

2

1. (continued)

(d) The sash cramp shown below was used during the manufacture of the stools.

State two adjustments that could be made to this tool.

Adjustment 1 _____

Adjustment 2

(e) A stool frame is shown below.



State two methods of ensuring the frame is "square"

1._____

2._____



(C)			MARG
(-)	(con	itinued)	
	(ii)	Plywood is a manufactured board.	
		Describe how plywood is constructed to give it strength. Sketches may be used.	
			1
(d)	The State	circular work surface was cut out using a machine saw. e the name of a suitable machine saw.	
			1
(e)	Knoo State	ck down fittings were used in the assembly of the desk. e one advantage of using knock down fittings over traditional joints.	
			1
(<i>f</i>)	Two State	colours of paint were used in the finishing of the desk. a method that would prevent the colours from running together.	
(f)	Two State	colours of paint were used in the finishing of the desk.	1
(f)	Two State	colours of paint were used in the finishing of the desk.	1
(<i>f</i>)	Two State	colours of paint were used in the finishing of the desk.	1
(<i>f</i>)	Two State	colours of paint were used in the finishing of the desk.	1
(<i>f</i>)	Two State	colours of paint were used in the finishing of the desk.	1
(<i>f</i>)	Two State	colours of paint were used in the finishing of the desk.	1
(f)	Two State	colours of paint were used in the finishing of the desk.	1
(f)	Two State	colours of paint were used in the finishing of the desk.	1

3. A wooden kitchen utensil is shown below. (a) The utensil was manufactured on the machine shown 旧口 Revolving centre 60 Dead (i) State **one** advantage of using a revolving centre instead of a dead 1 (ii) State the name of the tool used to turn the blank into a cylinder. 1 (iii) State the name of the tool used to check the diameters when 1 (b) The utensil was sanded before removal from the wood lathe. State two adjustments that should be carried out on the lathe before sanding. 1_____ 2 2 (c) Vegetable oil was applied as a finish to the utensil. State a reason why vegetable oil was chosen as the finish. 1





DO NOT WRITE IN THIS MARGIN A storage rack for garden tools is shown 5. Fork (a) State the fault with this method of storing tools. 1 (b) The following joints were researched during the design of the storage Joint X Joint Y Joint Z State the name of each joint Joint X 3 Joint Y Joint Z

		DO NOT WRITE IN THIS MARGIN
5.	(continued)	
	(c) The tool shown below was used in the manufacture of the storage rack.	
	(i) Name of tool	1 0
	(ii) Use of tool	1 0

(a) The following factors were considered when designing the toy train. Manufacture Cost Safety Colour **Environment** Select from the list above: 1 the factor which ensures no sharp edges;_____ the factor which makes the train look good. 2 (b) Part of the train was manufactured using the machine shown below. А С |00|В (i) State the name of this machine. (ii) Name the parts shown at A , B and C using the list below.

Tool rest Driving fork Headstock Tailstock Revolving centre

6. A toy train is shown below.

А

В

С

2

3

1

2

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MARGIN





		DO NOT WRITE IN THIS MARGIN
6.	(continued)	
	 (c) The joint shown below was used in the manufacture of the shelving unit. Tick (✓) the name of this joint. 	
	 Butt Through housing Mortise and Tenon Stopped Housing 	1
	 (<i>d</i>) The tool shown was used during the manufacture of the shelving unit. (i) Tick (✓) the name of this tool. 	
	 File Chisel Marking gauge Hand router 	1
	(ii) From the list below select the use of this tool.	
	Measuring joint Sanding joint Levelling joint Sawing joint	1
	(e) Pencil marks were removed from the shelving unit before applying a finish. State how the pencil marks could be removed.	1
	 (f) The screw shown was used to fix the shelving unit to a wall. Tick (✓) the name of this type of screw. 	
	 Round head Raised head Countersunk head 	1



		DO NOT WRITE IN THIS MARGIN
7.	(continued) Rails	
	(c) The legs were glued and screwed to the rails during assembly. State one reason why they were screwed together as well as glued.	1
	(ii) State the name of this type of wood screw.	1
	(iii) State one reason for using a wood screw with this type of head.	1
	(<i>d</i>) An abrasive paper was used during manufacture. State the name of a suit type of abrasive paper.	table
	 (e) Gloss paint was applied as a finish. State two reasons for using a gloss paint finish. 	
	Reason 2	2

DO NOT WRITE IN THIS MARGIN 8. A table is shown below. Legs (a) The machine shown below was used in the manufacture of the table. Tick (\checkmark) the name of the machine shown. Mortise machine Pedestal drill 00 1 Wood lathe Sanding From the list given below, name the parts (A), (B) and (C of the (ii) machine. Tailstock **Revolving centre** Headstock Toolrest **Fork centre** В С А Deb 00 3 В С (iii) State two safety precautions you should follow when using this machine. 2

8. (continued)

(b) The table legs are made from a hardwood. Which of the following is a hardwood?



