



Turnbull High School  
Technical Department

# **National 5 Practical Woodwork Homework Booklet 1**

**Name:**

**Class:**

**Teacher:**

1. Tick (✓) the correct answer.

(a) Which man-made board is shiny on one side and textured (rough) on the other?

Blockboard

Chipboard

Plywood

Hardboard

1

(b) Which material is made from mixing glue with very small pieces of wood?

Acrylic

Chipboard

Plastic Laminate

Plywood

1

2. Tick (✓) the correct answer.

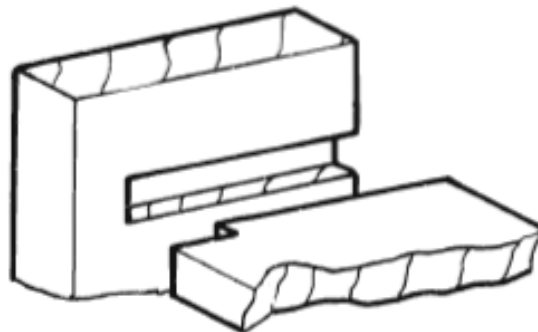
(a) This woodwork joint is called a:

Stopped halving

Stopped housing

Stopped mortise

Stopped rebate



1

Tick (✓) the correct answer.

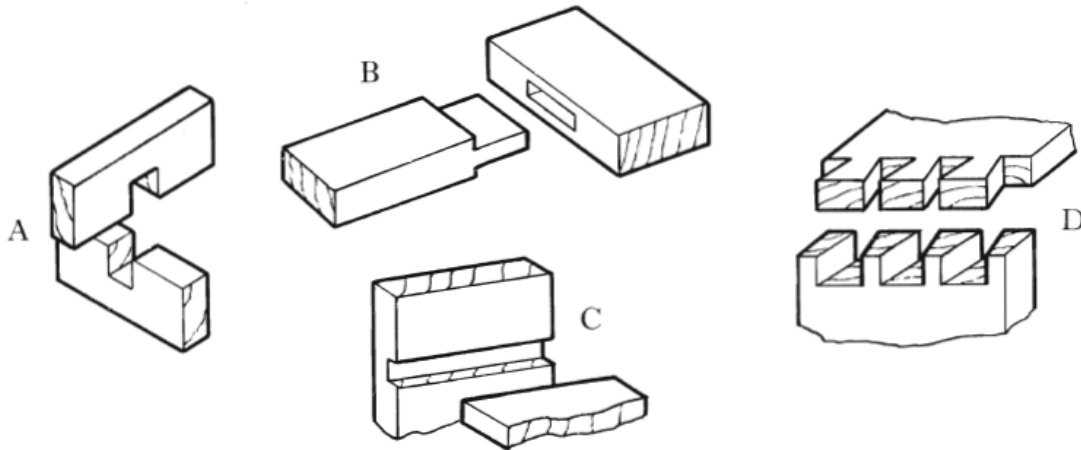
(b) The process used to make this wooden handle is called:

- Forming
- Shaping
- Turning
- Twisting



1

3. Four woodwork joints are shown:



(a) Which joint would be most likely to be used to join a rail to a leg of a table?

\_\_\_\_\_

1

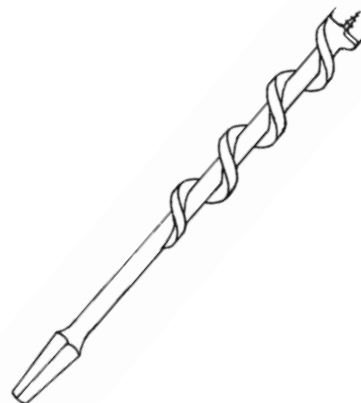
(b) Which joint would be most likely to be used to join a shelf to a side of a cabinet?

\_\_\_\_\_

1

4. Tick (✓) the correct use for each tool.

- (a)
- Boring holes in metal
  - Boring holes in wood
  - Countersinking screw holes
  - Cutting threads in metal.

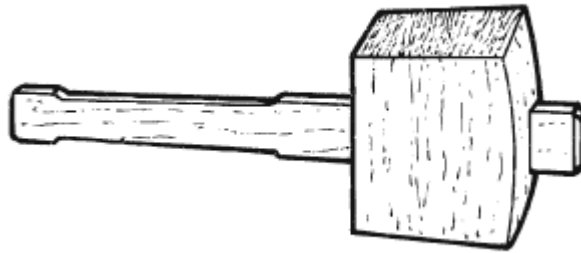


1

Tick (✓) the correct use for each tool.

