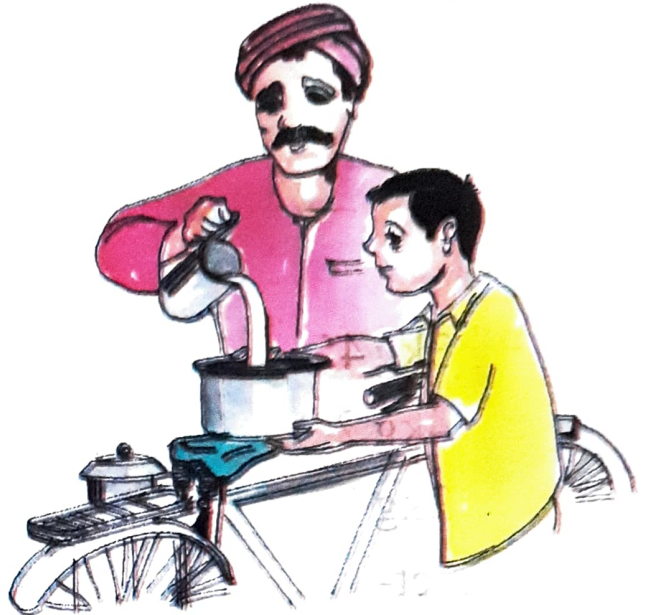


Capacity



Harihar is very happy today. He is discussing about the preparation for the festival with his mother. There was a knock at the door. He opened the door and saw the milkman standing there. He came back quickly with the utensil and said, "I need 2 litres of milk today." The milkman took out the measuring jug, measured two times with it and gave the milk. Harihar said, "Everyday you measure 1 litre twice (two times), but today you measured even 2 litres of milk twice."



The milkman replied - "I have two types of measuring jugs today because today is a day of festival." Now Harihar started thinking that "when I purchased oil yesterday, then the shopkeeper had measured only half a litre of oil in five times of measuring."

Can you clear Harihar's confusion?

- What was the capacity of the measuring jug with which the milkman measured the milk daily?
- What was the capacity of the measuring jug with which milkman would have measured the milk on the day of festival?
- What was the capacity of the measuring jug, with which the shopkeeper would have measured the oil?
- What is the capacity of the measuring jug, with which the milkman measures the milk at your home?

Understand- **Capacity is the maximum quantity of milk, oil or water which any vessel can contain.**

Make the students use measuring vessels of different capacities.

We know it-

If we measure 5 times with the container of 100 mL it will be half litre. If we measure 10 times with the container of 100mL it will be 1L.

If we measure 2 times with the container of 500 mL it will be 1L.

200mL container will be used.....times to measure 1L

100mL measured 10 times = $100 \times 10 = 1000 \text{ mL} = 1\text{L}$

200mL measured 2 times = $200 \times \dots = \dots \text{ mL}$

500mL measured 2 times = $500 \times 2 = 1000 \text{ mL} = 1\text{L}$

Now see-

There will be 3L and 500mL in 3500ml.

3500mL can also be written as -

$3 \times 1000\text{mL} + 500 \text{ mL}$ or $3000 \text{ mL} + 500 \text{ mL}$

In short, we write litre as L and millilitre as mL

Make correct pairs-

approximately 12 litres

approximately 1/2 litre

approximately 5 litres

50 mL

500 litres



Understand-

- How many litres are there in 7350 mL?

$$7350 \text{ mL} = 7000 \text{ mL} + 350 \text{ mL}$$

$$= 7 \times 1000 \text{ mL} + 350 \text{ mL} = 7 \text{ L } 350 \text{ mL}.$$

- How many millilitres will be there in 3L 125 mL?

$$3 \text{ L} = 3 \times 1000 \text{ mL} = 3000 \text{ mL}$$

$$3 \text{ L } 125 \text{ mL} = 3000 \text{ mL} + 125 \text{ mL} = 3125 \text{ mL}.$$

Now you also solve-

a. $7 \text{ L } 300 \text{ mL} = \dots\dots\dots \text{mL}$

b. $1 \text{ L} = \dots\dots\dots \text{mL}$

c. $3500 \text{ mL} = \dots\dots\dots \text{L } \dots\dots\dots \text{mL}$

d. $3000 \text{ mL} = \dots\dots\dots \text{L}$

Now add-

Bholu's cow gives 2L 500mL milk and his goat gives 1L 200mL.

