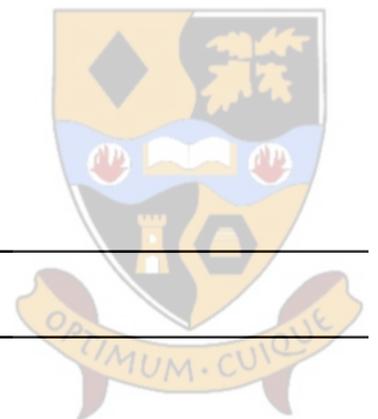
---

State two common errors made when using this tool.

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---



# Marking Gauge

Identify the parts of the Marking gauge.

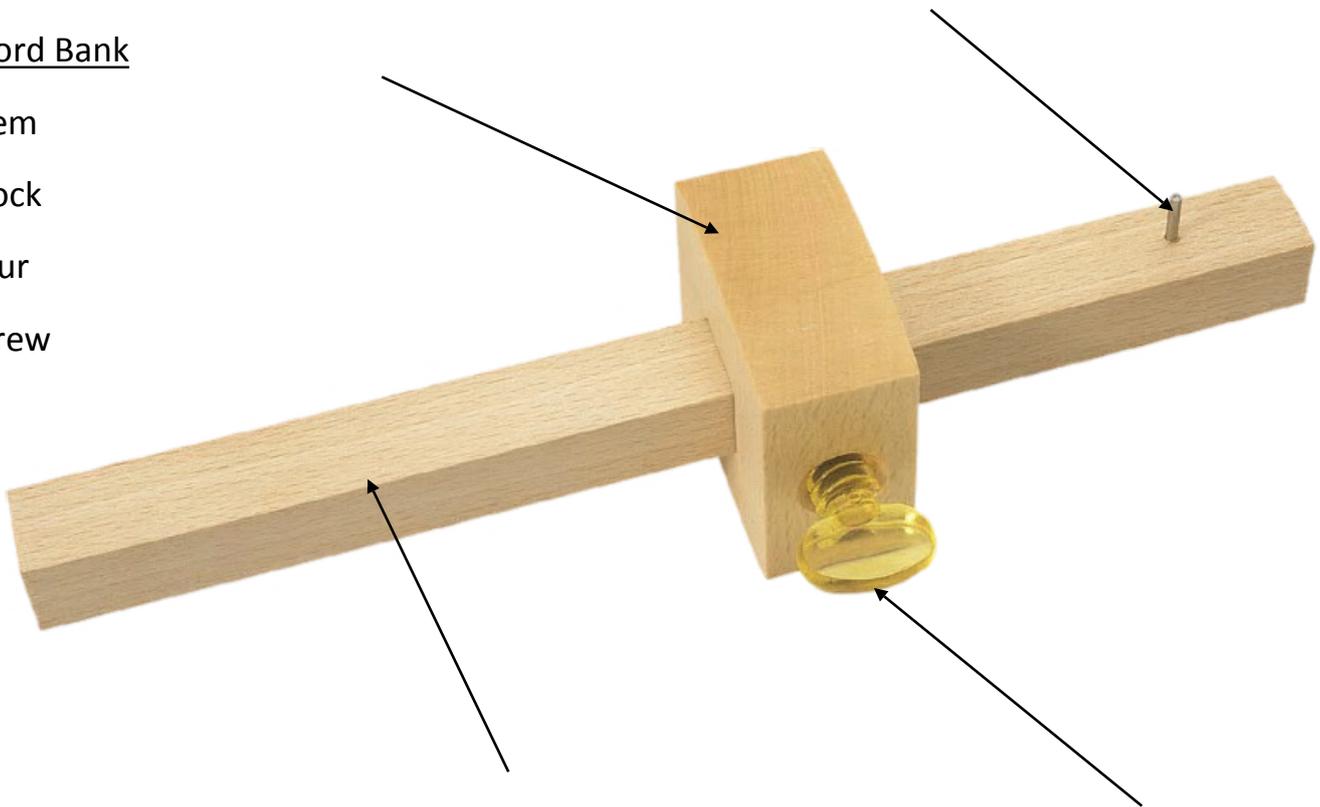
## Word Bank

Stem

Stock

Spur

Screw



The purpose of this tool is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

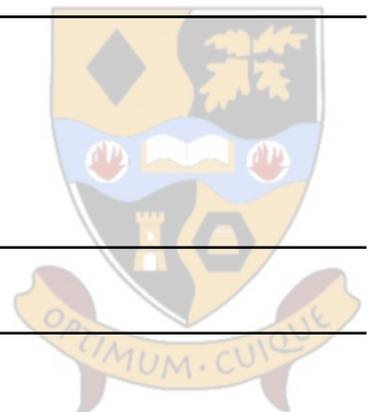
\_\_\_\_\_

State an adjustment which could be made to this tool.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Explain how to set the tool to a depth of 9mm. Sketches may be used to help.

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# Mortise Gauge

Identify the parts of the Mortise gauge.