				DO NOT WRITE IN THIS MARGIN
8.	(cor	ntinu	ed)	
	(d)	(i)	The joint shown below was used during the construction of the desk tidy.	
			Tick (\checkmark) the name of this joint.	
			Stopped housing	
				1
			Mortise and tenon	
			Corner rebate	
		(ii)	A white glue was used to glue the joint shown above. Tick (\checkmark) the name of this giue.	
			PVC	
			TAP	4
			PVA	
			MDF	
		(iii)	The tool shown below was used to hold the joint together while the glue set.	
			Tick (\checkmark) the correct name for this tool.	
			G-clamp	
			Bench vice	
			Machine vice	1
			Sash cramp	

9. (a) A wooden chair is shown



DO NOT WRITE IN THIS MARGIN

10. (*a*) A wooden stool is shown.



 (b) A gouge and parting chisel were used during the manufacture of the leg shown. Shoulder	DO N WRI IN TH MAR(
Shoulder	
Describe the operation performed by the: (i) Gouge (ii) Parting chisel (c) State a functional reason for the shoulder at the top of the leg. (c) State a functional reason for the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the shoulder at the top of the leg. Image: Description of the should be	
 (i) Gouge	
 (ii) Parting chisel	2
 (c) State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the shoulder at the top of the leg. Image: State a functional reason for the should reason for the functional reason	
Image: wide of the second s	
Image: bit 1 Bit 1 Bit 1 Bit 1 Bit 1 (i) State a reason why bit 1 was preferred when boring the holes in the boring the b	1
Bit 1 State the name of each bit shown. Bit 1 Bit 2 (ii) State a reason why bit 1 was preferred when boring the holes in	
State the name of each bit shown. Bit 1 Bit 2 (ii) State a reason why bit 1 was preferred when boring the holes in	
Bit 1 Bit 2 (ii) State a reason why bit 1 was preferred when boring the holes in	
(ii) State a reason why bit 1 was preferred when boring the holes in	2
the seat.	
	1
(e) A damp cloth was used to wet the stool during the finishing process.	





		DO NOT WRITE IN THIS MARGIN
11. (continu	ued)	
(<i>c</i>) (i)	The machine below was used during the manufacture.	
	State the name of this machine	
	State the name of this machine.	1
(ii)	From the list below, tick (\checkmark) three safety checks that should be carried	
	Material is secured Tool rest is	
	Tailstock removed Material turns freely	3
	Guard is down Chuck key is removed	
(iii)	Wood was placed under the plastic before drilling.	
	State a reason for this.	1
(iv)	The covering was kept on the plastic during manufacture.	
	State a reason for this.	1
	[Turn over	

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MARGIN

12. A bathroom vanity unit is shown below.



(a) The items to be stored in the vanity unit were measured.
 Tick (✓) the stage in the design process where this would take place.

Eva	luation



Research



(b) (i) The joint shown below was used in the manufacture of the vanity unit.
 Tick (✓) the name of this joint.





- Dowel joint
- Knock down fitting

Tick (\checkmark) the name of this tool.

(ii) The tool below was used to mark out the joint.



1

1

Marking	gauge

Steel rule

Dividers

Scriber



2 (00)	otinu	ad)	DO NOT WRITE IN THIS MARGIN
(c)	(i)	A white coloured glue was used during the manufacture of the unit. From the list, select the name of this glue.	
		PVC Epoxy Impact PVA	1
		Glue	
	(ii)	A waterproof glue was used. State a reason for this.	
			- 1
	(iii)	State a method of removing excess glue from the joints during	-
	. ,	the manufacture of the vanity unit.	
			1
	(iv)	The tool shown was used to check for squareness. Select the name of the tool from the list below.	-
		Engineer's	
		Mitre square	
		Try square	
(<i>d</i>)	(i) doo	A countersunk screw was used to attach the hinges on the or. Tick the image of a countersunk screw.	
			1
	(ii)	The tool shown below was used when attaching the hinges. State the name of this tool.	1



DO NOT WRITE IN THIS MARGIN 13. (continued) (b) The mortise gauge shown below was used to mark out the mortise and tenon joint. Thumbscrew Locking Adjustment screw Spurs Mortise cut 0 centrally on Stem **20mm** leg. Stock Part of table leg showing mortise Describe two steps to mark a 12mm mortise centrally on the table leg. Sketches may be used to illustrate your answer. You must reference sizes in your answer. Step 1 2 Step 2 (c) The finishing process includes "wetting the wood". State the purpose of "wetting the wood".

DO NOT WRITE IN THIS MARGIN

14. A woodpecker toy is shown below.



15. The wooden clothes hanger shown below is designed to hang in a wardrobe or be freestanding.



(a) The wood joints shown below were considered during the design of the hanger.

State the name of each joint.



Joint Y

Joint Z



16. A wooden kitchen roll holder is shown below.



(a) The following statement appeared in the specification. "The holder must be stable."

State which feature of the holder gives it stability.

