



## Geometry &amp; Measurement Concepts - NCERT Chapter 11: Jugs and Mugs

Students will be able to use the standard measure of '1 litre' to measure the capacity of familiar objects

40- 50 min

PRE REQUISITES:

G2. 72 Know how to measure capacity in non-standard units

TLM



A 1 litre unit measure

MISCONCEPTIONS

Students may confuse capacity with mass and use Kilogram or grams as units for describing capacity



KEY VOCABULARY

Litre, litres



## PLAY



Visualize 1 litre of water using 1 litre water bottle

○ Show a 1 litre water bottle or 1 litre measure, a bucket and a large bowl to the students

QUESTION

How many bottles of water do you think will be required to fill the bowl?

○ Call one student to use 1 litre water bottle to fill water into the bowl

QUESTION

How many bottles of water was required to fill up the bowl?

○ Encourage the students to reply in terms of number of bottles (Eg. 2 full bottles of water)

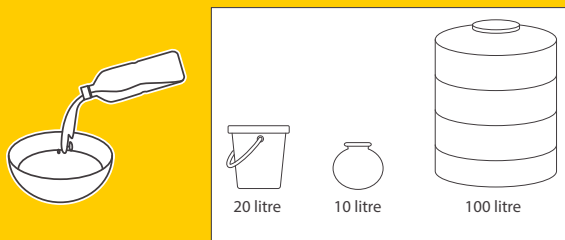
QUESTION

How many bottles of water do you think will be required to fill a bucket?

○ Name any other container that can hold about 5 bottles of water?



## PROCESS



Understanding capacity of everyday containers in litres

○ Show a 1 litre bottle of water and tell students that the amount of water it can hold is called 1 litre

○ Pour 2 bottles of water into a large bowl and explain that the bowl now has 2 litres of water

○ Pour 1 bottle of water into a mug and explain that the mug now has 1 litre of water

○ Draw a bucket, a pot, and a water tank on the black board

○ Explain that each container has a different "capacity" or the amount of water it can hold

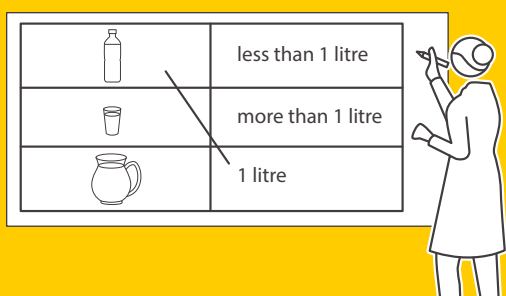
○ Point to each container and tell its capacity. For eg. A pot can hold 10 litres of water, a bucket can hold 20 litres

QUESTIONS: Have you seen people buy milk packets? How many 1litre bottles can you fill using a 2 litre packet of milk?

○ A bucket has a capacity 15 litres. How many units of 1 litre can it fill?



## PRACTICE



Draw the containers and ask the students to match them with their capacities

○ Help the students solve question 3 from the worksheet. Ask the students to match the containers with the amount of juice each can hold

|  |                   |
|--|-------------------|
|  | less than 1 litre |
|  | more than 1 litre |
|  | 1 litre           |

QUESTION

Name one more container that can hold less than 1 litre of water

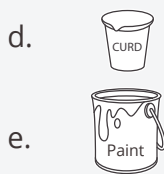
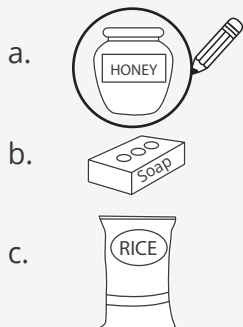
○ Help the students solve question 4 from the worksheet. Ask the students to identify how many bottles of 1 litre can these containers fill

| Object | How many bottles of 1 litre can it fill? |
|--------|------------------------------------------|
|        |                                          |
|        |                                          |
|        |                                          |

○ Emphasize that liquids like water, milk, dal, soup, are all measured in litres. Solid objects like a ball, pebbles, marbles are all measured in grams or kilograms



① SOLVED EXAMPLE : Circle the things in the list that can be measured in litres:



② Circle the object which has capacity more than 1 litre

A small shampoo sachet

A watering can

A small bowl

③ Match the containers with the amount of juice each can hold

|  |                   |
|--|-------------------|
|  | less than 1 litre |
|  | more than 1 litre |
|  | 1 litre           |

④ How many bottles of 1 litre can these containers fill

| Object                       | How Many bottles of 1 litre can it fill ? |
|------------------------------|-------------------------------------------|
| A 5 litre cooker full of dal |                                           |
| A 20 litre tub of water      |                                           |
| A 3 litre oil jar            |                                           |
| A 3 litre oil jar            |                                           |

⑤ Match the containers with the items it can store

|           |                    |
|-----------|--------------------|
| A pitcher | 2 litres of oil    |
| A bucket  | 50 litres of oil   |
| A tank    | 20 litres of water |



Find out the three largest vessels/objects/containers at your home.