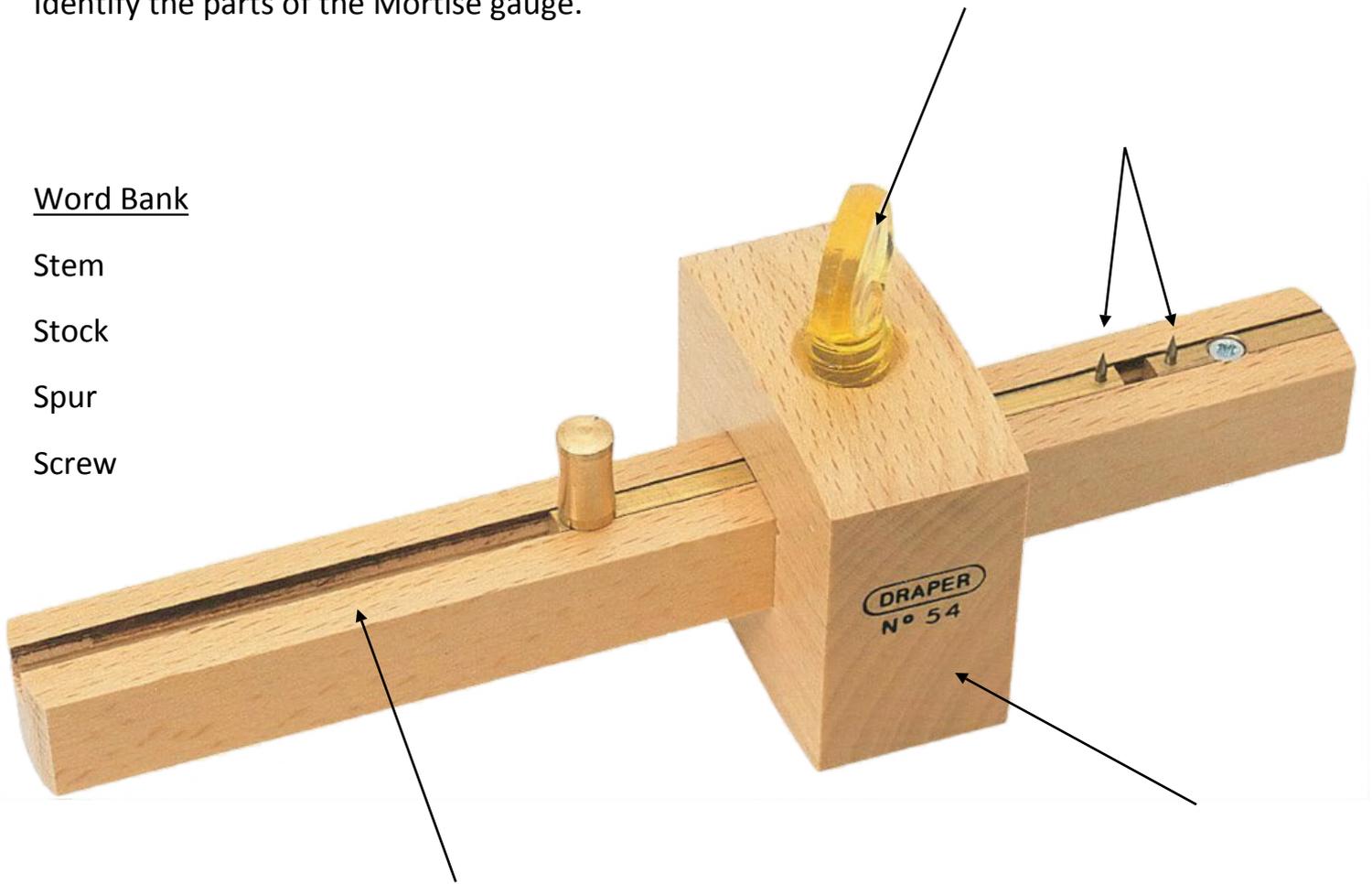
## Word Bank

Stem

Stock

Spur

Screw



The purpose of this tool is \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

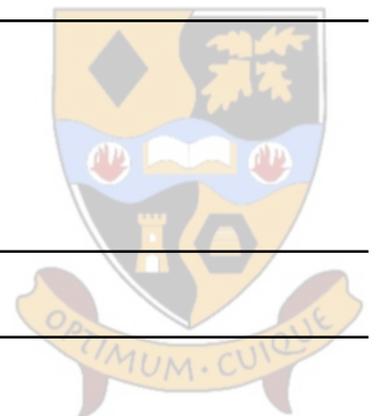
\_\_\_\_\_

State two adjustment which could be made to this tool.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Explain how to set the tool to a depth of 6mm with a spacing 10mm.  
Sketches may be used to help.

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# Sliding Bevel

Identify the parts of the Sliding Bevel



Parts

Blade

Stock

Thumbscrew

The purpose of this tool is \_\_\_\_\_

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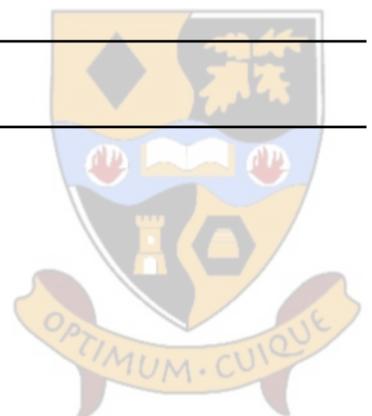
---

State an adjustment which could be made to this tool.

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Explain how this tool could be set to draw an angle of  $60^\circ$ . Sketches may be used to help.

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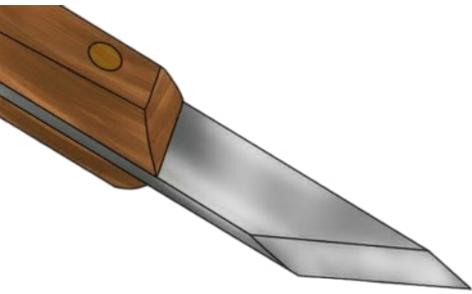
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---



# Marking Knife

Shown below is a Marking knife.



The purpose of this tool is \_\_\_\_\_

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State 3 Health & Safety checks you would need to carry out before and during use of this tool.

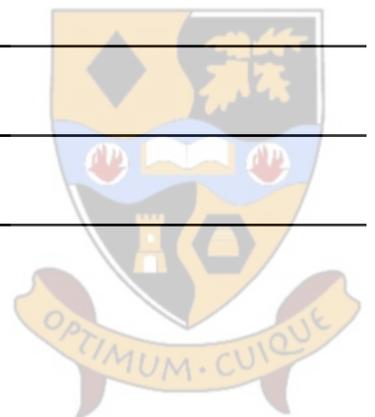
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

---

---



Explain how to use this tool when marking out a wood joint. Sketches may be used to help.

---

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# Bradawl

Shown below is two type of Bradawls.



The purpose of this tool is \_\_\_\_\_

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---

Describe how you would use the bradawl.

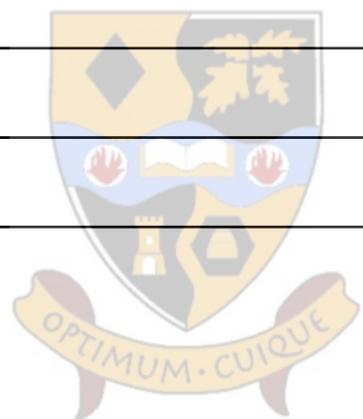
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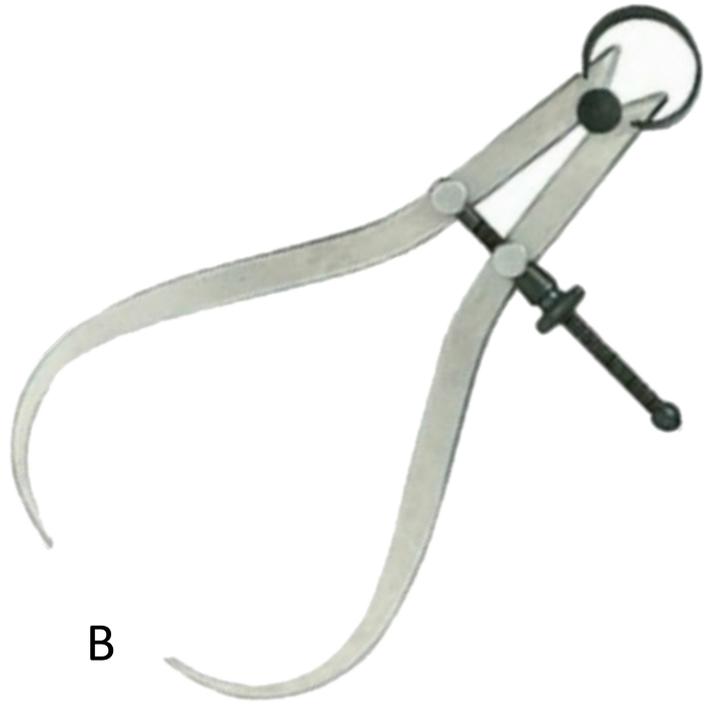
---



# Callipers



A



B

State the name of the tool above \_\_\_\_\_

Describe the purpose of the tool.

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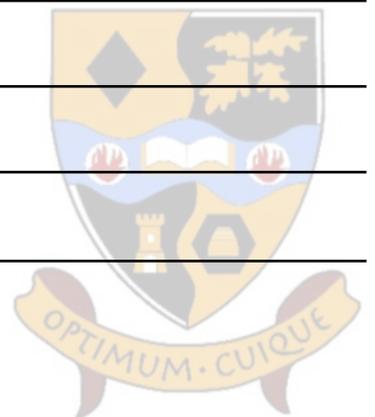
---

Describe why using B would be preferred instead of A.

