Year 10 Construction UNIT 5

1 of 2 KNOWLEDGE ORGANISER

Marking and cutting a Half Lap Joint



- This is my half lap joint.
- To mark this joint out accurately I had to use a steel rule and a marking gauge.
- I cut the joint by using a tenon saw because this saw has a rigid blade and helps to cut in straight lines.
- I removed any waste material using a chisel and a mallet. To do this safely I made sure my work was held in the wood vice.

A Good Example of recording practical work

(The description underneath the photo to the left is detailed enough to achieve either a MERIT or DISTINCTION)

Tips:

What photographs do I have to include?

- 1. You need a photograph of each joint **BEFORE** it is stuck together.
- 2. You need a photograph of the joint AFTER it has been glued together.
- 3. You need a photograph of the frame, including a steel ruler, to **PROVE** that your frame measures 300mm x 300mm.

What notes do I have to Make?

What is the name of the joint – finger joint, dovetail joint, lap joint or half lap joint What tools did you use to **mark out** the joint?

What tools did you use to **cut** the joint?

Did you use any tools to finish the joint?

Tools		What is it used for
Steel rule		Used for measuring small distances up to 300mm long
Tri-square		This is used to set out lines accurately at 90 degrees to the edge of the timber
Tenon Saw	off	A Tenon saw is used for cutting small pieces of timber in a straight line.
Bevelled Chisel		These are bevelled on the steel front edge of the blade, so they are easy to get into small corners when cutting a joint.

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Using Tools Safely and Safe Conduct

- The quality of your carpentry work depends on the safe use of hand tools and the equipment you use.
- Tools are not cheap so you should look after them carefully.
- It is important to behave safely when using carpentry tools as they are sharp or hazardous
- You could be suspended from a building site if your behaviour was dangerous or unacceptable.

Personal Protective Equipment PPE

Personal Protective Equipment is clothing or equipment used to reduce the risk of injury

What PPE equipment is this carpenter wearing?



Maintaining a Tidy Work Area

- If you are working in a workshop or on a site it is important to tidy as you work
- Make sure you put tools back and store them properly to prevent them from getting damaged.

Keep your Tools Sharp and Clean

 Clean and sharp tools are much easier to use than tools that are blunt or damaged



Storing Tools

 You should store carpentry tools in an organised way to prevent them getting damaged or blunted.

Why would this be a good storage solution for tools on a construction site?

Safe Manual Lifting

- In a workshop or on a construction site it is important to lift heavy objects safely.
- If you don't lift a heavy object correctly you could cause a musculoskeletal injury.