01 Choosing materials & woods.

WORKSHEET 01 · TOPIC 01 · USE COURSE NOTES PAGES 5–8 TO HELP YOU

NAME | CLASS | DATE

TASK 1 Sort the timber rack

4 marks

Tick one box for each material. 1 mark for every two correct.

MATERIAL	HARDWOOD	SOFTWOOD	BOARD
Beech	☐	☐	☐
Spruce	☐	☐	☐
MDF	☐	☐	☐
Mahogany	☐	☐	☐

MATERIAL	HARDWOOD	SOFTWOOD	BOARD
Red pine	☐	☐	☐
Flexi-ply	☐	☐	☐
Balsa	☐	☐	☐
Ash	☐	☐	☐

TASK 2 Fill the gaps

5 marks

USE EACH ONCE · TOUGHNESS · DURABILITY · STABILITY · HARDNESS · WORKABILITY

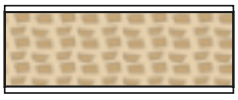
A beech worktop resists scratches and dents because of its _____. An ash hammer handle takes shocks without cracking because of its _____. An oak bench lasts for years outdoors because of its _____. A plywood shelf does not warp or twist because of its _____. Red pine is easy to saw, plane and join because of its _____.

TASK 3 Name the board from its edge

4 marks

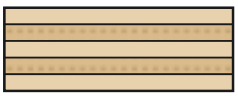
Each drawing shows the edge of a manufactured board, enlarged. Name each board.

A



Chips of wood in resin, plastic faces

B



Five layers, grain alternating

C



About 3 mm, one smooth face

D



Fine fibres, smooth both faces

A _____ B _____ C _____ D _____

TASK 4 Fix the weak answer

3 marks

Each answer below scored 0. Rewrite it so it would score 1 mark.

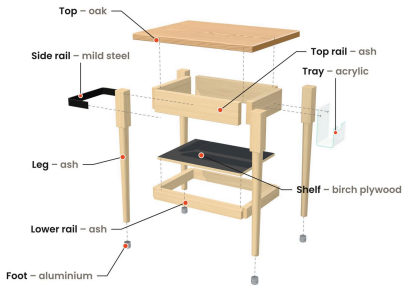
(a) "State one reason softwood suits a garden shed." Pupil wrote: *"It is cheap."* 1

(b) "Name a softwood for a bookshelf." Pupil wrote: *"Pine."* 1

(c) "Oak is strong. State one other reason it suits a table." Pupil wrote: *"It is strong."* 1

TASK 5 NOOK: complete the cutting list

5 marks



(a) Use course notes page 7 to complete the four blank cells in NOOK's cutting list. All sizes in mm. (4)

PART	MATERIAL	QUANTITY	LENGTH	BREADTH	THICKNESS
Top		1	420	320	20
Leg	Ash		460	35	35
Long top rail		2	330	70	20
Shelf		1	310	200	9

(b) State why the shelf is made from a manufactured board and not solid ash. 1

TASK 6 Pick the material

6 marks

Choose a material for each product and give a reason **linked to the product**. One material is not needed.

CHOOSE FROM · ASH · BEECH · FLEXI-PLY · MDF

PRODUCT	MATERIAL	REASON LINKED TO THE PRODUCT
Child's wooden toy blocks		
Painted flat-pack cabinet door		
Garden spade handle		

TASK 7 Exam practice: a garden planter

6 marks

A school makes red pine planters with exterior plywood bases. They stand outside all year, full of damp soil.

(a) State two benefits of softwood for this product. 2

(b) Explain why MDF would not be suitable for the base of the planter. 2

(c) Outline two ways the school could make its choice of timber more sustainable. 2