

NAME:.....CLASS:.....

**SECOND TERM e – LEARNING NOTES**

*JS 1 (BASIC 7)*

SUBJECT : BASIC TECHNOLOGY

SCHEME OF WORK:

WEEK TOPIC

1. Revision of Last Term's Work
2. Board Practice: basic board practice: (1) setting drawing paper on the board. (ii) Sharpening pencil to conical point and knife edge. (iii) using the tee and set squares for drawing boarder lines and horizontal and vertical lines (iv) positioning and drawing the title block. (v).writing(freehand) legible letters and numerals
3. Freehand Sketching : basic freehand techniques of drawing lines, curves, circles, and irregular shapes
4. Scales and Scale Drawing: (a) reading graduation on the metric rule. (b) measuring and comparing given sizes
5. Scales And Scale Drawing(cont'd) :(c) scale drawing: (i) types of scale; full size, 1:1 (ii) reduction scale e.g. 1:5, 1:10, 1:20, 1:100, etc. (iii) enlarged scale, e.g. 2:1, 3:1, etc.
6. Woodwork Hand Tools; (a) Measuring tools; metric rule, inside calipers, outside calipers, pair of dividers, etc. (b) Setting and Marking out tools: try-square, sliding bevel, meter square, pair of compasses, trammels, etc.
7. Woodwork Tools (cont'd) (c) Driving tools; hammer; mallet and screw driver, etc. (d) Boring tools; wood brace' ratchet brace and bradawl, etc.
8. Woodwork Tools (cont'd) (e) Holding devices; Bench hook, Bench vice, 'G' cramp, sash clamp, etc. (f) cutting and pairing tools; rip saw, cross cut saw, tenon saw, bow saw, dovetail saw, jack plane, smoothing plane, spoke shaves, chisels, etc.
9. Concept of Energy and Power; (a) Concept of Energy and power. (b) Definitions: (i) power (ii) energy (iii) units (c) relationship between energy and power
10. Revision
11. Examination.

**WEEK: ONE**

**DATE:**

**TOPIC:** Revision of last term's work

The Teacher should use discretion, knowing areas most students are still having difficulties in last term's work and re-teach or re-explain those areas within this week.

**WEEK: TWO**

**DATE:**.....

**TOPIC:** Board Practice

**SUB-TOPICS:**

- (i) The instrument required for a good board practice
- (ii) Setting Drawing Paper on the Board
- (iii) Sharpening pencil to conical point and knife edge
- (iv) Using the tee and set squares for drawing boarder lines and other horizontal and vertical lines
- (v) Positioning and drawing the title block.
- (vi) Writing (freehand) legible letters and numerals

**Content Development (NOTES FOR FIRST LESSON/PERIOD ONE)**

Sub-Topic I: The instruments required for good board practice

The instruments required for good board practice are:

- (1) Drawing board and Tee-square
- (2) Set-square (30°, 60°, 45° angles)
- (3) Compass and Dividers
- (4) Protractor and French curves
- (5) Drawing pencils (HB and 2H)
- (6) Eraser and Drawing paper

Sub-Topic II: Setting Drawing Paper on the Board

Step 1: The drawing board is conveniently placed on the table with the paper on the board, leaving equal size all round, with the Tee-square edge to the left hand side.

Step 2: Place the tee-square on the paper and gently move or slide the tee-square to the top edge of the paper. Set the top edge of the paper parallel to the edge of the tee-square with the stock of the tee-square firmly against the edge of the drawing board on the left-hand side.

Step 3: Hold the paper with four pieces of adhesive tape or two metal cups to hold the paper in position at four corners.

Step 4: Gently slide the tee-square down without moving the paper.

### Sub-Topic III: Sharpening of Drawing Pencils to conical point and knife edge

A well sharpened pencil is very essential to technical drawing. Pencils for lettering and freehand sketching should be sharpened to a 'conical point' while those for geometrical or engineering drawing should be sharpened to a 'chisel point'.

All horizontal lines are drawn with...