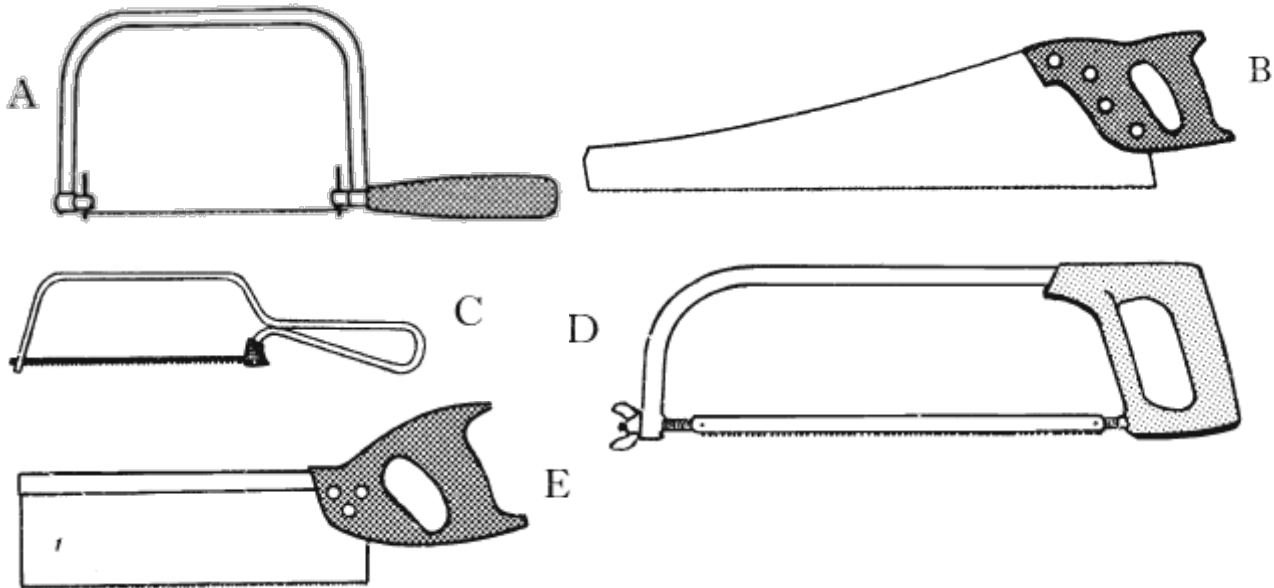
(b)

- Bending a piece of acrylic
- Hammering in nails
- Forging a piece of metal
- Driving a chisel into wood



1

5. Five saws are shown below.



(a) Which saw would be used to cut a large sheet of thick plywood?

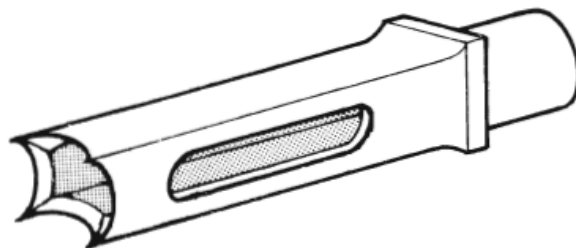
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1

6. Tick (✓) the correct answer.

(a) This is used in a:

- Milling machine
- Mortise machine
- Shaping machine
- Shearing machine

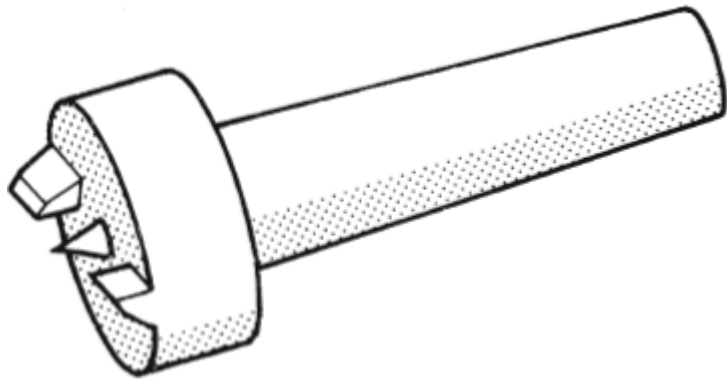


1

Tick (✓) the correct use for each tool.

(b) This is used in a:

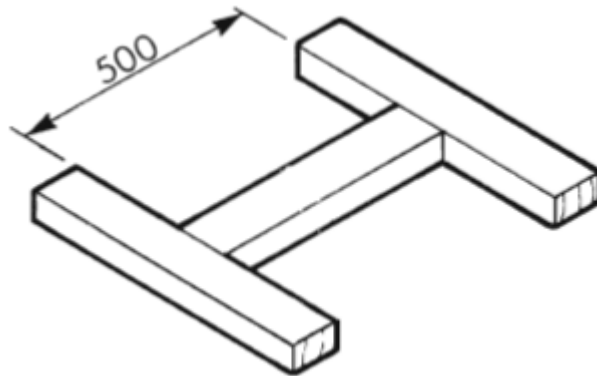
- Drilling machine
- Sanding machine
- Metal lathe
- Wood lathe



1

(c) The frame shown has just been glued. What should be used to hold it in position until the glue sets?