(b) The stem is turned on a wood lathe as shown



From the list below select the name of parts (A), (B) and (C)

Revolving centre Tailstock Headstock Fork centre Tool rest (i) Part A

(ii) Part B

(iii) Part C

		DO NOT WRITE IN THIS MARGIN
5. (0	continued)	
(0	c) State three safety checks which should be made to the wood lathe before switching it on.	
	1	
	2	
	۲	3
	3	
(e)	The wooden base was varnished. State two stages in the preparation of The base before applying the varnish.	
	Stage 1	
		2
	Stage 2	



				DO NOT WRITE IN THIS MARGIN
17.	(b)	(cor	ntinued)	
		(ii)	The holding device shown below was used to hold the strips while the glue dried.	
			A coco	
			State the name of this device.	1
	(<i>c</i>)	A nı	umber of mats were produced for sale.	
		Stat	e two advantages of using a template to mark out the curved ends.	
		1.		
		2.		2
	(d)	Stat the o	e the name of a machine tool and a hand tool suitable for cutting out curved ends.	
		(i)	Machine tool	
			Hand tool	2

18. A wooden base for a table lamp is shown below.



(a) (i) The base was manufactured on the machine shown below.



State the name of this machine.

(ii) Tick (\checkmark) the name of the process carried out by this machine.

- Forging
- Casting
- ____ Turning

3

1

DO NOT WRITE IN THIS MARGIN



DO NOT WRITE IN THIS MARGIN **19.** A decorative wooden box and stand are shown. Assembled Exploded view showing joint A (a) State the name of joint A . 1 The tool shown below was used to mark out the joint. Adjustment screw Thumbscrew Spurs Stem Stock (b) (i) State the name of this tool. 1 (ii) State two adjustments that can be made to this tool. Adjustment 1 2 Adjustment 2



20 . A storage rack for con	nputer games made fr	rom hardwood is s	hown.	DO NOT WRITE IN THIS MARGIN
Decorative holes	Curved edge "C"		ORCA UPTER WE Thickness	
Empty Rack (<i>a</i>) From the list below,	Rack with some in place select a suitable har	games C dwood.	computer game	
Pine	Beech	Spruce	MDF	1
 (b) Tick (✓) two pieces storage rack. □ The length of □ The type of co □ The thickness 	of information that v computer game	vill determine the] The breadth of] The number of] The cost of co	length " L " of the ^c computer game ^c computer games mputer game	2
 (c) The joint shown wa Cross halving Through hous Mortise and to Stopped hous 	s used in the manufacting enon	cture. Tick (🗸) the	e name of the	1



DO NOT WRITE IN 20. (continued) THIS MARGIN (f) The tool shown below was used during the manufacture of the storage rack. Tick (\checkmark) the name of this tool. Flat bit Countersink bit 1 Auger bit Forstner bit (g) The storage rack is to be finished using **varnish**.

State a method of applying the varnish thinly and evenly.

21. A storage rack for use in a kitchen is shown.



(a) Using the information above, **complete** the cutting list shown below.

Part name	Material	Quantity	Length	Breadth	Thickness
Front rail		1	240	30	30
Back rail	Plywood	1		40	12
Shelf	Plywood	1	240	120	
Side	Plywood		180		12

5

DO NOT WRITE IN THIS MARGIN



21.(<i>d</i>)	(con	tinued)	DO NOT WRITE IN THIS MARGIN
	(ii)	The tool shown below was used to hold one end of the material on The machine. From the following list, select and write the name of this tool.	
		Driving fork Parting tool Facing tool Live centre	
			1
	(iii)	From the list below, tick (\checkmark) three safety checks that should be Carried out to the machine before switching it on.	
		Chuck key removed Material turns freely	3
		Safety goggles are worn Speed set correctly	
		Apron on Hair tied back	





• ••	(000	stinued)	DO NOT WRITE IN THIS MARGIN
∠ ∠.	(con	The tools shown below were used when manufacturing the peg.	
		(i)	
		Tool name	1
		(ii)	
		Tool name	1

23. A covered sand pit table for a nursery is shown.

wooden table top plastic tray containing sand wooden top frame wooden legs wooden rails Assembled Exploded view The joint shown was used in the manufacture of the table. (a) Slot State the name of this joint. (i) 1 State the name of this type of chisel. (ii) 1 (iii) Describe how to ensure that the slot in the leg is cut to the correct depth. 1

WRITE IN THIS MARGIN

DO NOT



23. (continued)

2.

(d) The top frame is shown below.



State two methods of checking that the frame is 'square'.

1. ______

(e) State a suitable finish that could be applied to show the natural grain of the wood.

2

DO NOT WRITE IN THIS MARGIN

DO NOT WRITE IN THIS MARGIN

24. A TV unit made from MDF is shown below.



- (a) A cutting list was made for the TV unit.State two pieces of information that would be found on a cutting list.
- 1.

 2.



DO NOT WRITE IN THIS MARGIN

24. (continued)

- (*d*) A hand router was used to finish the bottom of the joint.
 - (i) With reference to the sketch below, describe how you would set this tool to finish the joint to a depth of 10 mm.

hand router cut away for clarity

(ii) State **one** reason why a hand router, rather than a chisel, would be used to flatten the bottom of the joint.

2

25. A child's toy bike is shown





