

Name _____

Class _____

Date _____

By the end of this worksheet I can...

- ☐ describe commercial assembly methods: adhesives, joints, knock-down fittings, fixings, snap and press fit, riveting, spot and arc welding, thermal bonding
- ☐ describe methods to identify assembly methods and the issues that influence them
- ☐ describe chrome plating, galvanising and plastic dip coating

I DO

Worked example Read how a full-mark answer is built

1 Outline factors that influence the choice of assembly method for a product. (3 marks)

Points that earn marks from the marking instructions: one ✓ per point

- ✓ Volume of production
- ✓ Materials being joined
- ✓ Whether the joint must be permanent or taken apart for maintenance

WE DO

Guided practice Use the starters and word bank to help you

A flat-pack storage unit has a polypropylene drawer and MDF panels.

2 Describe how snap fits and knock-down fittings could be used in the assembly of the unit, giving an advantage of each. (4 marks)

Sentence starters

Snap fit: ...

Snap fit advantage: ...

Knock-down fitting: ...

Knock-down advantage: ...

Word bank

MDF · clicks · Knock-down fitting · consumer
· Snap fit · flexible · moulded · cam lock

Tip: 4 marks = 4 separate, developed points.

YOU DO

On your own No notes. Check your answers afterwards.

3 Quick check: tick one box for each.

- a) What is the purpose of a pilot hole for a screw?
☐ To guide the screw and stop the wood splitting ☐ To let the screw head sit below the surface ☐ To make the screw easy to remove later ☐ To hold extra glue around the screw
- b) A galvanised fence post can be identified by...
☐ A mirror finish ☐ A spangled, mottled surface ☐ A smooth coloured plastic coat ☐ Visible layer lines
- c) Which joint is best for fixing shelves into the sides of a bookcase?
☐ Housing ☐ Halving ☐ Mortise and tenon ☐ Lap
- d) Which method joins car body panels quickly on an automated line?
☐ Arc welding by hand ☐ Dovetail joints ☐ Spot welding ☐ Thermal bonding

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

1. Mortise and tenon	_____	A Joins thin sheet from one side only.
2. Housing joint	_____	B Hot metal dipped in plastic powder: protective, coloured, grippy finish.
3. Knock-down fitting	_____	C Strong frame joint for tables, chairs and doors.
4. Epoxy resin	_____	D Two-part adhesive that joins different materials.
5. Pop rivet	_____	E Carcase joint for shelves in bookcases and cabinets.
6. Dip coating	_____	F Non-permanent fitting for flat-pack furniture.

5 Explain what is meant by 'Snap fit'. (2 marks)

6 Explain what is meant by 'Spot welding'. (2 marks)

7 Explain what is meant by 'Galvanising'. (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?