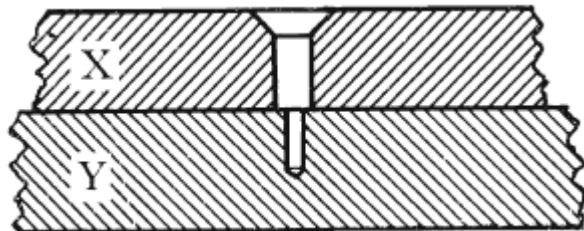
- A hand clamp
- A 'G' clamp
- A sash cramp
- A mitre cramp



1

7. Two pieces of wood, X and Y, have to be held together with a screw. The various stages are listed below in the WRONG order.

- A Countersink the hole in X
- B Drill pilot hole in both pieces
- C Put in screw
- D Mark position of screw hole
- E Drill clearance hole in X



List the stages in the CORRECT order in the boxes below.

Stage 1

Stage 2

Stage 3

Stage 4

Stage 5

5

8. Part of a cutting list is shown below.

| 1           | 2               | 3                      | 4 | 5 | 6 |
|-------------|-----------------|------------------------|---|---|---|
| <i>Part</i> | <i>Material</i> | <i>Number required</i> |   |   |   |
|             |                 |                        |   |   |   |
|             |                 |                        |   |   |   |
|             |                 |                        |   |   |   |
|             |                 |                        |   |   |   |

Headings have still to be put into columns 4, 5 and 6.

What heading should be printed in:

Column 4 \_\_\_\_\_

Column 5 \_\_\_\_\_

Column 6 \_\_\_\_\_

3

9. Give **two** reasons why a workshop should be kept as tidy as possible when working

Reason 1 \_\_\_\_\_

\_\_\_\_\_

Reason 2 \_\_\_\_\_

\_\_\_\_\_

2

10. Write down **three** safety rules which should be obeyed when using the **drilling machine**.

Rule 1 \_\_\_\_\_

\_\_\_\_\_

Rule 2 \_\_\_\_\_

\_\_\_\_\_

Rule 3 \_\_\_\_\_

\_\_\_\_\_

3

1. Tick (✓) the correct answer.

(a) Which of the following is a softwood?

- Teak
- Pine
- Balsawood
- Mahogany

1

(b) Which of the following is most commonly found at the bottom of a drawer?

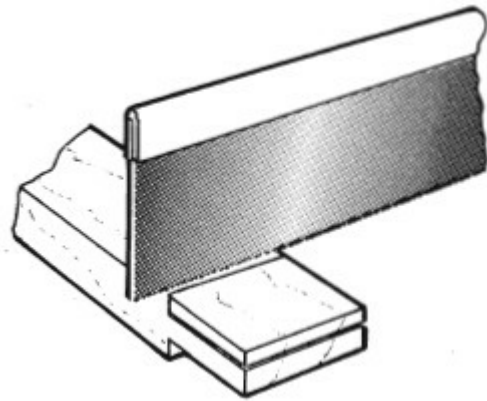
- MDF
- Chipboard
- Plywood
- Pine

1

2. Tick (✓) the correct answer.

(a) This illustration shows a:

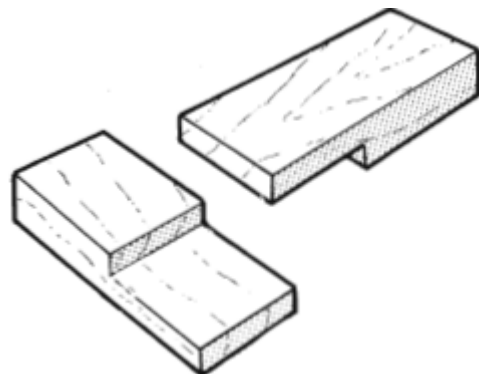
- Mortise being cut
- Tenon being cut
- Dovetail being cut
- Mitre being cut



1

(b) The woodwork joint shown is a:

- Through housing joint
- Rebate joint
- Halving joint
- Mitre joint



1

3. Tick (✓) the correct answer.

(a) The most suitable finish for a wooden salad bowl is:

- Varnish
- Gloss paint
- Vegetable oil
- Plastic dip coating

1

(b) The suitable finish for an exterior mahogany door is:

- Polyurethane varnish
- Creosote
- Wax
- Polish

1

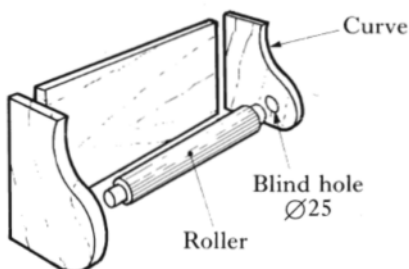
4. Name **two** stages of preparation that should be completed before applying varnish to a wooden table top.