How much milk is there in his home?

First, we add mL - $500 \text{ mL} + 200 \text{ mL} = 700 \text{ mL}$

Then, add L - $2 \text{ L} + 1 \text{ L} = 3 \text{ L}$

Total milk - $= 3 \text{ L } 700 \text{ mL}$

Now subtract-

Subtract 4L 520ml from 10L 880ml.

L	mL
10	880
- 4	520
6	360

It is done like simple subtraction

First, we subtract millilitres

$$880 - 520 = 360 \text{ mL}$$

Then, subtract litres, $10 - 4 = 6 \text{ L}$

Difference = 6L 360mL.

We have learnt

- The maximum quantity of a liquid contained by a vessel is called its capacity.
- $1000 \text{ mL} = 1 \text{ L}$
- To convert litre into millilitre, multiply litre by 1000.
- To convert millilitre into litre, divide millilitre by 1000.



Exercise

1. Fill in the blanks-

- $3150 \text{ mL} = \dots\dots\dots \text{ L } \dots\dots\dots \text{ mL}$
- $4 \text{ L } 600 \text{ mL} + 3 \text{ L } 50 \text{ mL} = \dots\dots\dots$
- $7 \text{ L } 500 \text{ mL} - 3 \text{ L } 400 \text{ mL} = \dots\dots\dots$
- $17 \text{ L } 800 \text{ mL} - 9 \text{ L } 950 \text{ mL} = \dots\dots\dots$

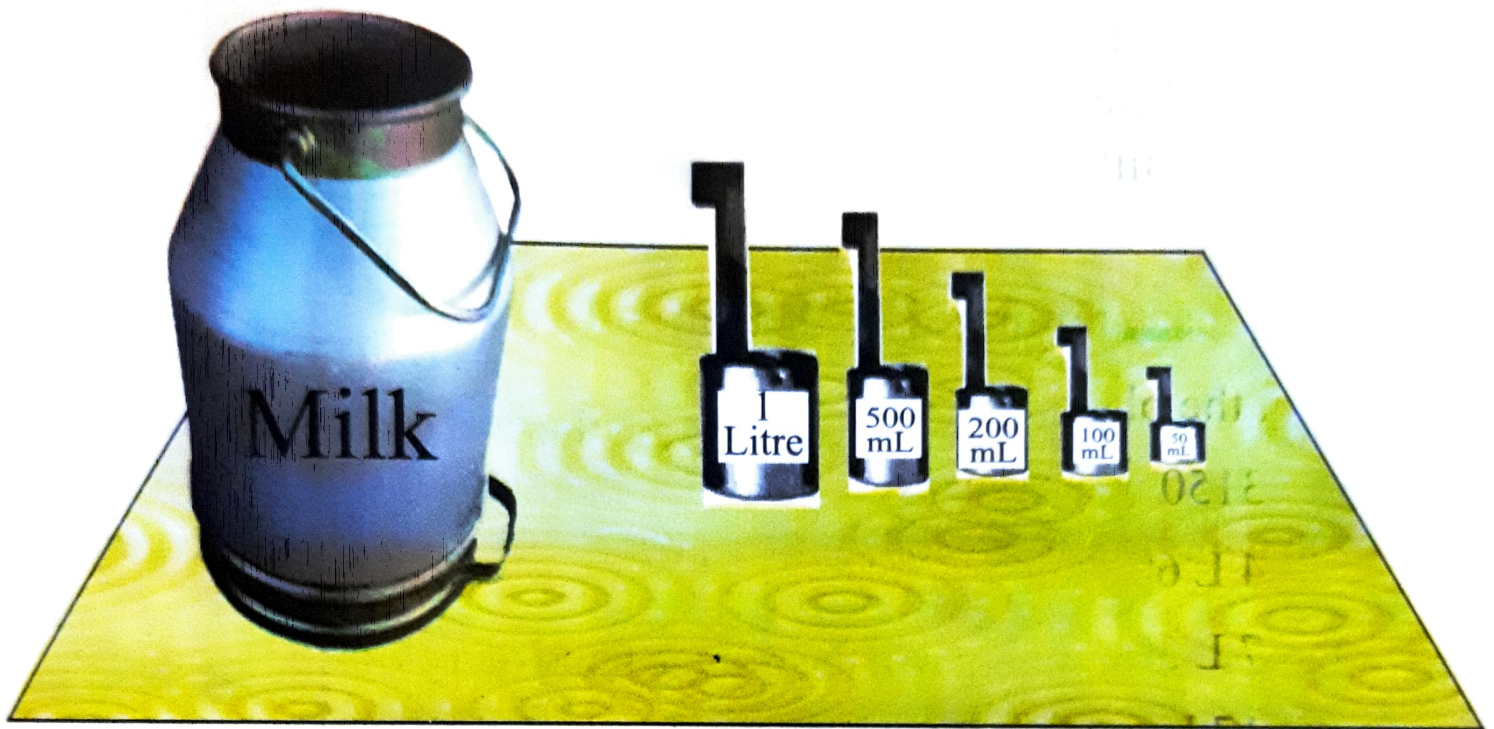
2. Add and write-

- $1 \text{ L } 500 \text{ mL} + 3 \text{ L } 500 \text{ mL} = \dots\dots\dots$
- $6 \text{ L } 500 \text{ mL} - 4 \text{ L } 300 \text{ mL} = \dots\dots\dots$
- $7 \text{ L } 500 \text{ mL} + 3 \text{ L } 600 \text{ mL} = \dots\dots\dots$
- $8 \text{ L } 600 \text{ mL} - 2 \text{ L } 800 \text{ mL} = \dots\dots\dots$

- A container has $14 \text{ L } 300 \text{ mL}$ oil. Another container has $10 \text{ L } 100 \text{ mL}$ oil. How much total oil is in both the container?
- $24 \text{ L } 400 \text{ mL}$ petrol is in the tank of Managan's car. $11 \text{ L } 200 \text{ mL}$ petrol was consumed in the journey. How much petrol is left in tank of the car?

Provide adequate opportunities for practice to understand the concept of addition and subtraction by converting millilitre into litre and litre into millilitre.

Dairy



Write, how many times the following measuring jugs will be used to measure milk-

Sl.	Required milk	50 mL	100 mL	200 mL	500 mL	1 L	2 L
1.	750 mL	1 time		1 time	1 time		
2.	1000 mL						
3.	500 mL						
4.	250 mL						
5.	4 L						
6.	1 L 500 mL						
7.	5 L 250 mL						
8.	6 L 750 mL						

Ask them for activities to measure the different quantities of water.

How Much have you Learnt?

1. Write the time by the clocks in the boxes.



2. How many millilitres are there in half a litre?
3. How many kilograms and grams are there in 6250 g ?
4. On which numbers will both the hands of a clock be at 12 o'clock ?
5. On which numbers will the minute hand of a clock be at quarter past 10 ?
6. Fill in the blanks-
- a. 1 minute = seconds b. 2 kg 300 g =g
- c. 1 kg = g d. 3000 mL = L
7. A shopkeeper had 56 kg 25 g ghee. He bought 30 kg 75 g more ghee. How much total ghee would he have now?
8. A bucket has 23 litres of milk. The milkman has measuring jugs of 1 L, 2L, and 5L. In how many least attempts the bucket can be emptied by using these measuring jugs?
9. What will be the sum of the greatest and the smallest numbers of 4 digits formed with 2,4,6, and 9.

10. Find the sum of the place value of 4 and 3 in number 5432.

11. Observe the pattern and complete them-

A. 4, 8, 12,,,

B. 20, 40, 60,,,

C. 100, 200, 300,,,

D. 500, 1000, 1500,,,

12. Draw a line segment of 6cm in your notebook.

13. A rectangular garden has length of 20metres and breadth of 15 metres. Find the perimeter of the garden.

14. Match the correct pairs-

12	L
25	XXXVI
36	XXV
50	XII

15. Convert into kilograms and grams-

- | | |
|----------|----------|
| a. 2535g | b. 5475g |
| c. 8019g | d. 8895g |

16. Convert into litres and millilitres-

- | | |
|-----------|-----------|
| a. 4550mL | b. 6125mL |
| c. 3790mL | d. 4550mL |