



*Junior Certificate Examination 2010*

***Materials Technology (Wood)***  
***Ordinary Level***  
***Section A (40 Marks)***

***Monday 21 June***  
***Afternoon, 2.00 to 4.00***

***Instructions***

- (a) Answer any **sixteen** questions.
- (b) All questions carry equal marks.
- (c) Answer the questions in the spaces provided.
- (d) This booklet **must** be handed up at the end of the examination.
- (e) Write your examination number in the box provided and on all other pages used.

***Examination Number:***

Centre Number	
Section A	
1	
2	
3	
4(a) or (b)	
5	
<b>Total</b>	

## SECTION A - 40 MARKS

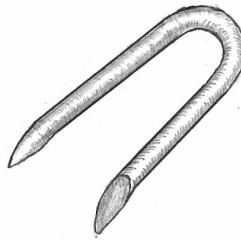
Answer any 16 questions from this section. All questions carry equal marks.

1. From the list given, identify the nails shown.

**A**



**B**



**Round Wire Nail**

**Staple**

**Clout Head Nail**

**Corrugated Fastener**

**Panel Pin**

**NAIL A**

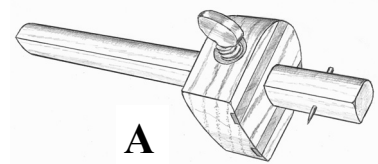
**NAIL B**

2. Name the tool labelled **A** in the diagram and give its use.

**NAME**

**USE**



**A**

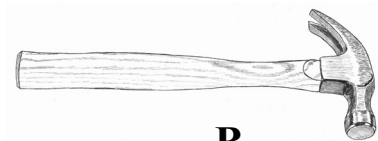
**OR**

Name the tool labelled **B** in the diagram and give its use.

**NAME**

**USE**

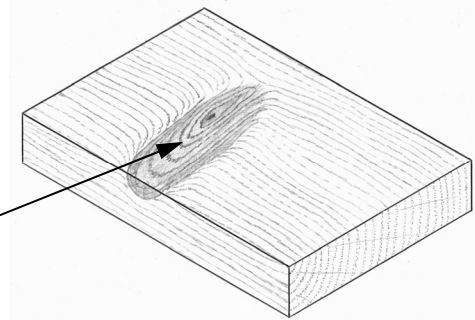
  



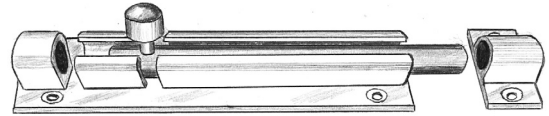
**B**

3. Name the grain feature shown at **A**.

**A**



4. Name the fitting shown and give its correct use.

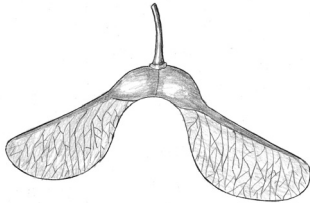


NAME

USE

5. State from which trees in the list these **seeds** come.

A



B

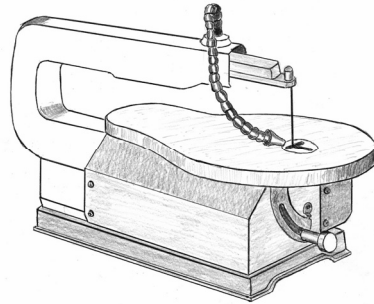


- Pine
- Oak
- Sycamore
- Ash
- Holly

TREE A

TREE B

6. Name the power tool shown in the diagram.



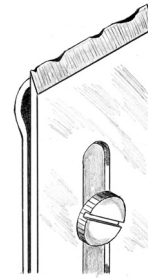
NAME

7. List **two** safety precautions that should be observed when carrying a chisel across a room.

1.

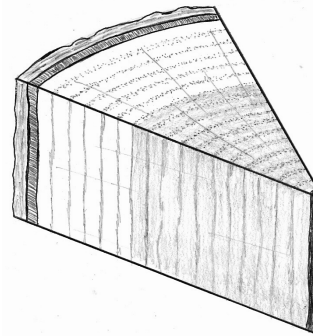
2.

8. How could a plane blade get damaged as shown in the sketch?



ANSWER

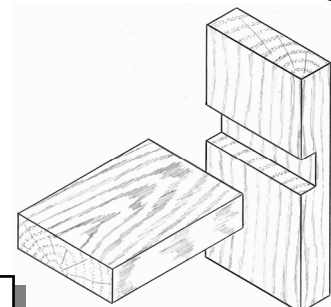

9. The diagram shows part of the cross section of a tree.  
Show, using an arrow, where the pith is.



10. Saws can be divided into two categories, saws for straight cuts and saws for cutting curves. Show by means of a tick (✓) into which group each of the following curves saws fit.

	Straight cuts	Curved cuts
<b>Coping Saw</b>		
<b>Dovetail Saw</b>		
<b>Compass Saw</b>		
<b>Scroll Saw</b>		
<b>Tenon Saw</b>		

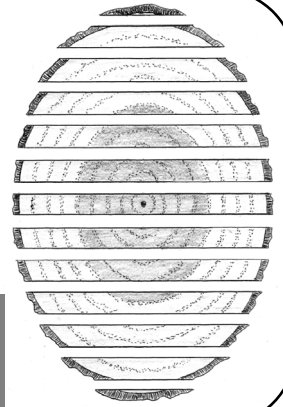
11. Name the joint shown.



