

Jugs and Mugs



0219CH07

Make and Enjoy Lemon Drink

You will need



Half a lemon



A pinch of salt



One spoon of sugar



One glass of water

How to make it:



Guess and then find out:

How many drops of lemon juice do you get from
half a lemon? 10 - 12

How many drops of lemon juice do you get from
a full lemon? 20 - 24

How many drops of lemon juice fill one
spoon? 12 - 13

Enjoy your lemon drink!

To make a drink, locally available material can be used or the name of the drink can also be substituted. The focus should be on volume.

For making 6 glasses of lemon drink –

How many lemons will you need? 3 lemons

How many spoons of sugar will you take? 6 spoons

Lemon Drink Stall at a Village Fair

There is a fair in Chaitra's village. Chaitra, Nazim and Aneesh want to put up a stall to sell lemon drink. They make a  bucket full of lemon drink.

They use two  different sizes of glasses.



Aneesh got a  jug.

Do you think it is easier to pour into a  glass from a  jug than a  bucket?

Nazim found that two big glasses fill the jug.

Shabnam wants to buy one jug full of lemon drink.

How much does she need to pay? 20 ₹

Chaitra found that two small glasses fill one big glass.

How many small glasses of lemon drink will fill the jug? 4 small glasses

How many small glasses will fill half the jug? 2



Fun in Filling Vessels

Find out how many cups of water will fill your bottle.

First guess and then try it out. 5 cups

Now, fill a different bottle with the same cup.

Which bottle holds less water?

Try it with another bottle.

Which bottle holds the least water?



Sunaina and Jaspreet brought different **vessels** from the kitchen. They had a jug, a glass, a mug, a pot and a bowl.

They filled each of these with a cup.



Guess which vessel holds the least water. bowl

Which vessel holds the most water? pot

Now, you collect different vessels from your kitchen.

Use the same cup to fill each of them.

Count the number of cups of water each of them can hold.

First guess and then do it.

<i>The vessel you used</i>	<i>Cups of water to fill it</i>
	3 cup
	50 cup
	10 cup
	4 cup

Ring the one which holds more water.

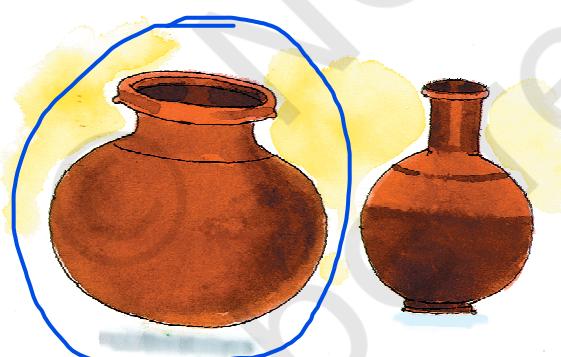
(a)



(b)



(c)



(d)



Rani and the Milkman

Anil is a milkman. He gives the same amount of milk at Rani's house every day. He uses a mug three times to fill Rani's milk pot .

One day Rani's mother gave her a different pot to take milk. Every day Rani's pot would fill to the top. But today Rani found that the pot was not filled completely.



Do you think Anil has given Rani less milk? Help her.

Find out

How much milk does your mother buy every day? _____

Try Yourself

Take five different types of big vessels from your kitchen.

Fill all of them one by one with one jug full of water.

What do you see? Why?

Talk to your friends about it.

Thirsty Crow

Chirpy crow was very thirsty. It looked everywhere but could not find water. Suddenly it saw a  pitcher (*matka*).

When it tried to drink water, it found there was very little water in the  pitcher.

It saw  pebbles lying nearby.



It put the  pebbles into the  pitcher one by one.



The water came up .

Chirpy drank water and flew away.



Do You Want to Be Like Chirpy?

Do you want to know how the water in the  pitcher came up? **Yes**

Take two  glasses of the same size.

Fill half of each glass with water.

You have to put tamarind (*imli*) seeds in the first glass to raise the water to the top. Guess how many seeds you will need to put in. **15-20**

Now, do it.

Count the number of seeds used. **15-20**

Now put the same number of marbles in the second glass.

What happens?

Repeat it with stones.

What happens now? Why?

Talk about it in the class.



Water is Useful

Find out how much water (in mugs or buckets) is used in your house for each of the following.



5 buckets



3 buckets



1 bucket



1 bucket

Guess and then find out:

a) How many mugs of water fill one bucket?

15 mugs

b) How many buckets of water do you use to take a bath? 1 bucket

c) How many mugs of water do you use to take a bath?

15 mugs



How much water will fill a balloon?

1 Mug

How much water is needed to fill a water gun (pichkari)?

1 Mug



I can drink 9 buckets of water at once. How many buckets can two camels drink at once?

18 buckets



Children should be encouraged to do the activity at home and note the observations. A discussion can be held in the class to compare the volumes of various vessels used by children.