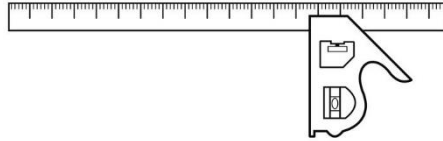


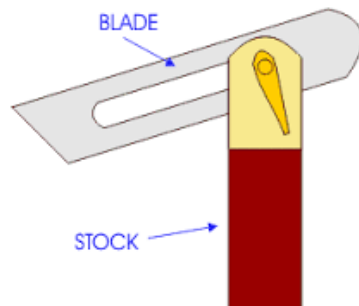
SANGAM SKM COLLEGE - NADI
WEEK 1- EXERCISE SOLUTIONS
YEAR 10
BASIC TECHNOLOGY

Exercise 1: Sketch a diagram of a combination square and write down its uses.



- Square, for marking and referencing 90° angles and checking if surfaces are flat and square to one another.
- Mitre square, for marking and referencing 45° angles, such as in woodworking for mitre joints.
- Spirit level, to check if a surface is level or similarly if a surface or edge is plumb (vertical).
- Depth gauge or height gauge.
- Form of marking gauge for marking lines parallel to an edge, by setting the head to a certain distance from the end of the rule.
- Reference for directly transferring dimensions without needing to take a measurement, minimizing measurement errors and inaccuracies.

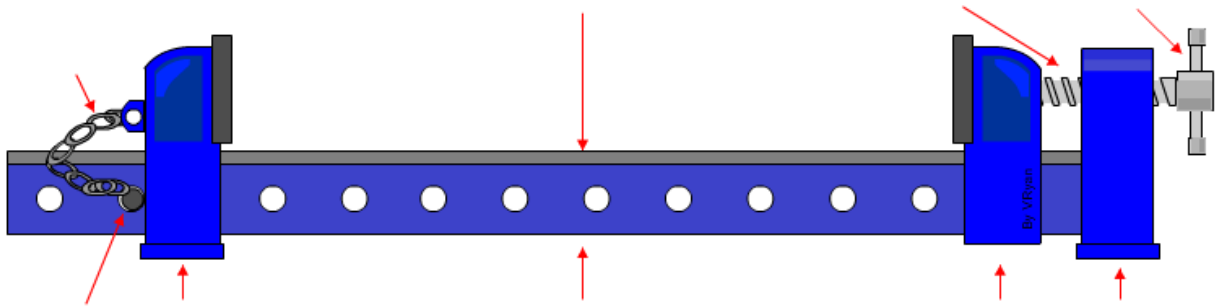
Exercise 2: Sketch a diagram of a sliding bevel and illustrate how to use this tool.



Transferring an existing angle.

1. Hold the instrument by the stock using one hand and tighten the thumb screw with the free hand.
2. Press the inside of the stock flush against the edge of the workpiece with the blade resting on the second side, now lock it into position by retightening the thumb screw.
3. Ensure that the edges of the stock and blade are flush against the two sides of the workpiece.
4. Once the angle has been set, place the blade of the sliding on the point where you wish to recreate it.
5. You can now cut the workpiece along the mark and recheck the angle with the bevel.

Exercise 3: Sketch a diagram of a sash clamp and write down how it is uses.



- When in use, the sash clamp is placed below the work to be glued / assembled.
- The slides are arranged on either side and scrap wood is placed between each face and the work. This protects the work when the thread is tightened.
- The tommy bar is used to tighten the thread and pressure is increased slowly.