Prepared by : Sri. K.Chandramouli, SA(BS),ZPHS,Lakshumpalli, Pedda vaduguru Mandal,Ananthapuram

PROFORMA FOR PROJECT WORK

IDENTIFICATION OF VARIOUS TYPES OF MOTION

PROJECT SKELETON :

We use many instruments and machines in our daily life which serve good purposes. Transportation machines like Bicycle and utilitarian machine like Sewing machine are some examples. This Project work is intended to study the various types of motion in these two machines.

Preliminary Information of the Project

1. **CLASS :** 7
2. **SUBJECT : General Science**
3. **NAME OF THE LESSON / UNIT :** Motion – Its types
4. **NO. OF PROJECT :** 2
5. **ALLOTMENT OF WORK :**

a. Preparation of Project plan :

b. Project Leader :

c. Data collection :

d. Data Recording :

e. Project Presentation :

DETAILED INFORMATION OF THE PROJECT

1.TITLE OF THE PROJECT: Identification of various types of motion in Bicycle and Sewing machine

2. OBJECTIVES OF THE PROJECT:

1. To know the various types of motion exhinited by common machines like cycle and sewing machine
2. By observing the machines personally through touch sense, we can get hands on experience
3. To develop sense of appreciation towards inventions and discoveries made by scientists.

3. HYPOTHESIS :

1. The various types of motion shown by different parts of a machine help the human beings to use them according to their needs.
2. Proper understanding of various types of motion helps us to use the machines more sensibly

4. TOOLS (QUESTIONNAIRE / EXPERIMENTS / CHECK LIST/ INTERVIEW/ OBSERVATION/ SURVEY : Observation.

5. MATERIALS REQUIRED : 1. Bicycle, Sewing machine

6. PROCESS / PROCEDURE : 1. Observation

7. INTRODUCTION : Recording the various types of motion exhibited by different parts of bicycle and sewing machine and understanding them.

8. PROCEDURE : Checking over the recorded data with regard to various types of motion in bicycle and sewing machine.

9. PROCESS :

1. The differences between various parts of bicycle and sewing machine have to be noted.

2. Estimating the capacity of functioning of these parts.

3. Recording the data observed.

4. Making hypothesis based on recorded data.

10. TABLE OF CONTENT :

S.No.	Part of the cycle	Type of motion	Use
1	Cycle	Translatory motion	Displacement
2	chain	Rotatory	Forward movement
3	wheel	Rotatory	Forward movement
4	Bell	Vibratory	Sound production
5	Pedals	Oscillatory	Easy leg movement
6	Gear wheel	Oscillatory	Forward/Backward movement

Types of Motion in sewing machines :

1	pedal	Oscillatory motion	Easy leg movement
2	Small wheel	Rotatory motion	To get mechanical force
3	Needle	Oscillatory motion	For sewing
4	Larger wheel	Rotatory motion	To rotate the small wheel

11. ANALYSIS: Various types of motion helps the machine in discharging the functions of various units in bicycle and sewing machine.

12. CONCLUSION : By studying through observation practically,one can easily understand the value of various types of motion.

13. EXPERIENCES : Hands on experience is gained through observation of various types of motion in bicycle and sewing machine.

14. DOUBTS AND QUESTIONS : After studying these types of motions, pupils get the doubts that whether other machines too have fgot the same types of motions or not.

15. ACKNOWLEDGEMENTS :

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16. REFERENCES :

!. Seventh class science text book.