


Grade: 3

Chapter number and name: Chapter 11, Jugs and Mugs

Learning Objectives:


1. Measuring and comparing the capacity of containers, used in daily life, in terms of non-standard units.
2. Getting a rough idea about how much one litre is.
3. Using standard measuring units, such as 1 litre, 500 ml, 200 ml, etc.

Learning Objective 1: Measuring and comparing the capacity of containers, used in daily life, in terms of non-standard units

Suggested Strategies	Continuous Review	Resources
<p><u>CRA [Concrete – representation of Abstract]</u></p> <p>The teacher needs to present a number of vessels in front of the students and ask them which of the vessels can hold more water than the other. The students can be asked about the vessels that they use daily to carry water, milk, oil, and juice. A discussion can be carried out with the children about the capacity of the different vessels.</p> <p>The teacher can provide a few real-life examples of how much water one can drink, the vessels used for drinking water, and the vessels used by cows to drink water.</p> <p>These examples will enable the students to have an idea about and distinguish the quantity of non-standard measures.</p> <p>Activity 1: Vessels of different capacities can be given to children, as for example, a bucket and a mug. The students can then be asked to fill the bucket with the mug.</p>	<p>To check the understanding of students about capacity.</p> <p>Questions:</p> <ol style="list-style-type: none"> 1. Is it possible to fill a bucket with water with the help of a spoon? 2. Can a tank be filled with a single bucket of water? 3. Would you use a glass or a bucket to fill your water bottle? 4. How many mugs of water is needed to fill the bucket? 5. How many glasses of water is needed to fill the mug? 6. How many spoons of water is needed to fill the glass? 	<ol style="list-style-type: none"> 1. A bucket, a mug, a spoon, and a glass. 2. Worksheet 1. <div style="text-align: center;">  </div> <p style="text-align: center;">Image</p>

<p>Similarly, a mug and a small glass may be given to the students, and they can be asked to fill the mug with the glass.</p> <p>Further, the students can be given a glass and be asked to fill the glass with the help of a spoon.</p> <p>Activity 2: The above activity can be done in reverse. The students can be asked to empty the vessels instead of filling them.</p> <p>These activities will help the students to understand non-standard measures in a clear manner.</p>	<p>7. Which vessel has the highest capacity?</p> <p>8. Which vessel has the lowest capacity?</p> <p>9. Is it hard or easy to fill the bucket with the spoon? Why is it so?</p> <p>Questions:</p> <p>1. Is it easier to empty a bucket with a spoon or with a mug?</p> <p>2. Can a small glass be used to empty a big bucket?</p> <p>3. Can a leaking tap fill a bucket? How much time will it take?</p>	
---	--	--

Learning Objective 2: Getting a rough idea about how much one litre is.

Suggested Strategies	Continuous Review	Resources
<p>1. Ask the following questions to test the prior knowledge of students about measuring liquids using standard units of measuring, such as 1 litre, half litre, and millilitres.</p> <p>Questions to check their prior knowledge:</p> <ol style="list-style-type: none"> 1. Have you seen a milkman selling milk? 2. How will ask the milkman to give a quantity of milk? 3. How will ask for a quantity of milk when it is sold in packets? 4. How will you ask for oil from a shop? 	<p>Questions:</p> <ol style="list-style-type: none"> 1. Rahul wanted to buy 2 litres of oil. But the shopkeeper said that only 500 ml packets were available. How many 500 ml packets would Rahul need to buy? 2. How many 200 ml makes 1 litre? <p>The students should be observed during the activity to check</p>	<p>1. Vessels used by a milkman (as shown below).</p> 

Expected answers from children:

1. Yes. He brings the milk in a big can and measures in terms of half-litre, one litre, and 200 millilitres.
2. Half a litre of milk.
3. Half-litre packet or 1 litre packet.
4. One litre of oil.

From the responses of the students, explanation can be provided to them that liquids are measured in terms of litres and millilitres. The teacher can explain about standard measures of measuring liquids, such as litre, 500 ml, 200 ml, 100 ml, and so on.

The teacher can also remind the students about the time they take syrup when they fall sick, showing them that medicinal syrups are measured in millilitres.

Activity 3—Milkman Activity: A child can be asked to play the role of a milkman. He must be provided with measures as shown in the picture. The other students can be asked to get milk from him.

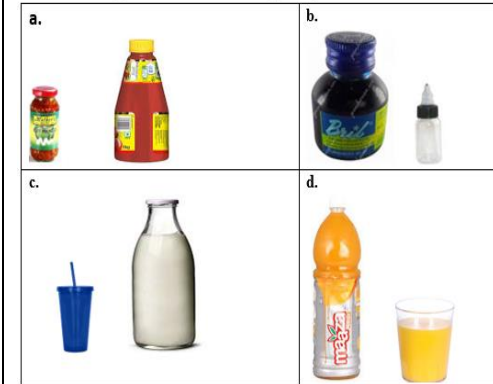
1. The student playing the role of the milkman can be asked to give 1 litre 2 litres, and other quantities with the help of the 200 ml mug.
2. The student playing the role of the milkman can be asked to measure 1 litre, 2 litres, and other quantities with the help of the 500 ml mug.