---

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State the name of the tool above \_\_\_\_\_

Describe the purpose of the tool.

---

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---

Describe how you could set this tool up for a 9mm diameter, state all tools required.

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# Templates

A spice rack is shown.



A template was used to mark out the bottom decorative curves.

Explain why a template would have been used to mark out this curve.

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State an advantage of using a template, excluding time advantage.

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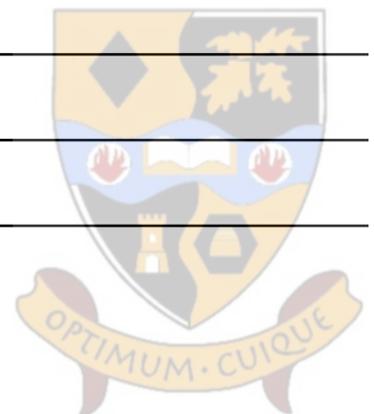
---

Describe how you would use a template to support your marking out.

---

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# Saws

Identify the type of saw shown \_\_\_\_\_



The purpose of this tool is \_\_\_\_\_

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Describe the purpose of the backboard. \_\_\_\_\_

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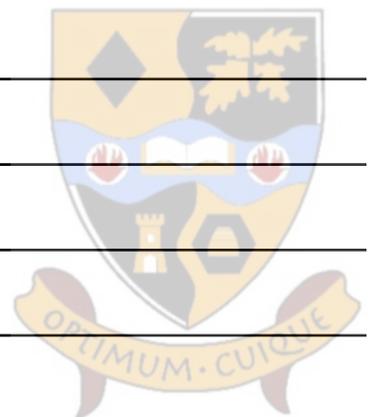
Identify the equipment used to hold your work whilst cutting with this saw.

---

---

State three health and safety considerations to observe when using this tool.

- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_



Identify the type of saw shown \_\_\_\_\_



The purpose of this tool is \_\_\_\_\_

---

---

---

Identify the direction the teeth should face.

---

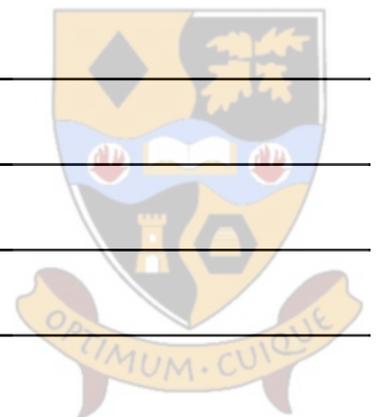
Identify the equipment used to hold your work whilst cutting with this saw.

---

---

State three health and safety considerations to observe when using this tool.

- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_



# Chisel

Identify the type of chisel shown \_\_\_\_\_



Blade  
Cross  
Section



The purpose of this tool is \_\_\_\_\_

---

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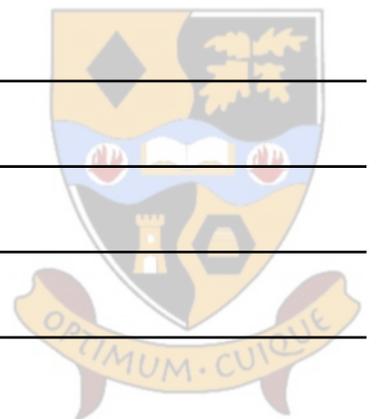
---

Identify the equipment used to hit the end of the chisel

---

State three health and safety considerations to observe when using this tool.

- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_
- \_\_\_\_\_  
\_\_\_\_\_



Identify the type of chisel shown \_\_\_\_\_



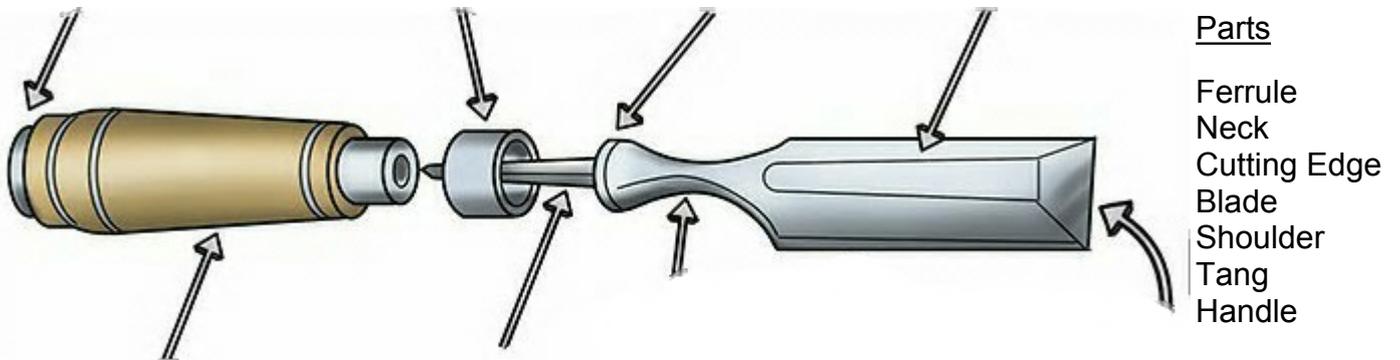
The purpose of this tool is \_\_\_\_\_

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Label the parts of the chisel.



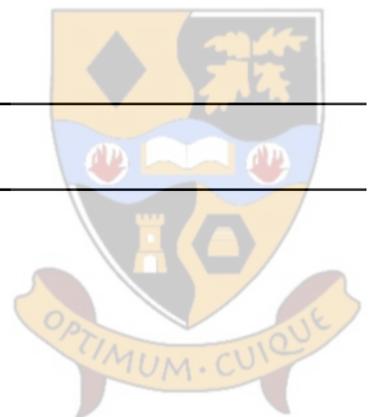
Parts

- Ferrule
- Neck
- Cutting Edge
- Blade
- Shoulder
- Tang
- Handle

State the purpose of the ferrule.

---

---



# Surform Tool

Shown below is a range of surform tools.



The purpose of these tools are \_\_\_\_\_

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---

Explain why there is a hole behind each tooth.

---

---

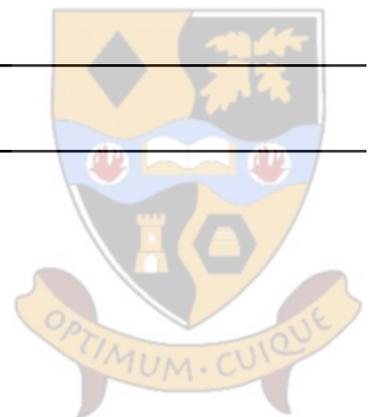
---

Explain how this tool could be used to round a corner. Sketches may be used to support.

---

---

---



# Planes



State the name of the tool above \_\_\_\_\_

State an adjustment which could be made to this tool.

---

---

Describe the purpose of the tool.

---

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---

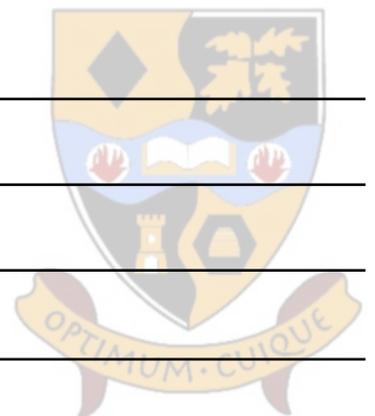
Explain how you would use this tool.

