

EXPERIENTIAL LEARNING

CLASS: VII

SUBJECT: SCIENCE

CHAPTER: 13 – MOTION AND TIME

SUB – TOPIC: MEASUREMENT OF TIME

NAME OF THE ACTIVITY: A SIMPLE PENDULUM

MATERIALS REQUIRED: Metallic ball/ stone, thread, a stand, stop watch.

METHODOLOGY OF ACTIVITY:

- Students are divided into four groups.
- A student of each group is asked to make a simple pendulum using the metallic ball / stone with a thread which is tied to a stand. (Note: Each group is given a thread of different length)
- Each student in a group is asked to measure the time taken by the pendulum for 20 oscillations then divide it by 20 to get time period and record it as follows.
- Length of the thread = _____ cm

S.No.	TIME TAKEN FOR 20 OSCILLATIONS (s)	TIME PERIOD (s)

1. Is the time period of the pendulum nearly the same for all the members of a group?
2. Is the time period of the pendulum same for all the 4 groups?
3. Is the length of the thread same for all 4 groups?

CURIOSITY QUESTIONS:

‘The time period of the pendulum of ‘Big-Ben’ clock in London is 4 sec.’ Why is it different from other pendulum clocks?

ANSWER GUIDE:

- Is the time period of oscillation of pendulum with different length same?
- Is the length of the pendulum of Big-Ben same as that of other pendulum clocks?