The above activity will help the students have a fair idea that 1 litre is made up of 1000 ml.

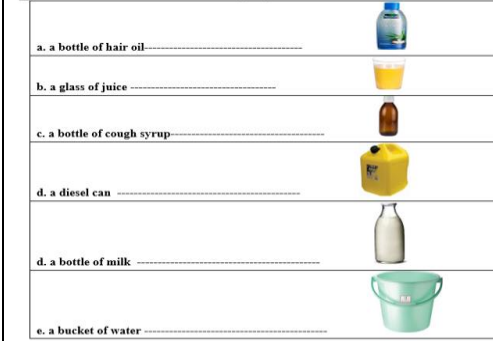
whether they are learning the concept.

2. Worksheet 2

1. Circle the object which can hold less quantity.

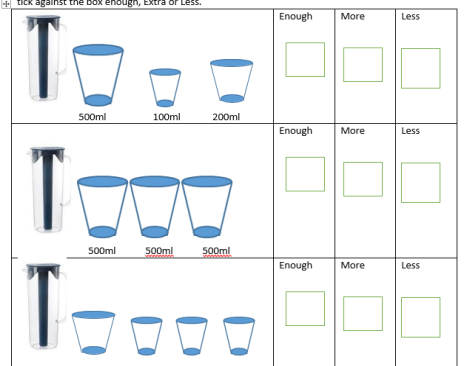


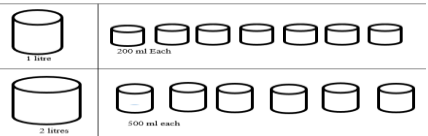
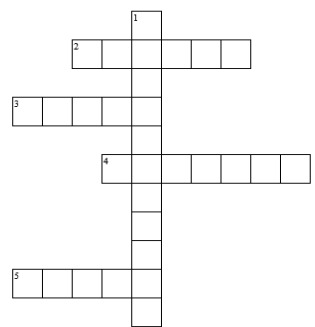
II. Choose the Most Suitable units of capacity litre or Millilitre



Image

Learning Objective 3: Using standard measuring units, such as 1 litre, 500 ml, 200 ml, etc.

Suggested Strategies	Continuous Review	Resources
<p><u>GBL: [Game Based Learning]</u></p> <p>Winning Strategy: The students are required to empty a bucket using different units of measurement. They must go from the lowest to the highest unit. Using any unit of measurement, they have to pour out one litre. For example, using a 100 ml mug, the students have to pour out water ten times to empty one litre. They will be required to empty water five times using the 200 ml mug and two times using the 500 ml mug. After having done this, the students have to record their measurements in a chart. One who measures correctly and empties the bucket will be declared the winner.</p>	<p>Questions:</p> <ol style="list-style-type: none"> 1. How many units of 500 ml are needed to make 2 litres? 2. How many units of 200 ml are needed to make 1 litre? 3. How many units of 100 ml are needed to make 1 litre? 4. How many units of 500 ml are needed to make 1 litre? 	<ol style="list-style-type: none"> 1. 5 litres of water in a bucket. 2. Measures: 100 ml, 200 ml, 500 ml, 1 litre. 3. Charts: A4 size 4. Worksheet 3  <p style="text-align: center;">Image</p>

Suggested Strategies	Continuous Review	Resources
<p><u>Integrating Art</u></p> <p>After students are aware of the concept of litres and millilitres, a worksheet can be given to them so that they can integrate art with their learning.</p>	<p>Questions:</p> <ol style="list-style-type: none"> 1. How many units of 100 ml make 1 litre? 2. How many units of 200 ml make 1 litre? 3. How many litres are there in 5 litres? 4. How will you measure your cough syrup? 5. How many units of 500 ml are there in 1 litre? 	<p>Worksheet 4</p> <p>Notebook: The students can be asked to draw a picture of a 1 litre oil packet, a 500 ml milk packet, a 500 ml coconut oil bottle, and other things.</p> <p>How many containers needed to fill the big container? colour them in blue.</p>  <p style="text-align: center;">Image</p>
<p><u>Integrating Language and Math</u></p> <p><u>Math Talk:</u></p> <ol style="list-style-type: none"> 1. The students can be divided into groups of five. Then, the students can be asked to share various quantities of juice, such as 1 litre, 2 litres, 500 ml, amongst themselves equally. 2. The students can be divided into groups of two. They must be told about the Vitamin A supplement that is given to every kid by the Government (1 ml approx.). They can then be asked how much quantity is needed for their class and for their schools. 3. The government is providing oil for each family for Diwali. 100 ml of oil is provided per head. How much oil will a family get if the family consists of 3 members, 4 members, and so on. <p><u>Crossword</u></p> <p>Complete the given crosswords given in Worksheet 8</p>		<p>Worksheet 8 (crossword)</p> <p>Find Measuring Units (Liters or Milliliters)</p>  <p style="text-align: center;">Image</p>