

PENANG SANGAM HIGH SCHOOL

P. O. BOX 44, RAKIRAKI

LESSON NOTES - 19

SUBJECT: BASIC TECHNOLOGY

YEAR/ LEVEL: 9

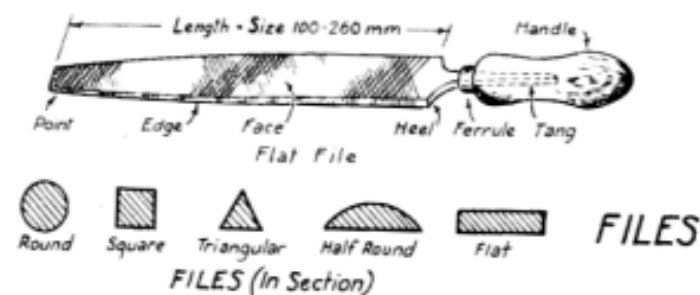
SCHOOL: PENANG SANGAM HIGH

Strand	BT9.4: HAND TOOLS AND MATERIALS
Sub - Strand	HAND TOOLS AND APPLIANCES.
Content Learning Outcome	BT9.4.1.1 Identify the common woodworking and metalworking hand tools, their parts and uses and develop skills in use of the hand tools.

ABRADING AND CUTTING TOOLS**Files**

Files are used in woodwork for two purpose:

1. Tool sharpening e.g. a saw.
2. Smoothing edges and small curves in wood which are difficult to reach with other tools.

**Rasp**

It is similar in appearance to a file except it has teeth instead of furrows.

It removes the wood more rapidly than a file but leaves a coarse finish which must be smoothed with a file or glass paper.

**PERCUSSION AND IMPELLING TOOLS**

Chisels are among the handiest of all woodworking tools and for many jobs. Chisels are available in wide range of shapes and sizes. These useful tools need to be handled with care and skills for the best results. Before using a chisel it is important to ensure it is sharp.

Chisels are tools with a long flat beveled blade with a square cut edge attached to a handle. They are used to remove unwanted parts from the wood or to carve and shape. The chisel is held by one hand, while the other hand is used in striking a mallet at the chisel's handle.

Beveled-edge firmer chisel

Has a beveled-edge and slim blade making it suitable for light work.

It is used for joint making; reaching into awkward corners in paring trenches, dovetails and chamfering.

**Paring chisel**

Is the same as a beveled-edged chisel except that it has a longer blade and is used for pairing work.



Mortise chisel

Is specifically designed for heavy work.
It is used for heavy work, cutting out mortises and slots.



Firmer chisel

It is the most common general purpose chisel that has a strong, thick rectangular section blade.
It is used for a wide range of tasks such as paring, trenching and light chopping of waste wood.



Parts of a chisel



- | | |
|------------|----------------------------|
| 1 Blade | 4 Tang |
| 2 Shank | 5 Grinding bevel |
| 3 Shoulder | 6 Sharpening bevel |
| 7 Ferrule | 8 Handle - wood or plastic |

SHORT ANSWER QUESTIONS

1. Name the chisel which is used for wide range of task such as paring, trenching and light chopping of wood.

2. Why files are used in wood work.

3. Label the diagram given below and state its use in woodwork.



Name: _____

Use:

