

Measurement

SPECIFIC OBJECTIVES

The students learn about

- measurement and its need
- measuring units
- measuring of length, time, capacity, mass, temperature and their units

TEACHING AIDS

Pictures of weighing balance, different measuring pots, weighing machine used at grocery shop and doctor's clinic; measuring tape, metre scale, a watch, soft drink cans and bottles of different capacities, milk pouch, thermometer, devices to measure capacities

LESSON PLAN

- Teacher will start the chapter with the 'Warm Up' exercise and help the students to write the answers.
- Now, teacher will explain what the measuring is and we measure to get the correct amount of the things.
- Now with the help of teaching aids, teacher will explain that different things are measured with different measuring devices.
- Teacher will explain about measuring devices and show their different samples/pictures.
- Now, teacher will explain the concept of unit that everything is measured in a unit.
- Teacher will also explain that different units are used for measuring different things.
- Now, teacher will explain the measuring of length, time, capacity, mass and temperature and their units with the help of different teaching aids.

Measuring Length

- Teacher will explain the concept of length and correlate it with everyday life.
- Teacher will also explain about devices with which it is measured (showing pictures/sample as mentioned in teaching aids).
- Teacher will also explain about its standard unit, smaller units and larger units (as given in chapter).

Measuring Time

- Teacher will explain the need of measuring time in everyday life and show pictures/sample of different types of watch as measuring device.

Teacher can also explain the difference between a clock and a watch using the information given in 'Knowledge Tree' in the chapter.

- Teacher will explain about standard unit, smaller units and larger units of time as given in chapter.
- To check the understanding of studied topics, teacher will ask the students to solve 'Checkpoint 1'.

Measuring Capacity

- First of all, teacher will explain the meaning of capacity and show different things of different capacities such as soft drink cans and bottles, milk pouch (as mentioned in teaching aids).
- Now, teacher will show pictures/samples of capacity measuring devices of different capacities.
- Teacher will explain about standard unit, smaller units and larger units of capacity (as given in the chapter).

Measuring Mass

- First, teacher will explain that for measuring the weight of an object we weigh its mass.
- Teacher will show picture/sample of weighing balance and measuring pots.
- Teacher will explain about the standard unit, smaller unit and larger units of mass (as given in the chapter).

Measuring Temperature

- First, teacher will explain the meaning of temperature.
 - Teacher will show thermometer as measuring device of temperature.
 - Teacher will explain about standard unit and other units for measuring temperature (as given in the chapter).
 - Teacher will also explain about normal temperature of human body.
 - To evaluate the understanding of chapter, teacher will ask students to solve 'Checkpoint 2'.
- At last, the teacher will make students revise the new terms given under the head 'Remember These Terms' and sum up the lesson by going through the points given under the head 'At One Go'.
- Teacher will ask the students to solve all the questions given under the head 'Check Your Study'.

BOOST UP

- Teacher can demonstrate the measuring of all the quantities taught in the class.
- Teacher can give students an assignment to measure the length of their pencil box, tiffin, book with centimetre scale and note them in their notebook.

EXPECTED LEARNING OUTCOMES

The students

- understand the concept of measurement and its need
- know about different measuring devices
- understand the concept of length, capacity and temperature
- know about different units for measuring length, capacity and temperature

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students about the chapter.

1. Name the physical quantities.
2. Name the measuring instruments for length, time, weight and temperature.
3. Name the measuring units of length.
4. Name the measuring units of mass.
5. Name the standard unit of time.
6. What is Fahrenheit (°F)?