NAME

--

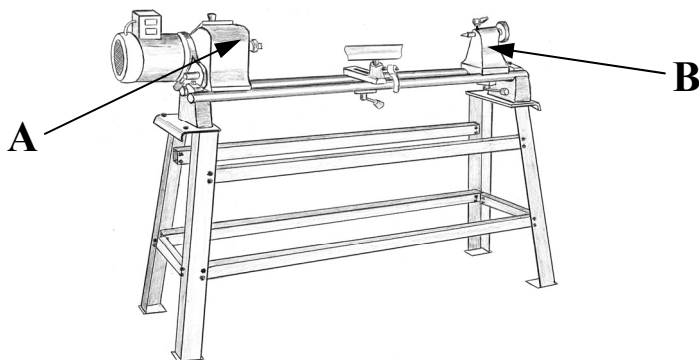
12. Why is **through and through** sawing the most popular method, in Ireland, of converting logs into planks?



ANSWER


13. From the list given, name the lathe parts shown at **A** and **B**.

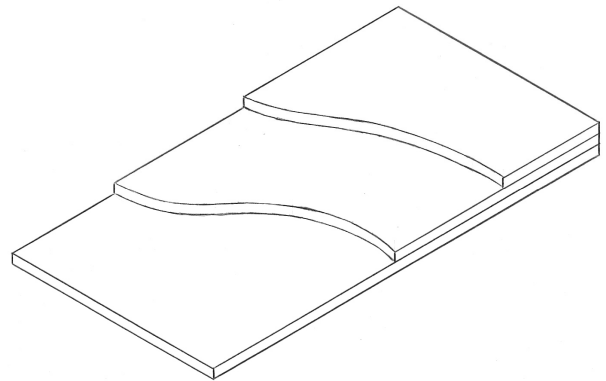


- Toolrest
- Headstock
- Tailstock
- Bed
- Faceplate

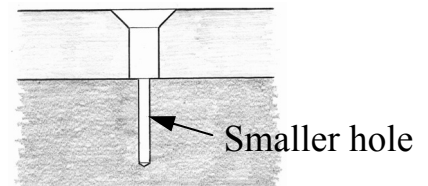
**A**

**B**

14. Three veneers of wood are to be glued together to form a sheet of plywood.  
Show by using arrows the direction the grain should go in each layer.

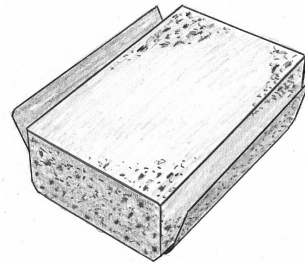


15. When joining wood using screws it is common to drill a large hole through the top piece and a smaller one in the second.  
What is the correct name for the smaller hole?



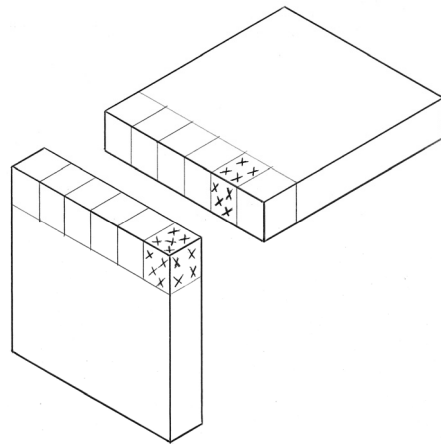
ANSWER

16. Why is **cork** a good material for making sanding blocks?



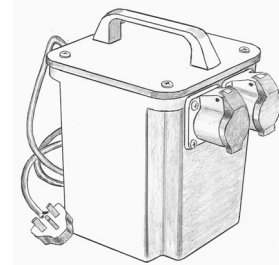
ANSWER

17. Complete the marking out of the waste on the **Finger Joint** shown.



18. When using power tools it is safer to use the type that plug into a transformer rather than those that plug directly into a mains socket.

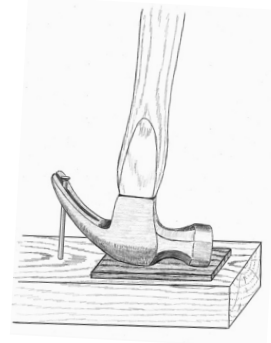
Why is this?



ANSWER

19. When pulling a nail, using a claw hammer, a piece of waste wood should be placed under the hammer head.

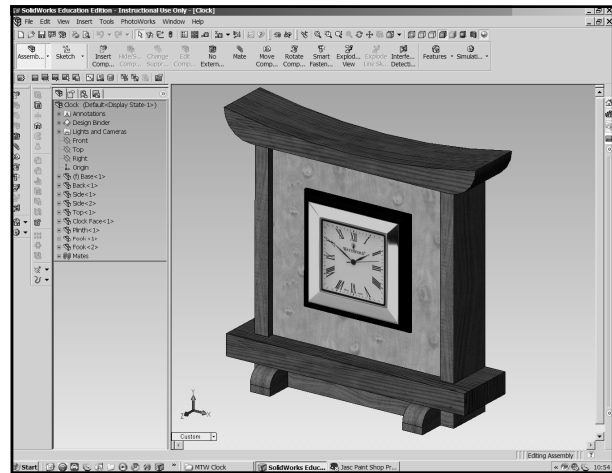
Give a reason for this.



ANSWER

20. CAD is often used by students to design their MTW projects.

Give one advantage of using CAD for this purpose.



**ADVANTAGE**


**This booklet must be handed up at the end of the examination.**

**BLANK PAGE**