---

---

---

---



An exploded view of a plane is shown below



Describe the purpose of the adjusting nut.

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Describe the purpose of the adjusting lever.

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---

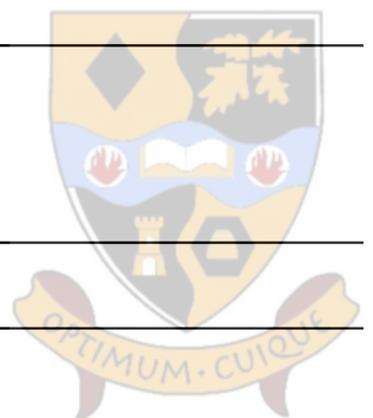
---

---

State the name of three other types of planes.

---

---



# Hand Router Plane

---

Shown below is a hand router.



The purpose of this tool is \_\_\_\_\_

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---

What is it commonly known as? \_\_\_\_\_

Describe how you would set this tool to a depth of 8mm. Sketches may be used.

---

---

---

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---

---



# Drill Bits



State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

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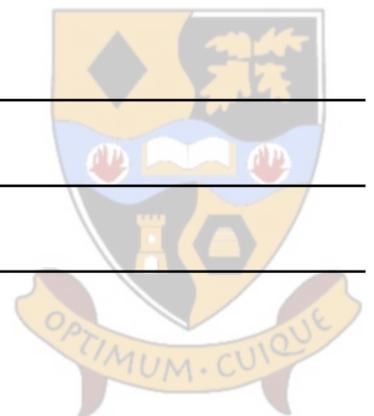
State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

---

---





State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

---

---



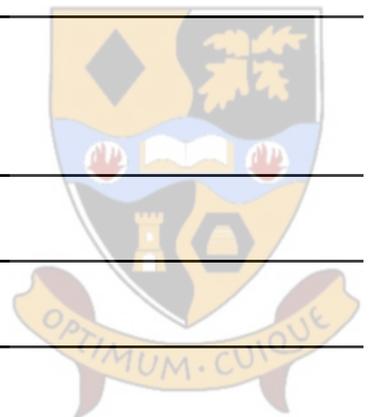
State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

---

---





State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

---

---



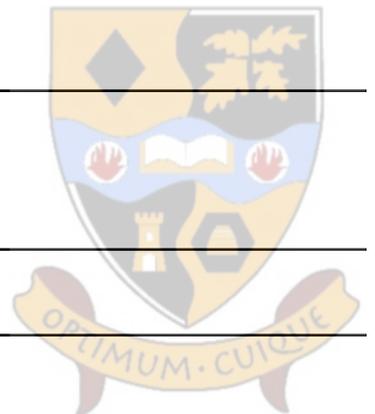
State the type of the drill bit above \_\_\_\_\_

Describe the purpose of the tool.

---

---

---



# Hand Drill

---



State the other name this hand drill is known as.

---

Describe the purpose of this tool.

---

---

Describe what safety checks you would need to carry out prior to using this tool.

---

---

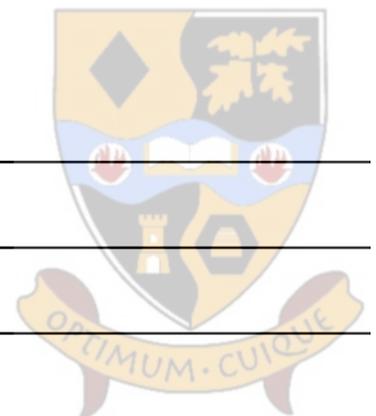
---

Briefly explain how to use this tool to drill a hole to 5mm.

---

---

---



# Drilling



State the name of the drill shown above.

---

The purpose of this tool is

---

---

State an adjustment which could be made to this tool.

---

---

---

Describe **three** health and safety checks which must be carried out prior to drilling.

---

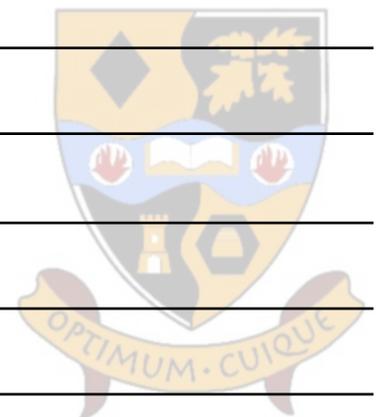
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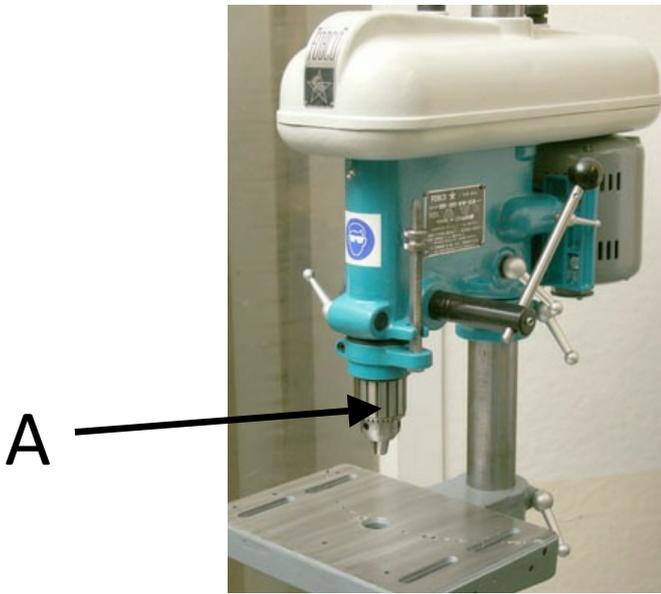
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---





State the name of the part shown at A.

---

State the name of the tool shown at B.

---

The purpose of tool B is

---

---

Describe **two** ways you could set your desired depth when drilling.

---

---

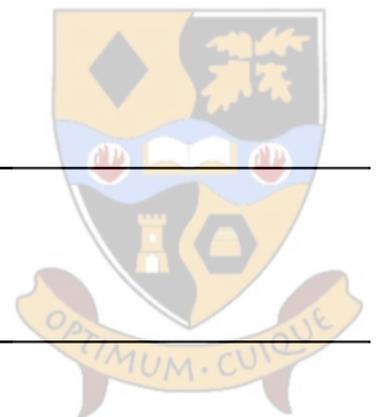
---

How could you ensure your material is secure.

---

What PPE is mandatory with this machine.

---





State the name of the drill shown above.

---

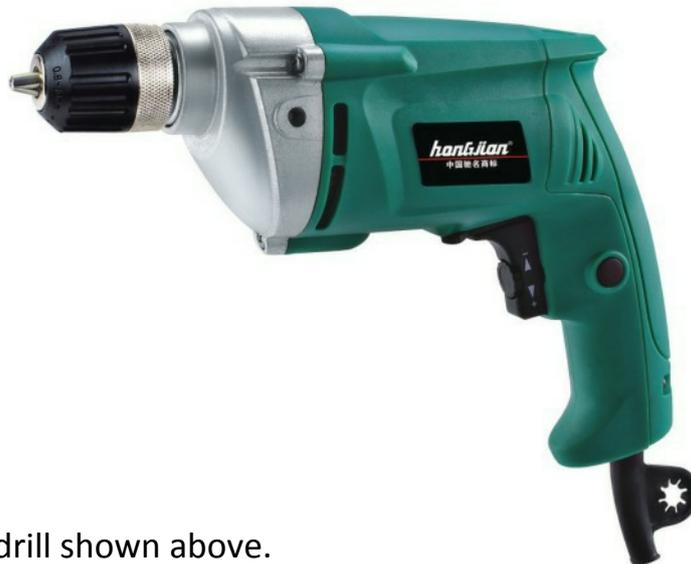
State an advantage of this drill.

