**LESSON PLAN FOR WEEK ONE (PART ONE) ENDING FRIDAY 9TH SEPTEMBER, 2024**

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| Date | 9/09/2024 |
| Class | JSS 3 |
| Average Age | 12 years |
| Duration | 80 minutes |
| Subject | Basic Technology |
| Topic | Gears and motion |
| Specific Objectives | At the end of the lesson the students should be able to:   * Explain what gears are * State the uses of gears * Mention three (3) types of gears * Sketch the various types of gears |
| Instructional Resources | A Chart showing two mashed gears |

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| STEPS | TEACHER’S ACTIVITIES | LEARNERS’ ACTIVITIES | MODE |
| Step 1 – Identification of Prior Ideas | The teacher draws the attention of the students to the fact that in engineering, there is always need to transmit energy or motion from one shaft to another. Gears are used to achieve this purpose. | Listen with rapt attention. | Entire class |
| Step 2 – Exploration | The teacher guides the students to look round the environment and identify various vehicles that work by means of gears. | Observe and take note of various vehicles that work by means of gears. | Entire class |
| Step 3 - Discussion | The teacher explains that in engineering, there is always need to transmit energy or motion from one shaft to another. Gears are used to achieve this purpose. Gears are metallic wheels with teeth.  The teacher identifies the uses of gears as stated below;  **Uses of gears**  Gears are basically used to:  1. transmit motion from one shaft to another.  2. change the speed of shafts to either high or low speed  3. change the running direction of shaft.  The teacher identifies the types of gears as stated below;  **Types of gears**  Below are the various types of gears we have;  1. Spur gears – These are gears used for transmitting drive between parallel shafts.  C:\Users\CHUKWU CHIZOBA\AppData\Local\Microsoft\Windows\INetCache\Content.Word\IMG_20230905_175957_9.jpg  2. Bevel gears - These are gears used for transmitting power/drive between shafts at angles. They have conical cross-sections to help them achieve their purpose.  C:\Users\CHUKWU CHIZOBA\AppData\Local\Microsoft\Windows\INetCache\Content.Word\IMG_20230905_175957_9.jpg  3. Rack and Pinion gears - These are gears used for converting rotary motion of the pinion to linear motion of the rack.  C:\Users\CHUKWU CHIZOBA\AppData\Local\Microsoft\Windows\INetCache\Content.Word\IMG_20230905_175845_5.jpg | Participate in class discussion | Entire class |
| Step 4 - Application | The teacher asks the students to mention where gear mechanisms are used/applied. | The learners respond to the teacher’s questions. | Entire class |
| Step 5 – Evaluation | The teacher asks the students the following questions:   * Explain what gears are * State the uses of gears * Mention three (3) types of gears * Sketch the various types of gears | Respond to the teacher’s questions | Entire class |

ASSIGNMENT**:** State two (2) life applications of gears.

REFERENCES: Evans Basic Technology for JSS Book 1, by Elekwa I. et al (2009)

Basic Technology for JSS Book 1, by Adedokun S. A. (2016)