

Name _____

Class _____

Date _____

By the end of this worksheet I can...

- ☐ describe the properties and uses of beech, ash, oak and mahogany
- ☐ describe the properties and uses of red pine and spruce
- ☐ describe the properties and uses of plywood, flexi-ply, MDF, chipboard and hardboard

I DO

Worked example Read how a full-mark answer is built

A back panel for a pine wall cabinet is made from MDF.

1 Outline two benefits of using MDF rather than solid pine for the back panel. (2 marks)

Full-mark answer each ✓ is one mark

MDF comes in large wide sheets, so the back can be cut in one piece without joining boards ✓. It is stable and will not warp or twist like solid pine can ✓.

Why marks are not awarded

"It is cheap and easy to use."

0 marks: unqualified "cheap" and "easy" never score.

WE DO

Guided practice Use the starters and word bank to help you

A child's toy is turned on the wood lathe.

2 (i) Name a suitable hardwood for the toy. (ii) Name a tool used to check the turned diameter. (2 marks)

Sentence starters

One ... is ..., which means ...

Another ... is ..., so ...

Word bank

oak · Ash · hardwood · close-grained · vernier
· callipers · Beech · outside

Tip: 2 marks = 2 separate, developed points.

YOU DO

On your own No notes. Check your answers afterwards.

3 Quick check: tick one box for each.

a) Which is a drawback of chipboard?

- ☐ Very expensive ☐ Too flexible ☐ Brittle and hard to screw into ☐ Only available in small widths

b) Which is a softwood?

- ☐ Beech ☐ Oak ☐ Spruce ☐ Mahogany

c) Why does plywood have an odd number of layers with grain at 90°?

- ☐ To make it cheaper than solid timber ☐ So that it bends easily in every direction ☐ To give it an attractive grain on both faces ☐ To reduce warping and add strength

d) Which hardwood suits a cricket bat or hammer handle?

- ☐ Ash ☐ Mahogany ☐ MDF ☐ Spruce

4 Key terms: write the letter of the matching description next to each term.

1. Softwood source	_____	A Hardwood: very durable. Quality and outdoor furniture, barrels.
2. Hardwood source	_____	B Hardwood: tough, bends well. Sports bats, tool handles.
3. Beech	_____	C Odd number of veneers with grain at 90°: strong and stable.
4. Ash	_____	D Coniferous trees: evergreen, needle leaves, fast growing.
5. Oak	_____	E Hardwood: very strong, turns well. Toys, spoons, chairs.
6. Plywood	_____	F Deciduous trees: broad leaves shed in winter, slow growing.

5 Explain two reasons why plywood is suitable for a cabinet back. (2 marks)

6 Give the properties and one use of MDF. (2 marks)

7 Describe the advantage of manufactured boards. (2 marks)

Check and reflect

Mark your answers with the answer sheet. Go back to the checklist on the site and re-rate each “I can” statement above. Which one still needs work?
