

BST Basic Technology

Making Learning Fun!



Nigerian Educational Research and Development Council

(NERDC):

UNIFIED SCHEMES OF WORK FOR JUNIOR SECONDARY SCHOOL

(JSS ONE)

1ST TERM

BST (BASIC TECHNOLOGY)

1. UNDERSTANDING TECHNOLOGY

- Technology-Related Professions
- Importance of Technology

2. SAFETY GUIDELINES

- Safety guidelines for pedestrians
- Safety guidelines for cyclists/motorcycles
- Safety guidelines for motorists (show pictures of road signs and markings)

3. WORKSHOP SAFETY (I)

- Causes of workshop accidents
- Types of workshop accidents (show different safe work habits and attitudes)

4. WORKSHOP SAFETY(II)

- Workshop safety devices
- Workshop safety rules and regulations (show safety devices like fire extinguishers, sand bucket, etc)

5. WORKSHOP SAFETY (III)

- Accident prevention techniques

6. PROPERTIES OF MATERIALS (WOOD)

- Identification of colour, mahogany, afara, obeche, opepe, mansonia, etc.
- Classification-Hardwood and Softwood
- Properties (show specimens of aforementioned timbers)

7 & 8. PROPERTIES OF MATERIALS (METAL)

- Identification of their physical properties, sound, malleability, ductility, etc. (show samples of different metals to students).

9. CLASSIFICATION OF METAL

-Classification: Ferrous and Non-Ferrous with examples (show students various types of metal products)

10. FORMS OF METALS

- Forms e.g. Rods, Bars, Pipes, Wires, Plates, Sheet, etc.
- Square, Triangular, Round, etc.
- Properties of ceramics and glass
- Types-Bricks, Tiles, Bottles, Cups, Pots, etc.
- Properties: brittle, heat resistant, etc.

11 & 12. REVISION AND EXAMINATION.

2ND TERM

1.REVISION OF LAST TERM'S WORK

- .-Safety Guidelines
- Workshop safety
- Properties of materials, wood, metal, ceramics and glass.

2. BUILDING MATERIALS

-Common building materials: cement, sand, gravel, metal, plastics, wood, glass, leaves, ceramics, grass, etc. (have charts on the items mentioned for students)

3. USES OF BUILDING MATERIALS

4. DRAWING INSTRUMENTS AND MATERIALS (I).

-Drawing materials and materials: T-square, pair of compasses, French curves, etc.

5. DRAWING INSTRUMENTS AND MATERIALS (II).

-Uses of drawing Instruments and materials

6. DRAWING INSTRUMENTS AND MATERIALS (III).

-Care of drawing Instruments and materials

7 & 8. BOARD PRACTICE

- Basic Board Practice
- Setting drawing paper on the board
- Sharpening pencil to conical point and knife edge.

9. TITLE BLOCK (I) & (II).

- Using the T-square and set-squares for drawing boarder, horizontal and vertical lines.
- Positioning and drawing of title block.

10. FREE-HAND SKETCH

- Free-hand writing of letters and numerals.
- Basic free hand techniques of drawing lines, curves, circles, and irregular shapes.

11 & 12. REVISION AND EXAMINATION.

3RD TERM

1.REVISION OF LAST TERM'S WORK

2. HAND TOOLS

- Measuring Tools
- Setting-out and Marking-out tools
- Driving tools (students should be able to identify these tools)

3. BORING TOOLS

- Holding Devices
- Cutting and Pairing Tools.

Objectives: At the end of this lesson, the students should be able to:

- Mention and explain boring tools
- Mention work holding devices
- Mention cutting and pairing tools
- Describe the woodwork hand tools
- Uses and sketch the hand tools.

4. CARE AND MAINTENANCE OF WOODWORK HAND TOOLS

Objectives: Students should be able to explain care and maintenance of woodwork hand tools.

5. METALWORK HAND TOOLS

- Marking-Out Tools
- Measuring tools and gauges
- Driving tools.

6. METALWORK HAND TOOLS

- Cutting tools (chisels, files, hacksaw)

7 & 8. CARE AND MAINTENANCE OF METALWORK HAND TOOLS

- Definition of lubrication
- Types of lubricant
- Use of metalwork hand tool box

Objectives: Students should be able to :

- explain care and maintenance of metal work hand tools.
- define lubrication e.g oil and grease
- construct metal work hand tool box. (images like cutting tools and shaped blocks)

9. MAINTENANCE OF TOOLS AND MACHINES

Meaning of maintenance practices (Preventive, Corrective, Predictive)

(images like grease, engine oil, louvre frame, tools and machine parts, cotton, rags, etc)

10. IMPORTANCE OF MAINTENANCE

Objectives: should be able to explain why tools and machine need regular maintenance

(image like detergent, rag, brush)

11. REVISION

12. EXAMINATION

[TO OBTAIN THE COMPLETE TEXTBOOK AND THE FULL VIDEOS ON THESE TOPICS, CLICK HERE](#)