Stage 1 \_\_\_\_\_  
 \_\_\_\_\_

2

Stage 2 \_\_\_\_\_  
 \_\_\_\_\_

5. An exploded view of a towel rail is shown:



- List of Tools*
- tenon saw
  - coping saw
  - bevel edge chisel
  - wood turning tool
  - smoothing plane
  - twist drill
  - forstner bit
  - countersink bit

Chose the correct tool from the list above and write it in the space provided.

(a) Which tool should be used to cut the hole? \_\_\_\_\_

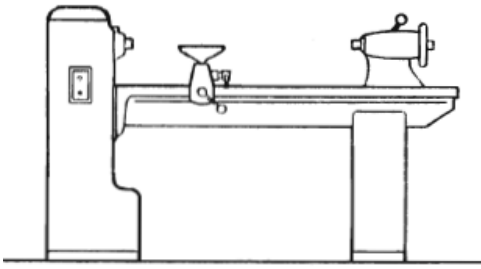
(b) Which tool should be used to cut the curve? \_\_\_\_\_

(c) Which tool should be used to make the roller? \_\_\_\_\_

3



6. Give the name and **one** common use for each machine:



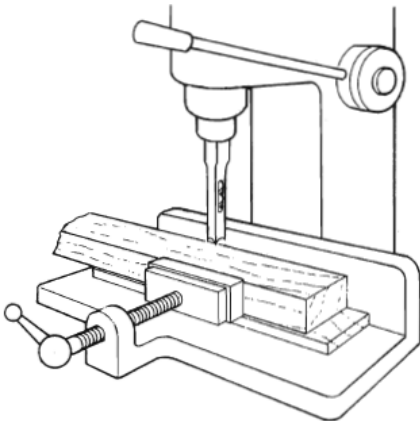
Name \_\_\_\_\_

Use \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2



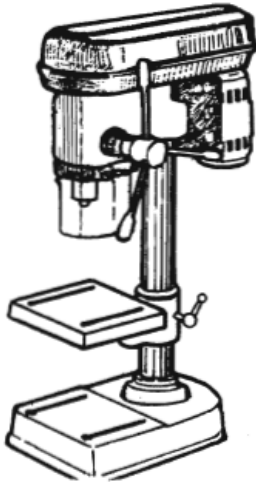
Name \_\_\_\_\_

Use \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2



Name \_\_\_\_\_

Use \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2

7. Five of the construction stages in making a housing joint are shown below in the **wrong** order.

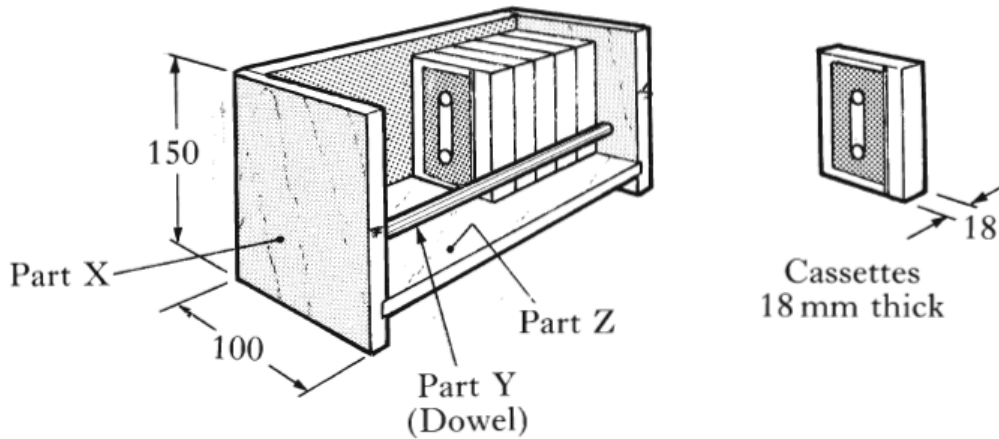
- A Cut out and fit the housing joint
- B Apply glue to the housing joint
- C Mark out the housing joint
- D Assemble
- E Test for square

(a) Which step should be done first? \_\_\_\_\_

(b) Which step should be done last? \_\_\_\_\_

2

8. The cassette rack shown is to be made from pine, 12mm thick. The shelf will be housed to a depth of 4mm. The cassettes will be stored in the position shown.



(a) If the rack is to hold 10 cassettes, what is the minimum length of part Z?

