

THIRD TERM E-LEARNING NOTE**SUBJECT: BASIC TECHNOLOGY****CLASS JSS 1****SCHEME OF WORK**

WEEK	TOPIC
1	REVISION
2	WOOD WORK HAND TOOLS-BORING TOOLS, CUTTING TOOLS
3	WOODWORK HANDTOOLS (CONTD.) –DRIVING AND IMPELLING TOOLS, HOLDING DEVICES, CARE AND MAINTENANCE.
4	METALWORK HANDTOOLS- MARKING OUT TOOLS,MEASURING TOOLS, HOLDING DEVICES
5	METAL WORK HAND TOOLS (CONTD.)-CUTTING TOOLS, DRIVING TOOLS
6	MAINTENANCE OF TOOLS AND MACHINES
7	BASIC ELECTRICITY- CURRENTS, ELECTRIC CIRCUIT.
8	BASIC ELECTRICITY (CONTD.)-MEASURING INSTRUMENTS, TRANSFORMERS, ELECTRICAL APPLIANCES AND ACCESSORIES.
9&10	BASIC ELECTRICITY (CONTD.)- SIMPLE ELECTRICAL CALCULATIONS

REFERENCE MATERIALS

- MELROSE, Basic Science and Technology Book 1
- NERDC, Basic Technology for JSS, Book 1

WEEK ONE**REVISION**

1. ___ is a universal language used for communication among technical people (a) Scaling (b) Technical drawing (c) Sketching (d) Oblique.
2. Technical people include the following except (a) engineers (b) technicians (c) builders and draughtsman (d) lawyer
3. Which of the following is not a drawing instrument (a) set squares (b) French curve (c) microscope (d) pencil
4. The following are the ways of caring for a tee square except (a) use it as a toy gun (b) never use the tee square as a walking stick (c) do not use a pen knife or blade along the edge of the tee square (d) always hang your tee square after use.
5. Set squares are used to draw the following inclined angles except (a) 30⁰ (b) 60⁰ (c) 45⁰ (d) 70⁰
6. ___ is a universal language used for communication among technical people (a) Scaling (b) Technical drawing (c) Sketching (d) Oblique.
7. Technical people include the following except (a) engineers (b) technicians(c) builders and draughtsman (d) lawyer
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Name: _____ Date: _____

11. _____ is one of the quickest methods by which the shape of an object can be communicated to others. (a) Technical drawing (b) Freehand sketching (c) Scale drawing (d) Isometric drawing
12. _____ can be defined as the shortest distance between two points. (a) Straight line (b) Curve (c) Circle (d) Square
13. Isometric view is at _____ to horizontal at both sides (a) 30° (b) 45° (c) 60° (d) 90°
14. Oblique drawing is at _____ to the horizontal at one side (a) 30° (b) 45° (c) 60° (d) 90°
15. The following are the advantages of free hand sketches except (a) A good sketch reduces the task of writing needed to describe the object on the mind of the designer. (b) The ability to make freehand sketching is a valuable asset to practice Engineering work. (c) Laypersons can express themselves by freehand sketches. (d) Materials are wasted by freehand sketches
16. _____ can be defined as the accurate representation of objects in a determined proportion (a) Scale drawing (b) Freehand sketches (c) Technical drawing (d) Isometric drawing.
17. In _____ scale drawing, the object is drawn to the same size with the actual size. e.g. 1:1 (a) enlarged (b) reduced (c) full (d) proportioned
18. In _____ scale drawing the actual size of the object is reduced in proportion to the drawing. It is used when the object is too big, examples include 1:2, 1:5, 1:10, 1:50, 1:100 (a) enlarged (b) reduced (c) full (d) proportioned
19. In the scale expressed below 50 is the _____ of the object 50:1. (a) actual size (b) drawing size (c) proportioned (d) regular
20. _____ scale drawing is used when the object to be drawn is too small to be clearly seen (a) Enlarged (b) Reduced (c) Full (d) Proportioned

WEEK TWO

WOODWORK HAND TOOLS-BORING TOOLS, CUTTING TOOLS

CONTENT

BORING TOOLS

Boring tools are the tools used for making holes on wood. The major types are

1. The brace
2. The bits
3. Gimlet
4. Bradawl

1. **THE BRACE:** This is a tool used for holding and turning the drill bits or twist drill when drilling hole. There are two types of brace and they are plain brace and ratchet brace.

Parts of brace are the head, crank, chuck and ratchet.

The head: this is made of hard wood and shaped to fit the hand of the user. It is screwed to a steel sleeve it fits over the the crank rod and runs on the hardened steel balls.

The crank: This is a rectangular bent metal rod, it fits into hardwood plastic handle. It moves in circular way called "the sweep of the brace".

The chuck: the end of the crank is enlarged, threaded and slotted to receive the socket and the jaws respectively.

The ratchet: This is a mechanical device fitted to the brace so that holes can be braced in confined places such as close corners and enable the use of "Half the sweep" of the brace. A ratchet brace allows the bit to be rotated in one direction only.

2. **BITS:** A bit is a tool used in wood. Bits generally have...
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