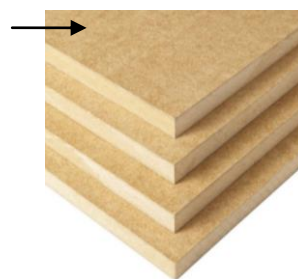


Manufactured Boards

These are made from the waste wood left over from conversion. They use thin sheets (plywood), small blocks (blockboard), wood chips (chipboard) and wood fibres (fibreboard). They are generally cheaper than solid wood and can be made into large sheets that do not warp or twist easily.

NAME	PROPERTIES	USES
Plywood	Made from thin sheets of wood (veneers), glued together with the grain direction at 90° to the one next to it. Strong in all directions, quite stable but can warp. A waterproof ply is available.	Tabletops, worktops, door fronts, drawer bottoms, building and construction
MDF	Made from fine wood fibers, compressed and glued together. Dust is extremely harmful to breathe. Does not warp easily, cuts and planes well without splitting, needs a finish.	Tabletops, worktops, veneered furniture, clock cases.
Blockboard	Strips of softwood are glued together and then sandwiched between two hardwood veneers. The edges look rough and are often covered with a thin hardwood strip. Does not warp easily. Very strong, rigid and rather heavy. Edge finishing is difficult.	High quality furniture, stage flooring, fire doors.
Chipboard	Made by compressing and gluing small chips of waste wood. Heavy, can warp easily, joining pieces together is not easy, needs a finish.	Cheap plastic coated furniture, roofing boards, partitions
Hardboard	Made by compressing and gluing pulped wood. It is smooth on one side and rough on the other. Not very strong, warps easily, needs a finish.	Door panels, cheap drawer bottoms, cabinet backs.



Questions

- 1) Explain why manmade woods can be considered to be environmentally sustainable.

- 2) You have been asked to design self-assembly furniture, it has to be cheap but strong, suggest two possible woods and give a reason for each.

- 3) Give two possible disadvantages of using chipboard.

- 4) When Plywood is manufactured, each layer has a different grain direction. What benefit does this give the wood?

- 5) Why do manmade boards require a finish?

- 6) Name two benefits that manmade boards have over real wood boards.
