

Carpentry

Ask students:

What is Carpentry?

Carpentry is the skilled trade of **cutting, shaping, and installing** wood (and sometimes other materials) during the construction of buildings, ships, furniture, and other structures.

Industries that use Carpenters:

- Construction
- Remodeling and Renovation
- Furniture and Cabinet Work
- Facility Maintenance
- Set Design and Entertainment
- Shipbuilding and Marine Industry
- Civil Engineering and Infrastructure
- Government and Military

Safety Rules:

Tool safety is absolutely essential for carpenters because they work with a variety of sharp, powerful, and sometimes dangerous tools on a daily basis. Can you give me examples of tool safety?

Hand Tool Safety

1. Keep tools in good condition – a sharp chisel is safer than a dull one.

TURN OVER

Carpentry

2. Use the right tool for the job – don't use a screwdriver as a chisel.
3. Store tools properly – put away sharp tools in a toolbox, not in your pockets.
4. Hold tools correctly – keep hands behind the cutting edge or blade.

Personal Protective Equipment (PPE)

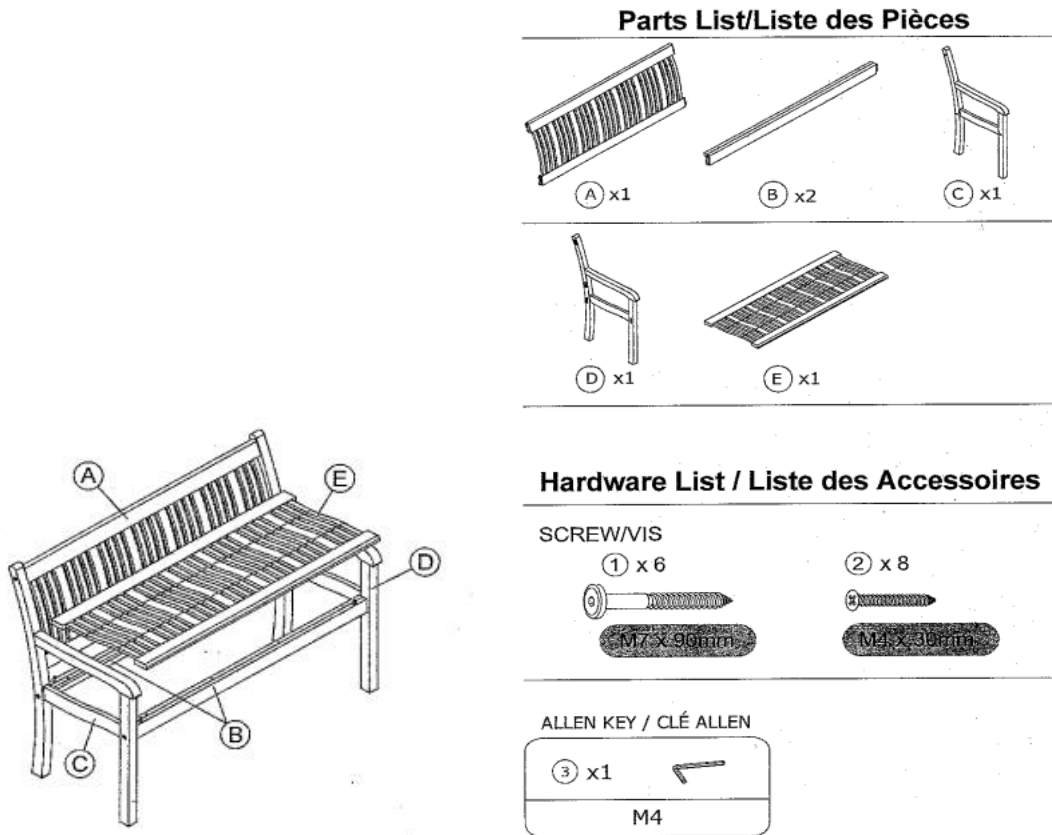
1. Wear safety glasses or goggles – protects eyes from flying debris.
2. Use hearing protection – loud tools like circular saws can damage hearing.
3. Wear a dust mask or respirator – protects lungs when cutting or sanding wood.
4. Wear gloves when appropriate – for splinters or handling rough materials (but not around spinning blades).

General Workshop Safety

1. Keep work area clean and organized – tripping hazards or clutter can lead to accidents.
2. Ensure proper lighting – always see clearly what you're doing.
3. Secure your work – clamp down wood to prevent slipping during cutting or drilling.
4. Stay alert – don't use tools if you're tired, distracted, or under the influence.

Carpentry

Build a Bench-1 bench per day



Align the backrest (A) with side arm (C). Insert two large screws (1) and tighten loosely with **Allen Key**.

