PENANG SANGAM HIGH SCHOOL
P.O.BOX 44, RAKIRAKI

LESSON NOTES-20

School: PENANG SANGAM HIGH **Year/Level: 11**

Subject: APPLIED TECHNOLOGY

Strand	AT 11.6: APPLIED ENGINEERING
Sub Strand	AT11.6.1 CARPENTRY JOINERY
Content Learning Outcome	AT11.6.1.1 Demonstrate knowledge of safety, materials, tools and processes and develop practical skills in simple joinery works.

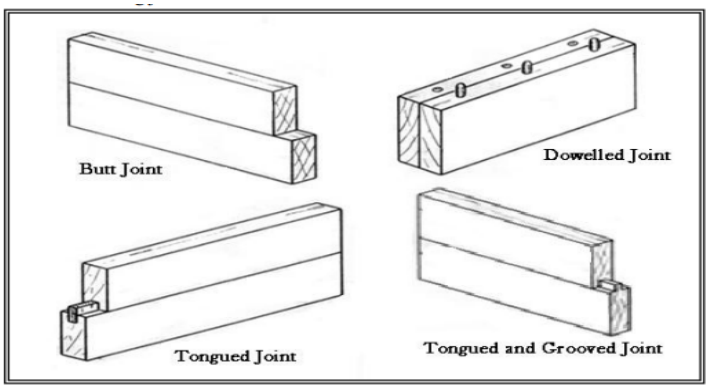
WOODWORKING JOINTS

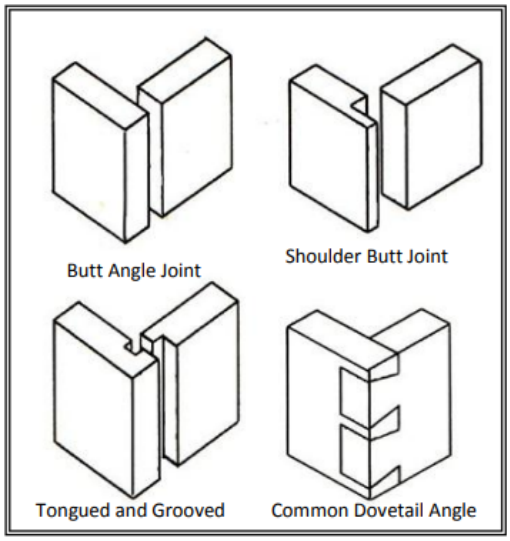
Successful woodworking depends mainly on the correct and accurate joining of pieces of wood. Woodwork joints are generally classified in three main groups:

- Widening Joints or Edge Joints.
- Corner Joints.
- Framing Joints.

Widening or Edge Joints

These joints are used when fitting together two or more pieces of timber to make up a wide surface. For this reason they are often called widening joints.





Butt Angle Joint

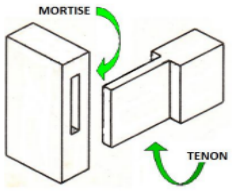
This is the cheapest type of construction. The ends are cut square, butted and nailed together at right angle

Shoulder Butt or Rebated Butt Angle Joint
This is a better type of construction. The end of one piece is fitted and nailed into a rebate cut on the other.

Tongued and Grooved Edge Joint
This is a strong joint which is usually made by machine.

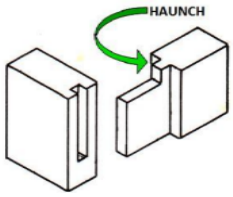
Common or Through Dovetail Angle Joint
This is possibly the strongest form of angle joint. It consists of one or more dovetail‘ cut on the end of one piece and sockets on the other piece.

Common or Through Mortise and Tenon Joint
This is the simplest form of the mortise and tenon joint.



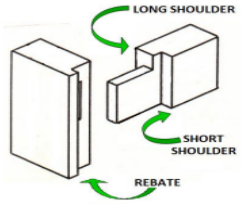
Common or Through Mortise and Tenon Joint

Haunched Mortise and Tennon Joint
This joint is used when the rail meets the stile or leg at the end.

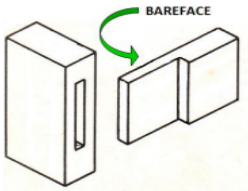


Haunched Mortise and Tenon Joint

Long and Short Shouldered Mortise and Tenon Joint
When the rails and stiles have been rebated as for paneled and glass door frames, the rail must have one shoulder cut longer than the other to fit into the rebate.



Long and Short Shouldered Mortise and Tenon Joint

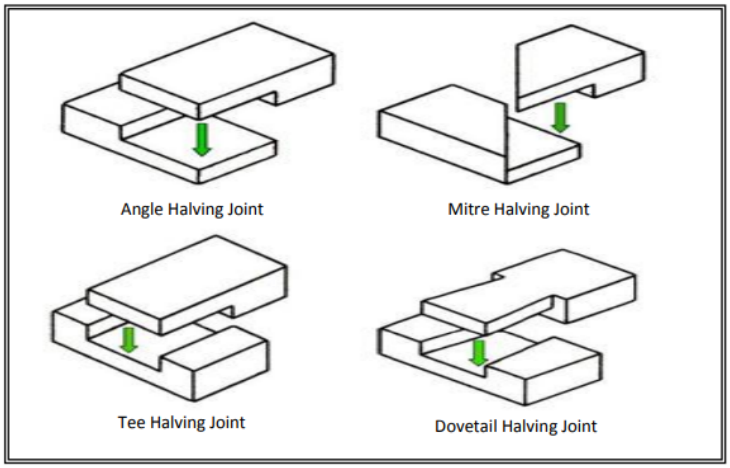


Barefaced Mortise and Tenon Joint

Barefaced Mortise and Tenon Joint
This joint is used where the rail is of thinner material than the stile or the leg.the tenon has only one shoulder, and is approximately half the thickness of the rail**.**

Angle Halving Joint
It is used for framing in building work, frames for cores of cheap flush doors, screen doors etc.

Mitre Halving joints
This is similar to the angle halving joint except that the lap or pin of one is mitred to fit against the mitred shoulder of the other.



Tee Halving Joints
This is a halving joint in the form of a T shape.

Dovetail Halving Joint
This is a stronger form of the tee halving joint and is used where pull may be exerted on the cross member, such as in top plates on buildings.

SHORT ANSWER QUESTIONS

1. Define the joints:
   a) Angle Halving Joint:

   _____
   _____

   b) Tongued and Grooved Edge Joint:

   _____
   _____

   c) Butt Angle Joint:

   _____
   _____

   d) Haunched Mortise and Tennon Joint:

   _____
   _____

THE END