

LESSON PLAN

SPECIFIC OBJECTIVES

The students learn about

- ✧ concept and definition of measurement
- ✧ need for measurement
- ✧ need for standardisation of units
- ✧ devices used for measuring length
- ✧ motion and rest; types of motion

TEACHING AIDS

Pictures/charts/models/animation on personal units of measurement; devices for measuring length; multiples and submultiples of SI units of length, mass and time. Car moving on – straight road, curved road; pendulum clock, swing; giant wheel, motion of planets around the sun; drill machine making hole, etc.

LESSON PLAN

- ✧ Teacher will start the lesson with ‘Science Vocabulary’ section by telling the meaning/definition of new terms which are used in the chapter.
- ✧ The teacher should tell the concept of measurement and unit and emphasise on the necessity of measurement.
- ✧ The teacher should discuss about various measuring units used in ancient times (as given in chapter).
- ✧ Students should be asked to perform Activity 1 in order to measure the length of a table using handspan so as to get familiar to the method of using personal units.
- ✧ The teacher should discuss the need for standardisation of units.
- ✧ The teacher should explain the metric system and the international system of units.
- ✧ The teacher should explain the multiples and submultiples of units and how they are used.
- ✧ For more clear understanding of SI units and their uses in measurements, the teacher should make students perform Activities 2 and 3.

- ✧ The teacher should discuss the common devices used for measuring length.
- ✧ The teacher should explain the correct method of measuring the dimensions of an object using a scale.
- ✧ The teacher should explain how to measure the length of a curved line by using a thread and a divider.
- ✧ The teacher should also perform Activity 4 in the class.
- ✧ The teacher should explain motion and rest and their expression as relative terms with the help of Activity 5.
- ✧ The teacher should discuss different types of motions with the help of suitable examples.
- ✧ Students should also be asked to solve Check Points 1, 2 and 3.
- ✧ The teacher will help the students to solve the questions given in exercises under the head 'Let's Drill Our Skills' and to complete the flowchart given under the head 'Let's Memorise'.

BOOST UP

- ✧ The teacher should also discuss the drawbacks of using ancient measuring units, i.e., angul, handspan, cubit, foot, etc.
- ✧ Students should also be asked to tell the different units used for measuring different fundamental quantities. They should also be asked to tell multiples and submultiples of units.
- ✧ The teacher should write names of different kinds of motions and ask the students to give two examples of each.

EXPECTED LEARNING OUTCOMES

The students understand and know the

- ✧ importance of measurement.
- ✧ different units of measurement used in ancient times.
- ✧ metric system and SI units.
- ✧ multiples and submultiples of SI units.
- ✧ rest and motion as relative terms.
- ✧ different kinds of motion and multiple motions in one action.

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students:

1. Why is measurement necessary in our daily life?
2. What is the difference between angul and handspan?
3. What are the SI units of length and mass?

4. Why are rest and motion said to be relative terms?
5. Which type of motion is of a giant wheel and the planets moving around the sun? Why?
6. Define oscillatory motion with one example.
7. What is meant by multiple motions?