---

---

What type of power does this drill require.

---



State the name of the drill shown above.

---

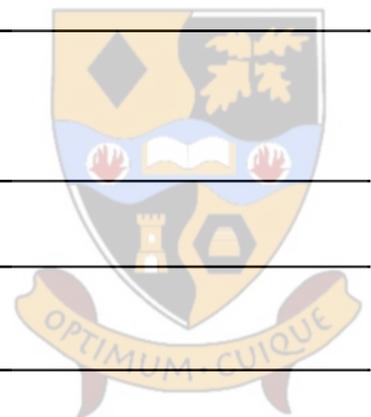
State a disadvantage of this drill.

---

---

What type of power does this drill require.

---



# Jigsaw



State the name of the tool shown above.

---

The purpose of this tool is \_\_\_\_\_

---

State an adjustment which could be made to this tool.

---

---

Describe a health and safety precaution you should observe using this machine.

---

---

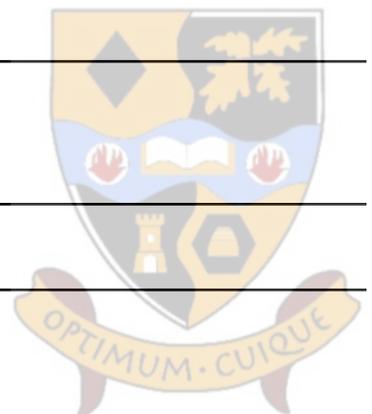
State an advantage of this machine.

---

---

What PPE is mandatory using this machine.

---



# Mortise Machine



State the name of the tool shown above.

---

The purpose of this tool is \_\_\_\_\_

---

Describe how you would set a depth of 35mm.

---

---

---

Describe how you could adjust this machine to cut an area 60mm x 15mm

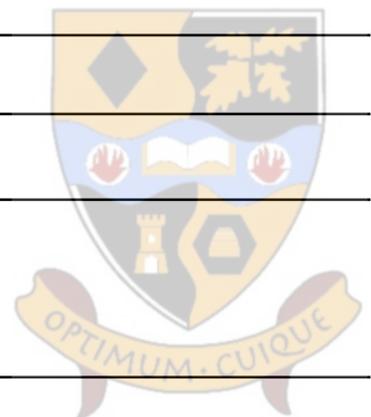
---

---

---

What PPE is mandatory using this machine.

---



# Sanding



State the name of the sander shown above.

---

The purpose of this tool is

---

---

State an adjustment which could be made to this tool.

---

---

---

Describe a health and safety precaution you should observe using this machine.

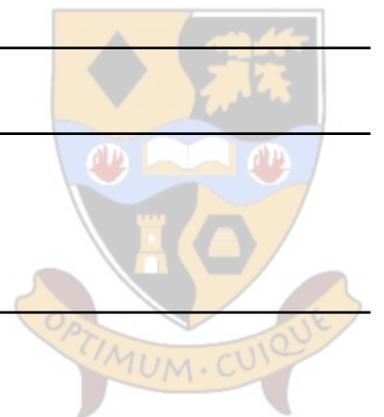
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---

What PPE is mandatory using this machine.

---





State the name of the sander shown above.

---

Describe a method of ensuring your material does not move when using this sander.

---

---

State an adjustment which could be made to this tool.

---

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---

Describe a health and safety precaution you should observe using this machine.

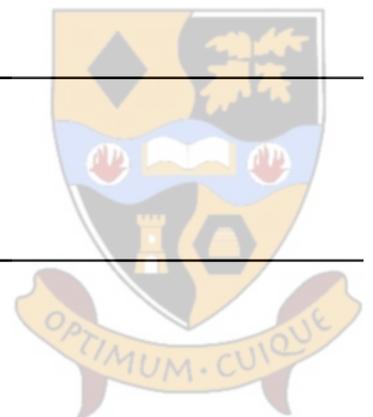
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---

What PPE is mandatory using this machine.

---



# Wood Lathe



State the name of the machine shown above.

---

The purpose of this machine is \_\_\_\_\_

---

What PPE is mandatory using this machine.

---

Identify the parts below.

## Word Bank

Tail stock

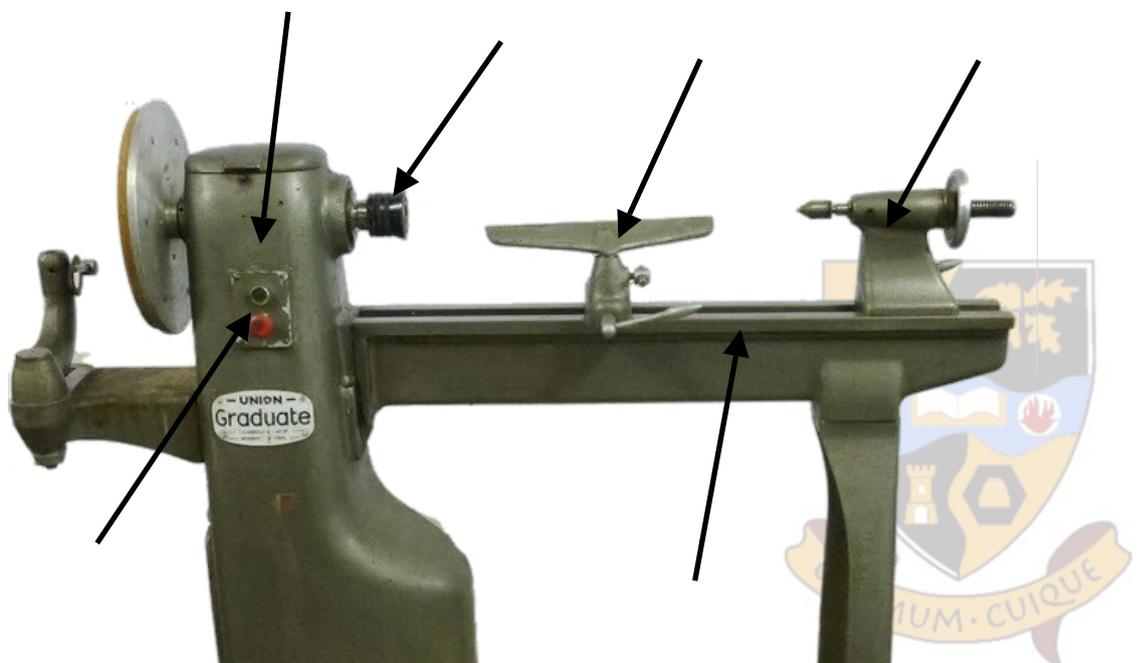
Tool Post

Power controls

Head Stock

Spindle

Bed



State **two** checks which need to be carried out prior to using this machine.

