

Name _____

Class _____

Date _____

By the end of this worksheet I can...

- ☐ identify butt, mitre, dowel, halving, bridle and haunched mortise and tenon corner joints
- ☐ identify T joints, cross halving and dovetail halving
- ☐ choose a flat-frame joint for a situation and justify it
- ☐ describe the stages in marking and cutting a flat-frame joint
- ☐ cut flat-frame joints with gaps no more than 1 mm

I DO

Worked example

Read how a full-mark answer is built

A garden bench uses traditional joints rather than knock-down fittings.

1 Identify two advantages of traditional joints over knock-down fittings. (2 marks)

Full-mark answer each ✓ is one mark

No extra fittings need to be bought ✓. The joints are glued with a large glue area, so they are permanent and won't work loose ✓.

Why marks are not awarded

"They are stronger and look better."

1 mark: "look better" scores; "stronger" alone is vague.

WE DO

Guided practice

Use the starters and word bank to help you

A sign frame has a rail crossing the middle of a stile.

2 Name a joint used where two parts cross. (1 mark)

Sentence starters

1. ...

Word bank

halving

Tip: 1 marks = 1 separate, developed points.

YOU DO

On your own No notes. Check your answers afterwards.

3 Quick check: tick one box for each.

- a) Which joint is quickest to cut for a light frame?
☐ Through mortise and tenon ☐ Haunched mortise and tenon ☐ Dovetail halving ☐ Halving
- b) Which is an advantage of a traditional joint over a knock-down fitting?
☐ It can be taken apart again easily ☐ It is always quicker to make by hand ☐ It needs no extra parts to buy ☐ It needs no glue to hold it together
- c) Which joint hides the end grain at a picture-frame corner?
☐ Butt ☐ Mitre ☐ Corner halving ☐ Bridle
- d) Which halving joint resists being pulled apart?
☐ Dovetail halving ☐ T halving ☐ Cross halving ☐ Corner halving

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

1. Stile	_____	A Upright part of a frame
2. Rail	_____	B Doesn't go all the way through, so it's hidden
3. Haunch	_____	C Short step on a tenon that stops twisting and fills the groove end
4. Stub tenon	_____	D Horizontal part of a frame
5. Mitre joint	_____	E Open slot and tongue: strong with a large glue area
6. Bridle joint	_____	F 45° on both parts; hides end grain

A table rail is joined to a leg with a mortise and tenon.

5 State the usual thickness of the tenon as a ratio of the wood. (1 mark)

The corners of a panelled cupboard door are joined with haunched mortise and tenon joints.

6 Explain why a haunched mortise and tenon suits the corner of the frame. (2 marks)

A picture frame has mitred corners.

7 Describe one advantage and one disadvantage of a mitre joint. (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?