\_\_\_\_\_

1

(b) Complete the cutting list shown below by entering the correct numbers into the dark squares.

| <i>Part</i> | <i>No. Required</i> | <i>Material</i> | <i>Length</i> | <i>Breadth</i> | <i>Thickness</i> |
|-------------|---------------------|-----------------|---------------|----------------|------------------|
| X           | 2                   | Pine            |               |                | 12               |
| Y           |                     | Dowel rod       |               |                |                  |

3

9. Write down **two** safety rules which should be observed whilst using a **chisel**.

Rule 1 \_\_\_\_\_

\_\_\_\_\_

Rule 2 \_\_\_\_\_

\_\_\_\_\_

2

1. Tick (✓) the correct answer

(a) Which of the following is **not** man made?

- Acrylic
- Chipboard
- Aluminium
- Scots Pine

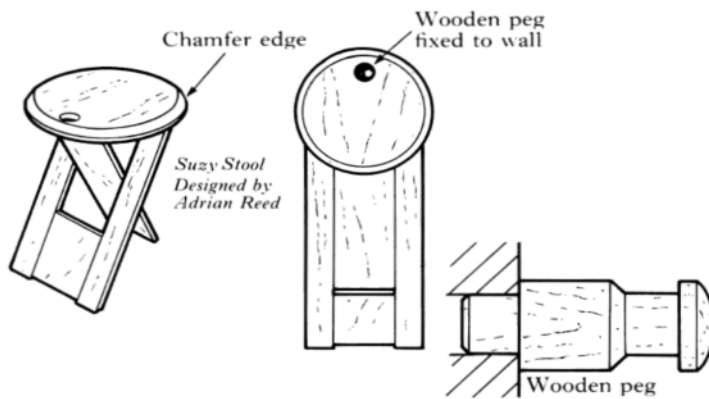
1

(b) Ash, beech and mahogany are all

- Dark brown in colour
- Softwoods
- Hardwoods
- Man made boards

1

2. Some sketches of a stool and peg are shown below:



| Tools  | Materials                 | Processes |
|--------|---------------------------|-----------|
| File   | Beech veneered blockboard | Carving   |
| Plane  | Solid beech               | Turning   |
| Router | Beech veneered chipboard  | Sanding   |
| Sander | Hardboard                 | Filing    |

Choose the correct answers from the table.

(a) Name the **process** used to make the wooden peg. \_\_\_\_\_

(b) Name the **tool** used to chamfer the seat of the stool. \_\_\_\_\_

(c) Name a suitable **material** for the seat of the stool. \_\_\_\_\_

3

3. Give **one** reason why excess glue is removed before varnish is applied.

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4. Six types of finish are listed below:

**Lead free paint**

**Wax**

**Varnish**

**Emulsion paint**

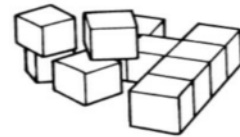
**Vegetable oil**

**Creosote**

Which finish should be used to:

(a) Add colour to wooden toy building blocks?

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(b) Seal a wooden salad bowl?

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(c) Protect and exterior wooden door?

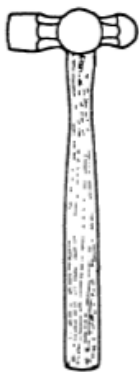
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3

5. Tick (✓) the correct use for each tool.

(a)



This tool is used for:

Riveting

Hammering panel pins into wood

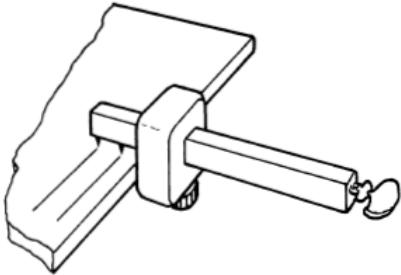
Driving a chisel into wood

Countersinking screw holes

1

5. Tick (✓) the correct use for each tool.

(b)



This tool is used for:

Marking out a housing joint

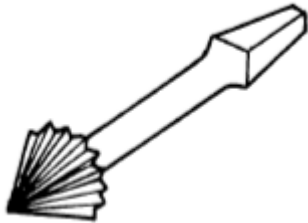
Measuring the outer diameter of a cylinder

Marking out a mortise

Gauging the thickness of wood

1

(c)



This tool is used for:

Supporting the end of wood on a lathe

Countersinking a hole

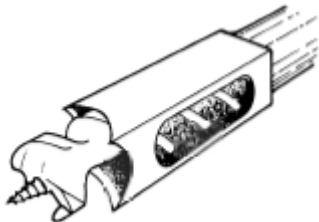
Knurling metal

Drilling holes

1

6. To which machine does each of the following pieces of equipment belong?

(a)