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State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

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State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

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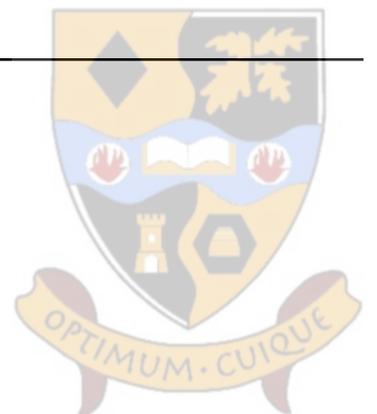


State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

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Types



State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

---

---



Types



State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

---

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State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

---

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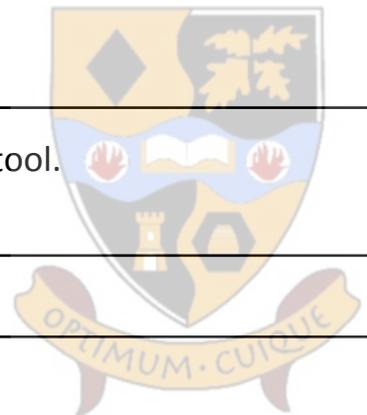


State the name of this tool. \_\_\_\_\_

Briefly describe the purpose of this tool.

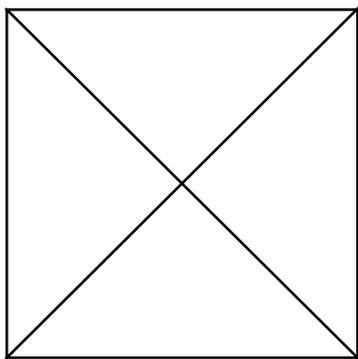
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# Prepping a Blank

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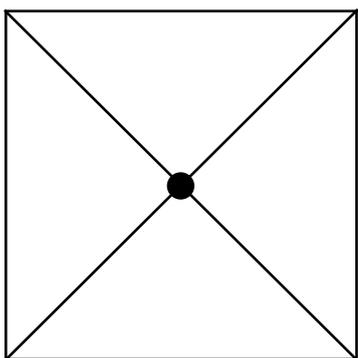


Stage 1

State the first step.

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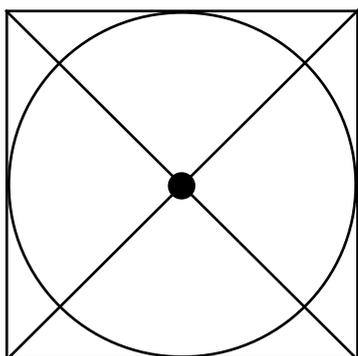


Stage 2

State the second step.

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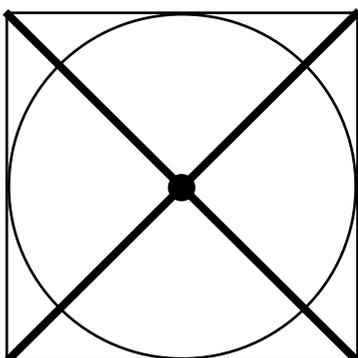


Stage 3

State the third step.

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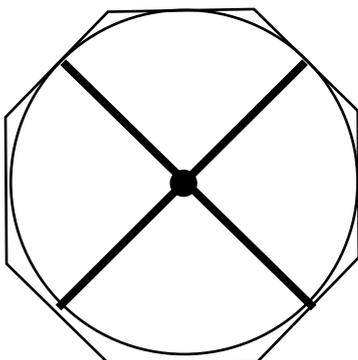


Stage 4

State the fourth step.

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Stage 5

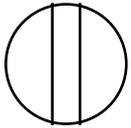
State the fifth step.

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# Screwdrivers



State the name of the tool above \_\_\_\_\_

Describe the purpose of the tool.

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Describe a disadvantage of this type of screwdriver.

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State the name of the tool above \_\_\_\_\_

Describe the purpose of the tool.

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Describe an advantage of this type of screwdriver.

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# Hammer

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State the name of the Hammer shown above \_\_\_\_\_

The purpose of this tool is \_\_\_\_\_

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Describe how you would use each side of this hammer.

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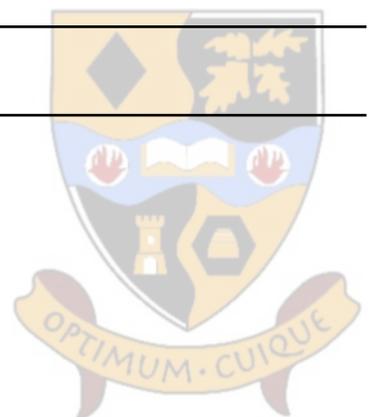
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State the name of the Hammer shown above \_\_\_\_\_

The purpose of this tool is \_\_\_\_\_

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---

Describe how you would use each side of this hammer.

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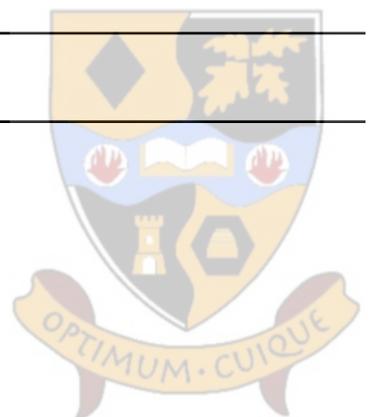
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State the name of the Mallet shown above \_\_\_\_\_

The purpose of this tool is \_\_\_\_\_

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Describe how you would use this mallet when cutting a wood joint.

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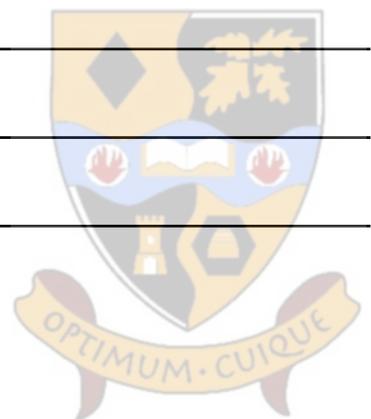
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State the name of the tool shown above \_\_\_\_\_

The purpose of this tool is \_\_\_\_\_

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Describe how you would use this tool.

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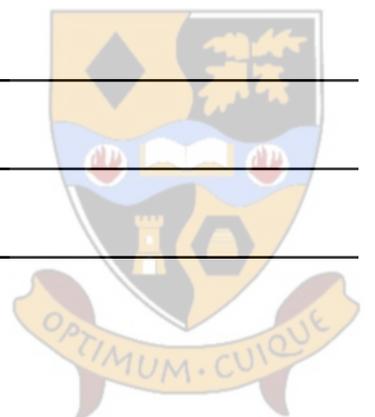
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# Nail Punch

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Shown below is a nail punch.



The purpose of this tool is \_\_\_\_\_

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Describe how you would use a nail punch. Include the names of any other tools used.

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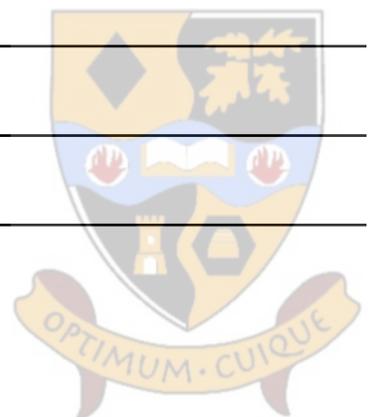
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# Fixings

Explain what is meant by the term fixing.

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Identify the type of nails shown below which can be used in the assembly of models.



