Unit 108: Wood occupations

# Worksheet 10: Hand tool uses (tutor)

1. State the uses of the chisels listed below in a site carpentry and joinery context:

|  |  |  |
| --- | --- | --- |
| **Chisel type:** | **Site carpentry uses** | **Joinery uses:** |
| Bevel-edged chisel | Fine work such as the fitting of ironmongery. | Paring the sockets back to the shoulder line when dovetailing, fine paring and fitting ironmongery. |
| Firmer chisel | Heavy stock removal such as chopping notches in for service runs and general purpose work. | Heavy stock removal such as halving joints, paring mortice cheeks, paring tenon cheeks, |
| Mortice chisel | Rarely used but sometimes carried where lots of deep mortice locks have to be fitted or where mortices have to be chopped on site. | Chopping non-standard mortices where it is difficult to hold the stock in the morticer and for paring wedge room at the ends of mortices. |

1. State the uses of the saws listed in a site carpentry and joinery context:

|  |  |  |
| --- | --- | --- |
| **Saw type:** | **Site carpentry uses** | **Joinery uses:** |
| Coping saw | Cutting encasement panels around services. | Removing the waste when cutting dovetail joints. |
| Tenon saw | General purpose work where accurate straight cutting is required such as cutting mitres when jointing architrave. | General purpose work where accurate joint shoulders are required and cutting small stock to length. |
| Panel saw | General purpose cutting on site, such as cutting flooring boards/panels to length, cutting the joints on roofing components etc. | General purpose cutting, such as cutting excess wedge material and horns off, panel sizing and haunch cutting. |

1. State the uses of the planes listed in a site carpentry and joinery context:

|  |  |  |
| --- | --- | --- |
| **Hand plane:** | **Site carpentry uses** | **Joinery uses:** |
| Smoothing plane | Due to it being lighter and smaller than a Jack plane, it is now used to shoot in doors. | Used to level the shoulders of assembled joinery products and general fitting work. |
| Block plane | Trimming mitres for architrave joints and general-purpose use, e.g. removing arises. | General purpose work, e.g. where arises have to be removed or trimming plastic laminate after being bonded. |
| Shoulder plane | Not used much in a site carpentry context, but very useful where tongues have to be eased to fit into grooves, e.g. when fitting window boards. | General shoulder easing on mortice and tenon joints and easing tongues when fitting to grooves or increasing the width of a rebate. |

1. State the uses of the marking-out tools listed in a site carpentry and joinery context:

|  |  |  |
| --- | --- | --- |
| **Marking out tool:** | **Site carpentry uses** | **Joinery uses:** |
| Marking gauge | For gauging the width and depth of hinge recesses and when fitting locks. | Gauging the centre line for halving joints, gauging housings for depth. |
| Craft/utility knife | Accurate marking out, such as when fitting ironmongery, used to provide a definite line when cutting shoulders of joints. | General purpose marking out where a cut line rather than a pencil line is required for accuracy. |
| Steel framing square | For marking out the lengths of rafter components and applying the face and edge cuts for the plumb and bird’s mouth cuts. | For marking out stair strings for step housings. |

1. List the stages required when sharpening a smoothing plane iron:

|  |  |
| --- | --- |
| **Stages:** | **Procedure** |
| 1 | Remove the lever cap and set aside |
| 2 | Clean out the mouth of the plane |
| 3 | Remove the back iron and set aside |
| 4 | Apply lubricant to sharpening stone |
| 5 | Sharpen the face bevel of the plane iron at 30° until a burr is felt on the back of the plane iron |
| 6 | Hold the back of the iron flat on the sharpening stone and move backwards and forwards until the burr is loose |
| 7 | Clean iron and remove burr with clean cloth |
| 8 | Reassemble the back and cutting irons with the back iron set back from the cutting edge approx. 1mm. |
| 9 | Place iron assembly back in the plane frog and secure with the lever cap |
| 10 | Adjust the plane iron to suit |