

YEAR 10 BASIC TECHNOLOGY

WEEK 2

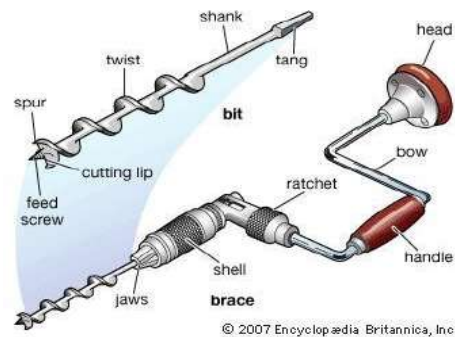
STRAND: HAND TOOLS & APPLIANCES

LESSON 4: BORING TOOLS

LEARNING OUTCOME: identify parts and uses of ratchet brace

1. Ratchet Brace and Bits

- Hand-operated tool for boring holes in wood, consisting of a crank-shaped turning device, the brace that grips and rotates the hole-cutting tool, the bit.
- The bit goes into the wood as the handle is turned.
- Pressure is applied to the top and the tool is rotated with a U-shaped grip.
- The ratchet must be reliably operational for both direction and the jaws must hold the tapered tang twist bits, and the dual purpose combination bits firmly and concentrically.



HARDWARE FOR JOINERY

LESSON 5: HANDLES

LEARNING OUTCOME: IDENTIFY THE TYPES OF HANDLES

Door Handles

- Doors generally have at least one fixed handle, usually accompanied with a latch. However, other types of handles are also used depending on the thickness and type of door.



Latch Handles

- Are for internal use and usually mounted on a back plate.
- They are used in conjunction with a tubular mortise latch and suitable for use with doors that are of 35-44mm thickness.

Lock Handles

- Have a keyhole cut for use both internally and externally where a lock is required and are used in conjunction with mortise sash locks.
- They are suitable for use with doors that are of 35-54mm thickness



LESSON 6: HOOKS

LEARNING OUTCOME: IDENTIFY THE TYPES OF HOOK

(i) Screw Hook

- Has a threaded end that screws into wood, ceilings or walls.
- The open end supports various items.
- The rounded tip hook is for household uses; pointed tip is for suspended ceilings.
- The L-shaped hook supports wide objects.



(ii) Swag Hook

- Combines a hook with a toggle bolt for hanging a swag lamp or a plant from ceiling.



(iii) Screw Eye

- Has a ring shaped end. Use it alone by fitting objects through the ring.



(iv) Hook and Eye

- Has a hook attached to a screw eye that screws into a gate or door.
- The hook fits into another screw eye to keep the gate or door closed or open.



(v) Rope Hook

- These are general purpose hook with two or four holes in the flat stem for screws.
- A porch-swing hook, which is screwed into the porch roof, a hammock hook with a plate to secure it to flat surface.



(vi) Self-adhesive Hook

- Made of plastic and meant for light weight objects.
- To install, wipe the surface clean, remove lining paper and press hook in place.



(vii) Coat Hook

- May have one, two or more hooks in various directions for hanging coats and hats.



(viii) Picture Hook

- Is nailed into a wall. A wire is attached to the back of picture frame and hanged on to the hook.



(ix) Heavy-duty Hook

- for hanging objects in a garage or workshop for items like bicycles and spare parts.



ACTIVITY

1. State the use of a ratchet brace
2. Differentiate screw hook & screw eye