Identify this type of nail \_\_\_\_\_

The purpose of this nail is \_\_\_\_\_

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Identify this type of nail \_\_\_\_\_

The purpose of this nail is \_\_\_\_\_

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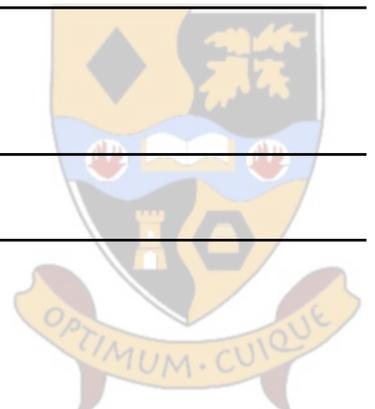
Identify this type of nail \_\_\_\_\_

The purpose of this nail is \_\_\_\_\_

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State whether nails are a permanent or temporary fixing.

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Identify the type of nails shown below which can be used in the assembly of models.



Identify this type of screw \_\_\_\_\_

The purpose of this screw is \_\_\_\_\_



Identify this type of screw \_\_\_\_\_

The purpose of this screw is \_\_\_\_\_

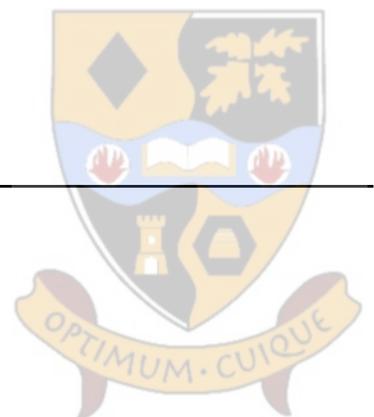


Identify this type of screw \_\_\_\_\_

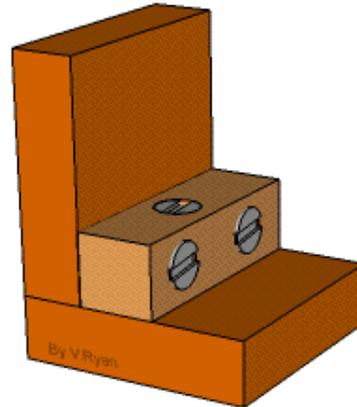
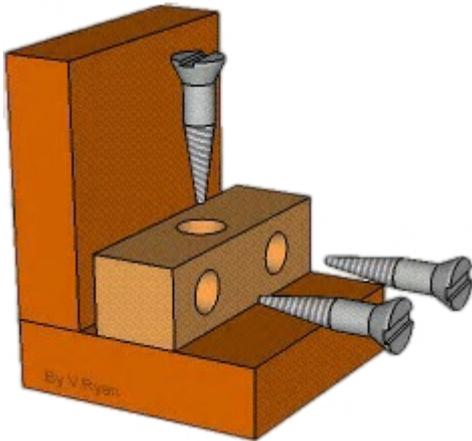
The purpose of this screw is \_\_\_\_\_

State whether screws are a permanent or temporary fixing.

\_\_\_\_\_

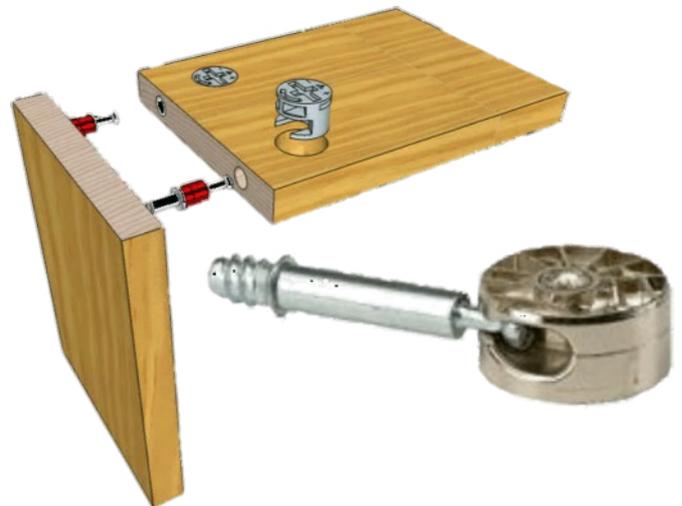
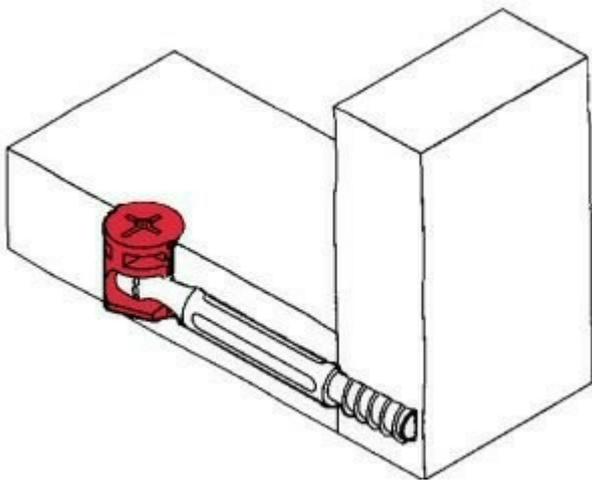


Identify the type of fixings shown below which can be used in the assembly of models.



State the name of the fixing shown above.

---



State the name of the fixing shown above.

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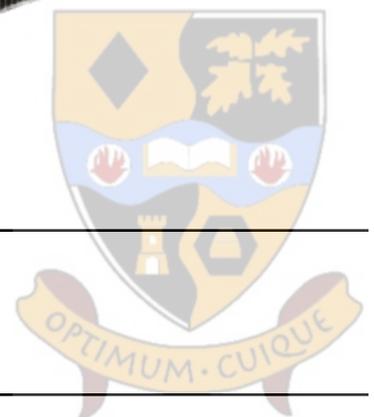


State the name of the fixing shown above.

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State whether these fixings are a permanent or temporary fixing.

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State the type of fixings these three are commonly known as.

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Explain two advantages of using this type of fixing over traditional wood joints.

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# Cramping

A range of tools are when assembling your model together.



State the name of the tool above \_\_\_\_\_

State an adjustment which could be made to this tool.

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Describe what is meant by the term square

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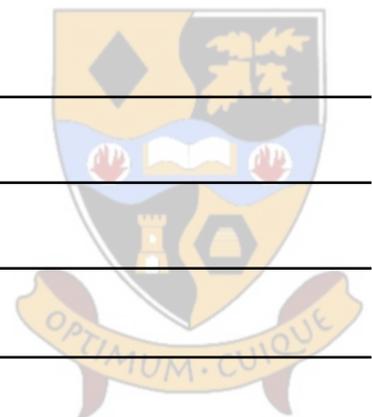
Describe **two** ways to check your model is square

