Session 36: Conversion of Mass and Volume

Session Title	Conversion of Mass and Vo
Objective	By the end of this lesson, students will b 1. Understand the basic metric units (mg, g, kg) and volume (mL, L) 2. Convert between different units of volume. 3. Solve simple real-life problems invo conversion.
Concept	Conversion of Mass and Volume
Materials Required	1. Chalk & Board 2. Guess card 3. A 1-liter water bottle 4. A 250ml juice box 5. A packet of rice (1 kg, 500g) 6. A small shampoo bottle (100ml) 7. A sugar packet (2 kg) 8. A tablespoon of oil in a transparent 9. Label the items with a number (not weight/volume).
Methodology	Activity and SEL based
Session Duration	90 Minutes

Introduction Activity (30 minutes):

Arrange a small “discovery table” at the front of the class with 6–8 everyday objects like:

- A 1-liter water bottle
- A 250ml juice box
- A packet of rice (1 kg, 500g)
- A small shampoo bottle (100ml)
- A sugar packet (2 kg)
- A tablespoon of oil in a transparent container

(Label the items with a number (not with their weight/volume).

Divide students into small groups of 3–4. Each group gets a "Guess Card" to note down their guesses.

They can observe, touch, lift (if safe) and discuss quietly.

Each group writes down their guess for the weight or volume of each item
AD_4nXcJCw-vm_P6JuBc_eOI1qb2YEH9wGavNNy0rHF9q09fRrvJxfnBV83iafau4SpDMLUNrisT-ZjU4JJXb

Teacher reveals actual weights/volumes one by one.

Groups check how close their guesses were.

Ask:

- “Which one surprised you the most?”
- “Why do you think you over/underestimated?”
- “How does the size affect your guess?”

Main Activity (50 minutes):

(15 minutes)

Facilitate a discussion on units: “How do we measure these?”

Introduce g, kg, ml, and l, and the conversion (1000 g = 1 kg, 1000 ml = 1 l).

(Draw the picture given below on a chart)

AD_4nXfSXX_xnPso3ojZU3hE6aVUERz490VFh1nV1PoFX-IVtAppnPxOJFojCU73-56kBQM9k93yXIyeqtB
AD_4nXfXdIZOpWYFheEnrhpMKMp-PhCCG46FweGafHAixu8KiT87Wrinv8qv9CK2tZzMB13Qu-MsUHN8

Which Unit Would You Use (10 minutes)

- Weighing a newborn baby
- Buying a sack of rice from the store
- Measuring the weight of a pencil
- Petrol in a scooter
- Filling a water tank
- Measuring medicine with a spoon
- Amount of water in a small juice box

Problems: (25 minutes)

Volume Conversion Problems (ml ↔ l)

1. Convert 3000 milliliters to liters.

   Answer: 3 liters

2. Convert 2 liters to milliliters.

   Answer: 2000 ml

3. A bottle contains 1.25 l of water. How many milliliters is that?

   Answer: 1250 ml

Mass Conversion Problems (g ↔ kg)

1. Convert 2000 grams to kilograms.

   Answer: 2 kg

2. Convert 5 kilograms to grams.

   Answer: 5000 g

3. A watermelon weighs 3.5 kg. How many grams is that?

   Answer: 3500 g

Review Questions (5 minutes):

1. Convert 3 kg into grams.
2. Convert 1,500 g into kilograms.
3. How many grams are there in 0.75 kg?
4. A box weighs 2,500 g. What is its weight in kilograms?

Follow Up Tasks (5 minutes):

Home work:

1. Your school bag weighs 1500 g. What is its weight in kg?
2. A cooking oil container holds 1.5 liters. Convert it to milliliters

Expected Learning Outcome:

Knowledge building:

- Concept understanding
- Able to solve real life problems involving conversion

Skill Building:

- Applying and practicing knowledge
- Team work

Resources:

Conversion of mass and volume

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