**NAME OF TEACHER: Tope Yomi**

**SUBJECT: Basic Technology**

**CLASS: JSS 3**

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| S/N | TOPIC | CONTENT | OBJECTIVES | PRACTICE QUESTIONS |
| 1 | Machine Motions  (a) Linear motion | -Linear motion   |  | | --- | |  |   Lever arrangement to produce linear motion.   |  | | --- | |  |   Use of slides and slots in mechanical systems. | Students should be able to explain the  use of levers,  linkages,  slides and  slots to produce linear motion in a mechanical system. | 1. Define motion  2. State two types of motion  3. List two types of appliance/machine that produces linear motion |
| 2 | Machine Motions  (b).Rotary Motion | Rotary Motion:  - one – way; e.g. shaft of running car;   reversible rotary motion; e.g. load drum of cranes, brakes, clutches and ratchets.   |  | | --- | |  | | Students should be able to  explain types and application of rotary motion;   |  | | --- | |  | | 1. State the function of a clutch in a vehicle  2. State at least four types of car engines  3. Explain how car engines function  4. State the function of a brake in a machine |
| 3 | Rotary Motion | |  | | --- | |  |   Principles of application.   |  | | --- | |  |   Conversion of rotary motion to linear motion:  - rack and pinion, screws, crank and slider;  - connecting rod and piston. | |  | | --- | |  |   explain the need to convert rotary motion to linear motion. | 1. State at least five machines that can convert rotary motion to linear motion. |
| 4 | Plain Figures | Examples of Plane Figures   |  | | --- | |  |   Construction of Plane Figures   |  | | --- | |  |   Determination of Areas of Regular Plane Figures,  e.g.  - triangle and rectangle of equal areas.  - square and rectangle of equal areas, etc   |  | | --- | |  |   Enlargement and reduction of plane figures: triangles,  rectangles and squares in given ratios by  (a) length of sides, and  (b) radial line method | Identify regular plane figures   |  | | --- | |  |   Construct regular plane figures of equal areas   |  | | --- | |  |   Find the area of regular plane figures   |  | | --- | |  |   Enlarge and reduce plane figures | 1. Define a plane figure.  2. Draw a rectangle of 10 by 4 and Reduce it in the ratio 3:6. |