

3

Measurement

LESSON PLAN

SPECIFIC OBJECTIVES

The students will

- ▶ learn units of length, weight and capacity.
- ▶ know conversion of units from bigger to smaller and smaller to bigger units.
- ▶ learn the four basic operations of measurements.
- ▶ know how to solve the problems involving measurements in day-to-day situations.
- ▶ understand the use of measurements in daily life.

CONTENTS EXPLAINED INSIDE THE CHAPTER

- ▶ Units of Length (pages 109)
- ▶ Units of Weight (page 109–110)
- ▶ Units of Volume (Capacity) (pages 110)
- ▶ Conversion of Units (pages 111–114)
- ▶ Operations of Measurements (pages 115–119)
- ▶ Word Problems (pages 119–120)

TEACHING AIDS

- ▶ A metre rod, a measuring tape, a ruler, a weighing balance, weights, measuring cylinders and vessels, chalk and a blackboard.

TEACHING STRATEGY

- ▶ Students have already learnt the standard units of measurements in the previous classes. The teacher can recall this concept by asking them to complete the 'Let Us Recall' exercise.
- ▶ Then, the teacher should talk them about the relation among standard units of length, weight and capacity or volume. She should also explain them how to measure the length, quantity

and volume using measuring devices or instruments. Then, she should go to pages 109–110 for text and exercise.

- Next, the teacher should teach them the conversion of units of length, mass and capacity. To make the calculation easier, she should develop their idea of shortcut method such that they can multiply/divide by 10, 100, 1000, etc. For text and exercise, she should go to pages 111–114.
- However, the students have learnt some operations of measurement in the previous classes. But, the teacher should extend their concepts by recalling them once more, i.e., the teacher should explain them the rules to add, subtract, multiply or divide the measurements. For text and exercise, she should go to pages 115–119.
- Thereafter, the teacher should talk them about the situations from daily life in which operations of measurements are required. Hence, she should motivate them to tackle such problems.
- Further, the teacher should encourage them to solve the puzzle. She may involve them in understanding the situations practically using a balance, weights and some materials like sand, soil, pebbles, etc.
- Next, the students may prepare the recipe by applying the ideas of measurement. For this, they can take the help of elders or parents at home.
- The teacher can check their life skills by assessing their project work.

EXPECTED LEARNING OUTCOMES

Students are able to

- establish the relation between cm, m and km.
- understand the relationship of g and kg as well as mL and L.
- use the measuring devices like a ruler, a metre rod, a measuring tape, a balance, weights, etc.
- convert a smaller unit to a bigger unit and vice versa.
- add/subtract/multiply/divide the measurements.
- tackle the problems involving measurements in daily life.
- understand the application of measurements in different activities.

ENRICHMENT ACTIVITY

- The teacher can discuss about digital and electronic weighing machine to the students. Also, she can explain them the functioning of a spring balance in the classroom.