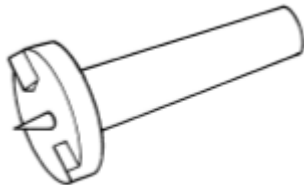


Name of machine:

\_\_\_\_\_

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(b)

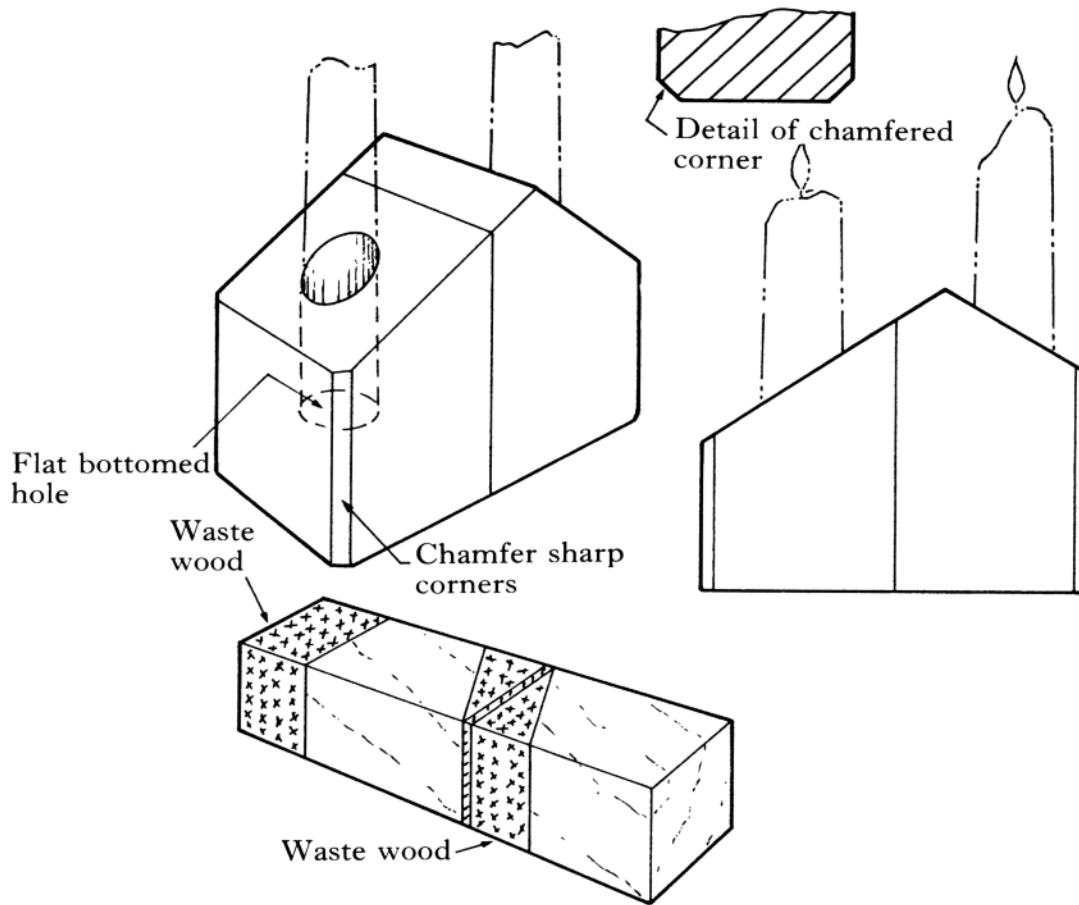


Name of machine:

\_\_\_\_\_

1

7. Some sketches and notes from a pupil's design for a simple candle holder are shown below:



(a) Answer the questions below by choosing the correct tool from the list:

Which tool should be used to:

(i) drill the flat bottomed holes?

\_\_\_\_\_

(ii) chamfer the corners of the wood?

\_\_\_\_\_

(iii) remove the waste wood from the end?

\_\_\_\_\_

**Tools list**

- Twist drill 1
- Forstner drill
- Coping saw
- Cross cut saw
- Smoothing plane 1
- Chisel
- Mortise drill
- Tenon saw 1

(b) Describe one method of holding the wood while the flat bottomed holes are being drilled.