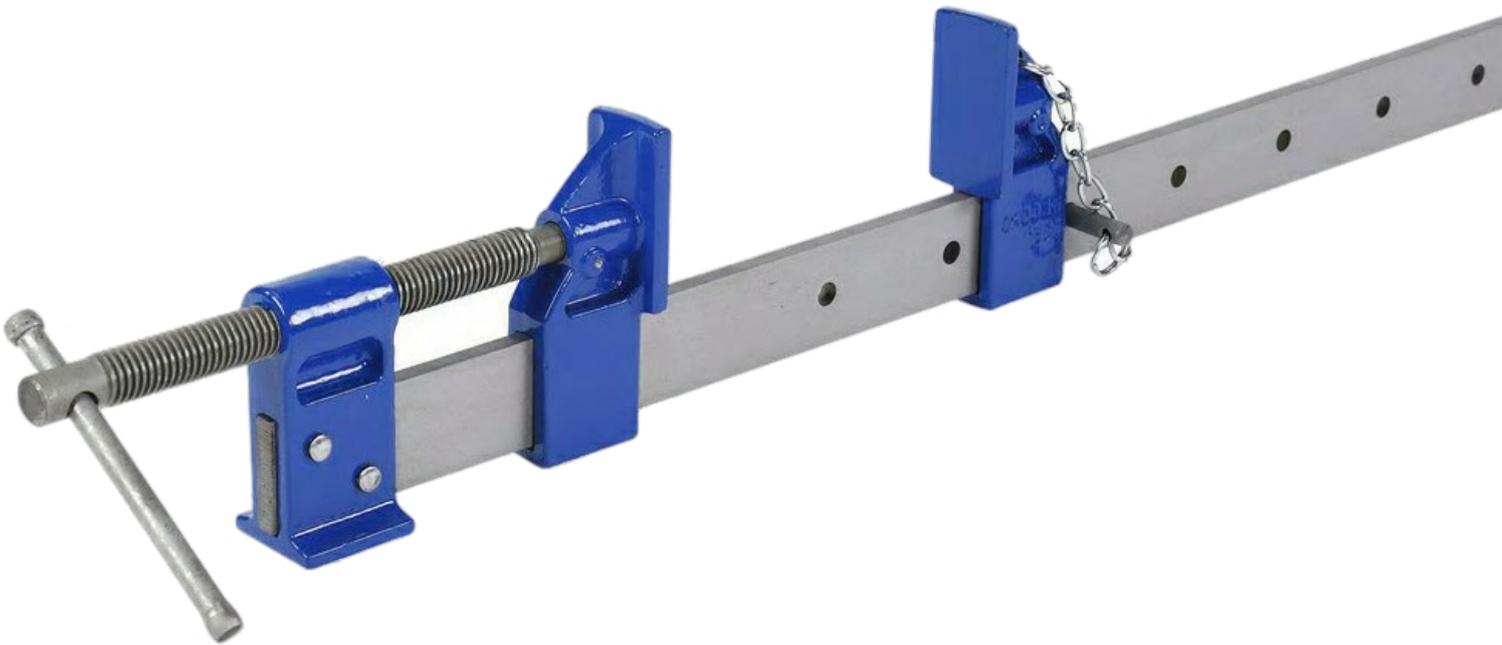
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State the name of the tool above \_\_\_\_\_

Describe **two** adjustments which could be made to this tool.

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Describe why you would never clamp directly onto your material.

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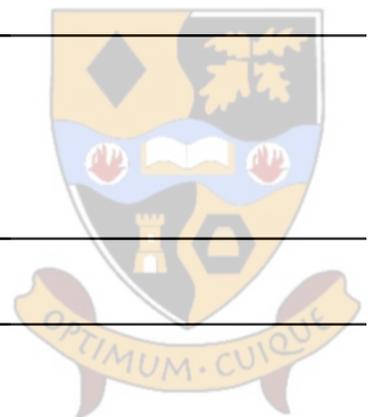
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Describe what is meant by a dry fit.

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# Adhesive



State the name of the type of adhesive used in the workshop.

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Describe an advantage of using this type of adhesive.

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When gluing models, describe how to remove excess glue.

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Describe why it is important to remove excess glue.

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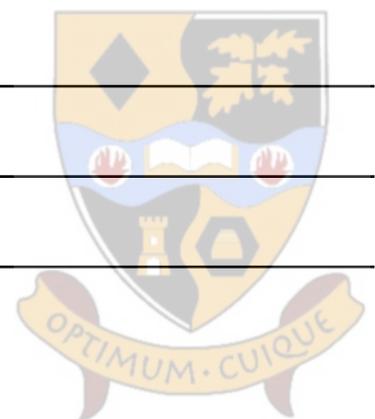
Explain why there could be an issue with gluing, if a product were to be used outside.

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# Finishing Technique

You will need to identify the correct order for finishing wood and fill in the table below.

- Apply wax using clean dry cloth
- Raise the grain and repeat
- Sand with smooth sandpaper
- Sand with rough sandpaper

	Step
1	
2	
3	
4	



Sandpaper Grades

Explain what the number grades on the back of sandpaper tell you.

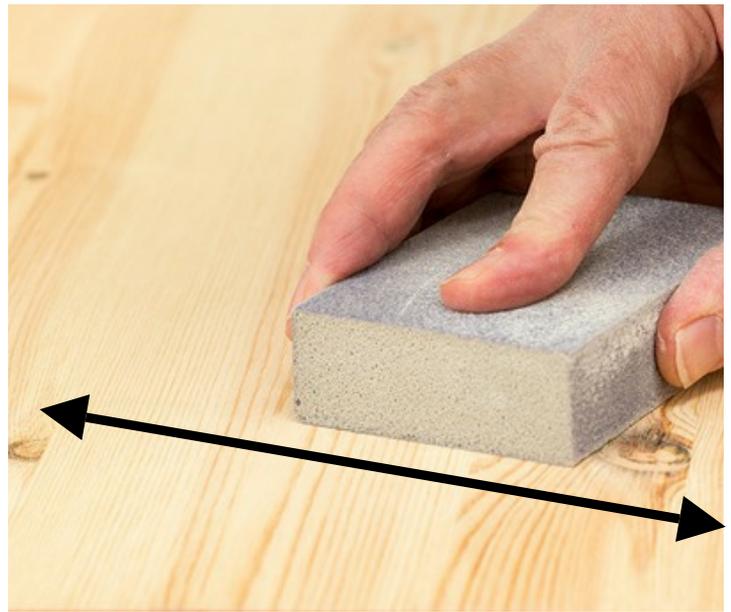


When sanding wood, which direction should you follow.

(Circle your answer)



With the grain lines



Across the grain lines

Explain why you should follow this direction.

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What is the name of the block used to wrap sandpaper around.

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# Wood Finishes

Explain the purpose of using a finish on wood.

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Explain what would happen if coffee was to be spilt on a table which had no finish.

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## Types of finish available

- Water Based Varnish
- Spirit Based Varnish
- Wax Polish
- Coloured Wax Polish
- Danish Oil
- Coloured Stains
- Paints
- Linseed Oil
- Vegetable Oil



Describe the process of preparing wood for a finish.

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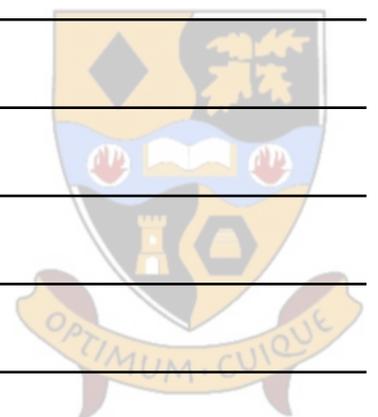
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Explain why you need to remove all pencil marks and blemishes prior to applying a finish.

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Explain how you would apply a wax finish to a model.

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State the name of a finish which would allow you to see the natural grain of the wood.

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State the name of a finish which would allow you to change the colour of the wood.

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If the product was to be used outside, name a check you would need to make with the finish.

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