As a rule: initially tighten all screws to about 50% so you can still adjust alignment. Only fully tighten when everything is properly positioned and stable.

Take both front and back rail/support bars (B) and align the notches with the side arm. Insert large screws (1) into the side arm, connecting the side arm to the support bars. Use **Allen Key** to tighten halfway.

Line up the second side arm (D) with the backrest and the two support bars. Use screws (1) to secure the side arm to the backrest and support bars. Tighten halfway.

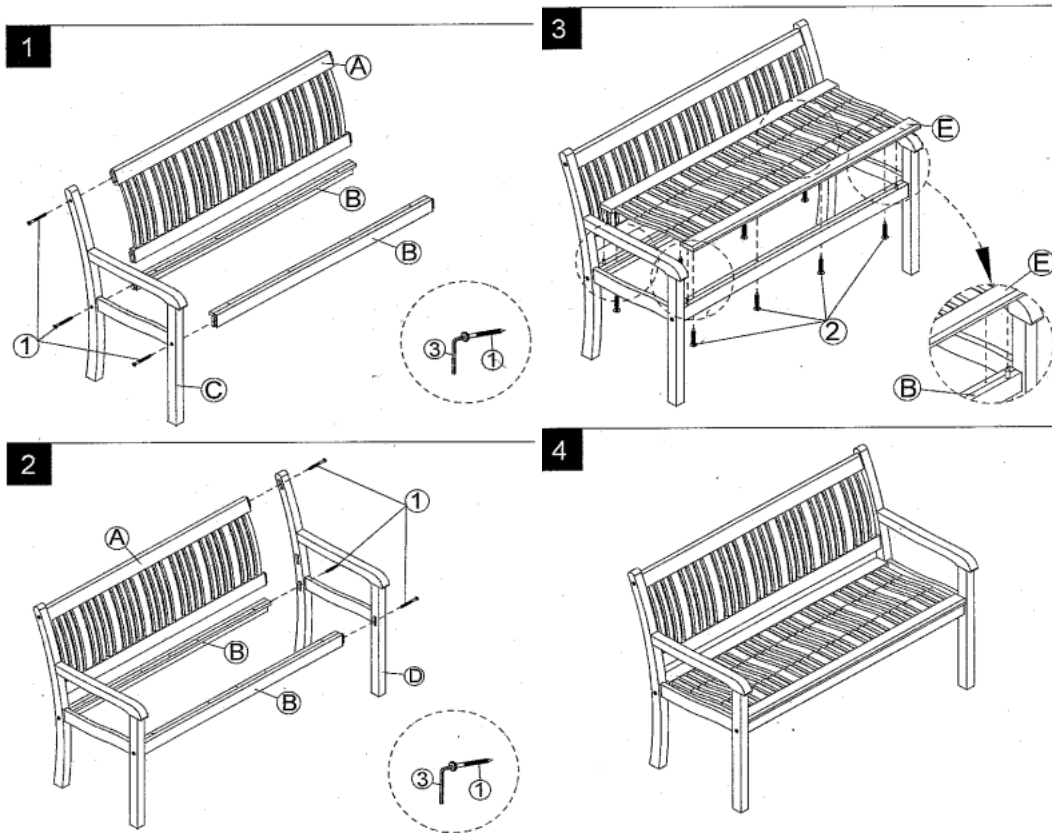
Once all parts are in place but only partially tightened, set the bench upright on a flat floor.

Make sure it sits level, doesn't rock, and the arms and backrest are lined up. If something is skewed, loosen relevant screws slightly, adjust alignment, then re-tighten.

Carpentry

Take the seat (E) and place it on the support bars. Use the 8 smaller screws (2) and the Allen Key to attach the seat to the support bars.

Go through all screws and fully tighten them, alternating between sides to maintain symmetry and avoid pulling the frame.



Tips & Troubleshooting

- If holes don't align, loosen nearby bolts (even ones already in place) to relieve tension and help parts shift slightly, then re-tighten.
- Don't fully tighten just one bolt first — do all to 50% and then fully tighten gradually.
- Work with your team to hold pieces steady while connecting.
- Keep an eye on orientation (which sidearm is left or right)

Carpentry

You Nailed It!

How to play:

- Safety Glasses on.
- Stand at the edge of the carpet until it's your turn.
- When the hammer is passed to you, step up and take your swing at the nail in the stump.
- One hit per turn, then pass the hammer onto the next person.
- The first person to get their nail in flush to the tree stump gets to call "Nail It".



Hammer

- Grip the **end of the handle** (not close to the head) for better swing and power.
- Keep a **firm but relaxed grip** to avoid strain.