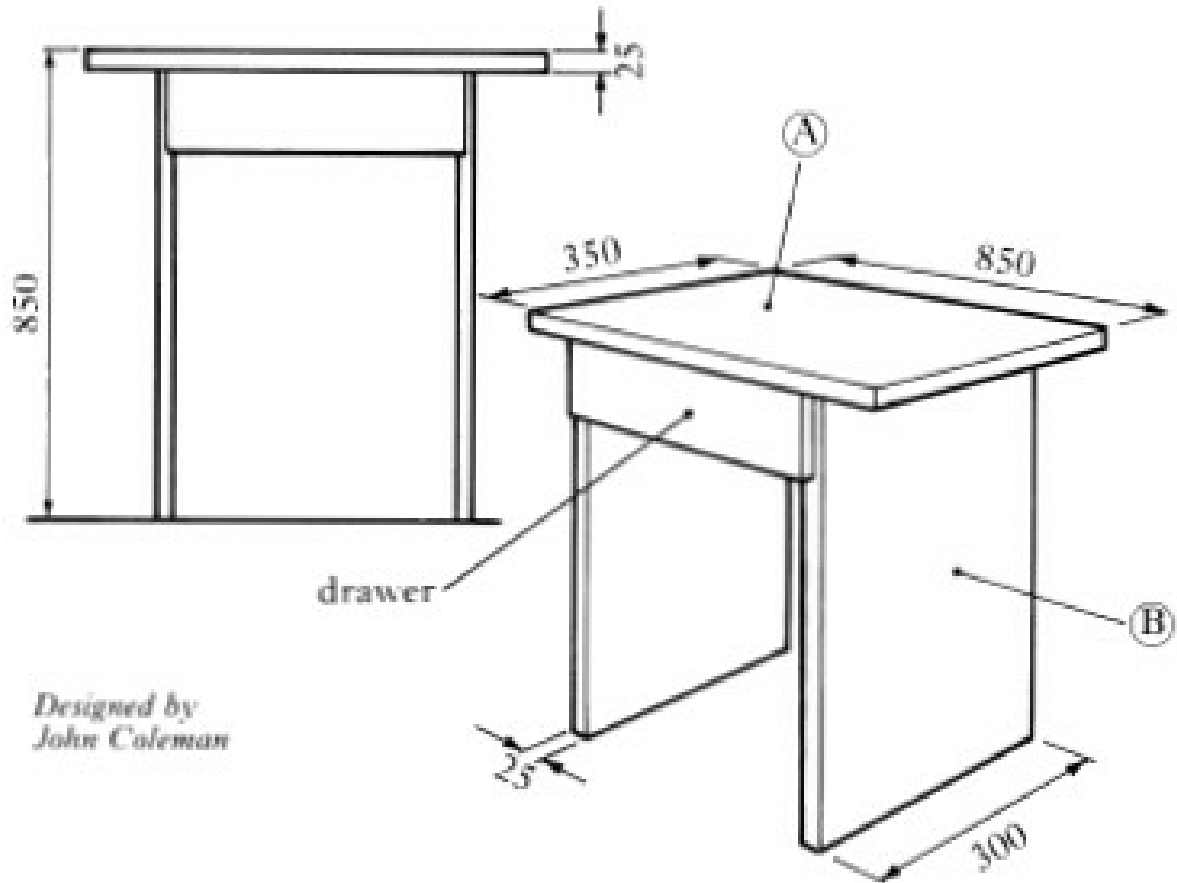
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

1

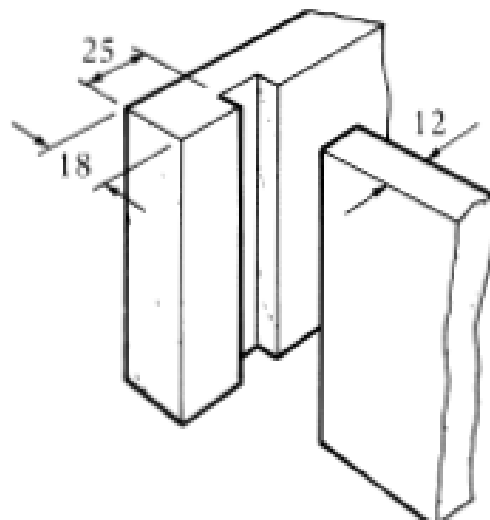
8. The drawings of a design for a table are shown below:



(a) Complete the cutting lists for Parts A and B. (Fill in the blank boxes).

| Part | No. off | Length | Breadth | Thickness | Material |
|------|---------|--------|---------|-----------|----------|
| A    | 1       |        | 350     | 25        | Sycamore |
| B    | 2       |        | 300     |           | Sycamore |

(b) An exploded view of the housing joint to be used for the front of the drawer is shown below:



8. (b) *Continued*

Write a brief description of how to mark out the housing. Use the dimensions on the sketch to help. Sketches may be used to illustrate your answer (use the space at the bottom for sketches.)

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1. Tick (✓) the correct answer

Which of the following materials is man made?

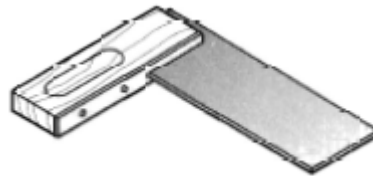
- Plywood
- Pine
- Mahogany
- Beech

1

2. Tick (✓) the correct answer

The tool shown is called:

- Try square
- Engineer's square
- Set square
- Tee Square



1

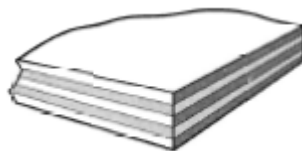
3. From the options given, write the correct name for the type of man made board shown.

*Veneered chipboard*

*Plywood*

*Blockboard*

*Hardboard*



\_\_\_\_\_

\_\_\_\_\_

2

4. (a) In the space below, sketch a 'cork-block' that is used with sandpaper.

1

(b) Explain why a cork-block should be used.

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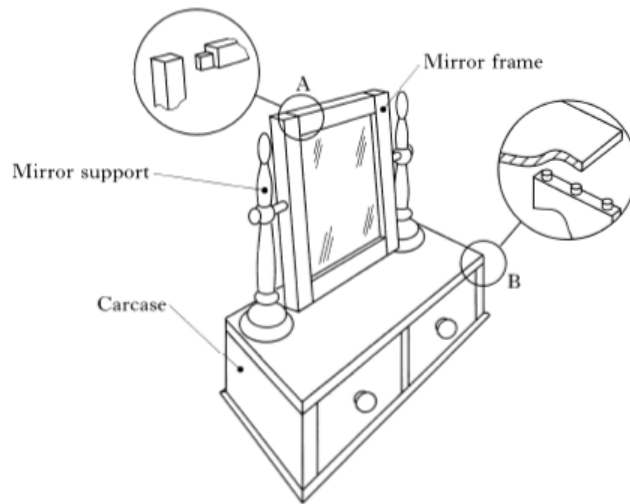
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1

5. A sketch of a mirror and drawer unit is shown below.



(a) From the list of processes, write down which one would allow you to make the mirror supports.

- Filing*      *Turning*      *Casting*      *Sawing*

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1

(b) From the list of joints below:

- Dowel*      *Lap*      *Mortise and Tenon*      *Butt*      *Housing*

(i) Name the frame joint shown at **A**

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(ii) Name the carcass joint shown at **B**

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2

6. A list of different types of finish is below:

*Creosote      Wax      Lead-free paint      Vegetable oil      Clear varnish*

(a) Which finish would be best for a wooden toy train if it is to be coloured green?



\_\_\_\_\_

1

(b) Which finish would be best for a turned wooden salad bowl?



\_\_\_\_\_

1

(c) Which finish would be best to protect and show the natural beauty of a wooden coffee table?



\_\_\_\_\_

1

7. State the **name** of the machine tool shown and give **one use** for it.

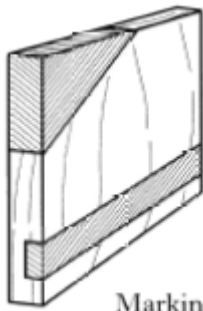


Name: \_\_\_\_\_ sander

Use: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2

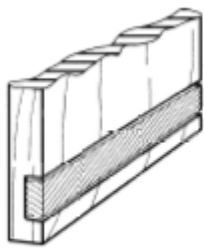
8. The end support for a book rack is shown below along with a list of tools.



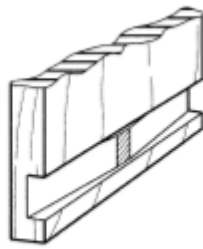
Marking out

### Tool list

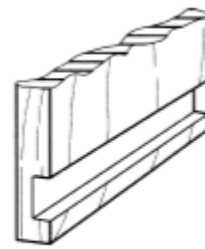
- Coping saw
- Router plane
- Compass
- Jack plane
- Bevel edged chisel
- Tenon saw
- Try square



(i) Cutting sides



(ii) Removing waste



(iii) Finishing

(a) For cutting out the joint, which of the tools from the list above would you use to:

(i) cut the sides of the joint?

\_\_\_\_\_

1

(ii) remove most of the waste from the joint?

\_\_\_\_\_

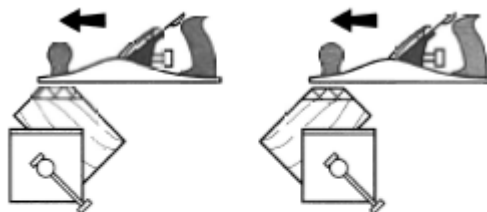
1

(iii) flatten the bottom of the joint to the correct depth?

\_\_\_\_\_

1

(b) The corner has to be removed with great care so the wood does not split.



1

Tick the box which shows the correct method of planing a corner.

9. Goggles are common items of safety equipment. For each of the following situations, write down **one different** safety rule you must observe, that **does not include goggles**.

(a) Cutting with a chisel

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1

(b) When turning wood on the wood lathe

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1

(c) When using the pillar drill

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1