



Jugs and Mugs



0219CH07

Make and Enjoy Lemon Drink

You will need



Half a lemon



A pinch of salt

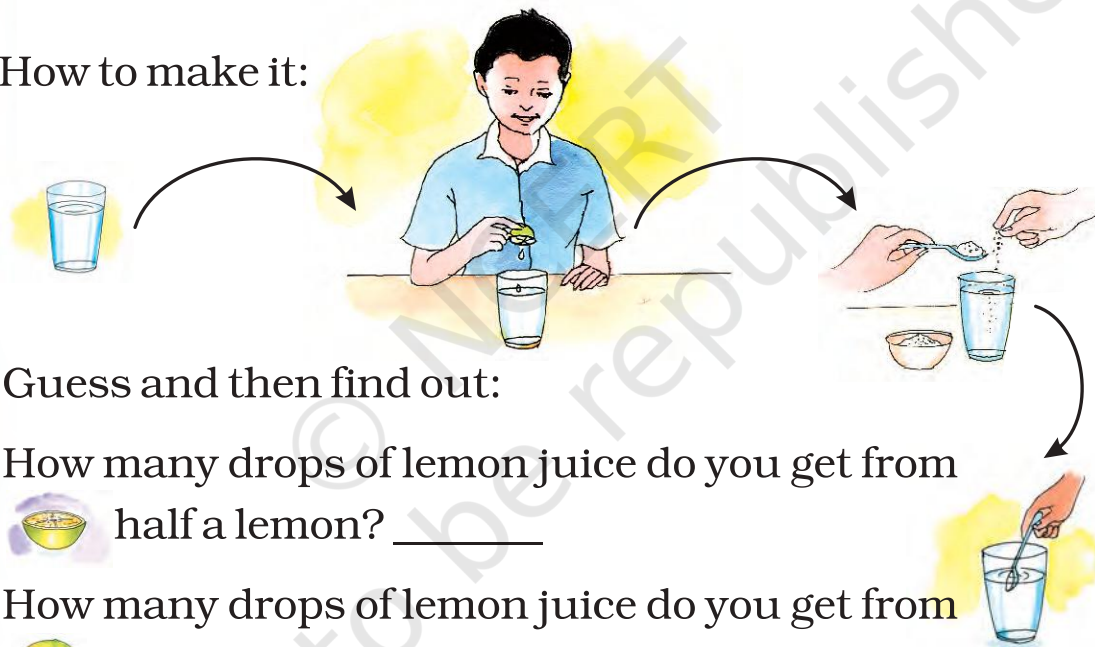


One spoon of sugar



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? _____

How many drops of lemon juice do you get from
 a full lemon? _____

How many drops of lemon juice fill one
 spoon? _____

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 –

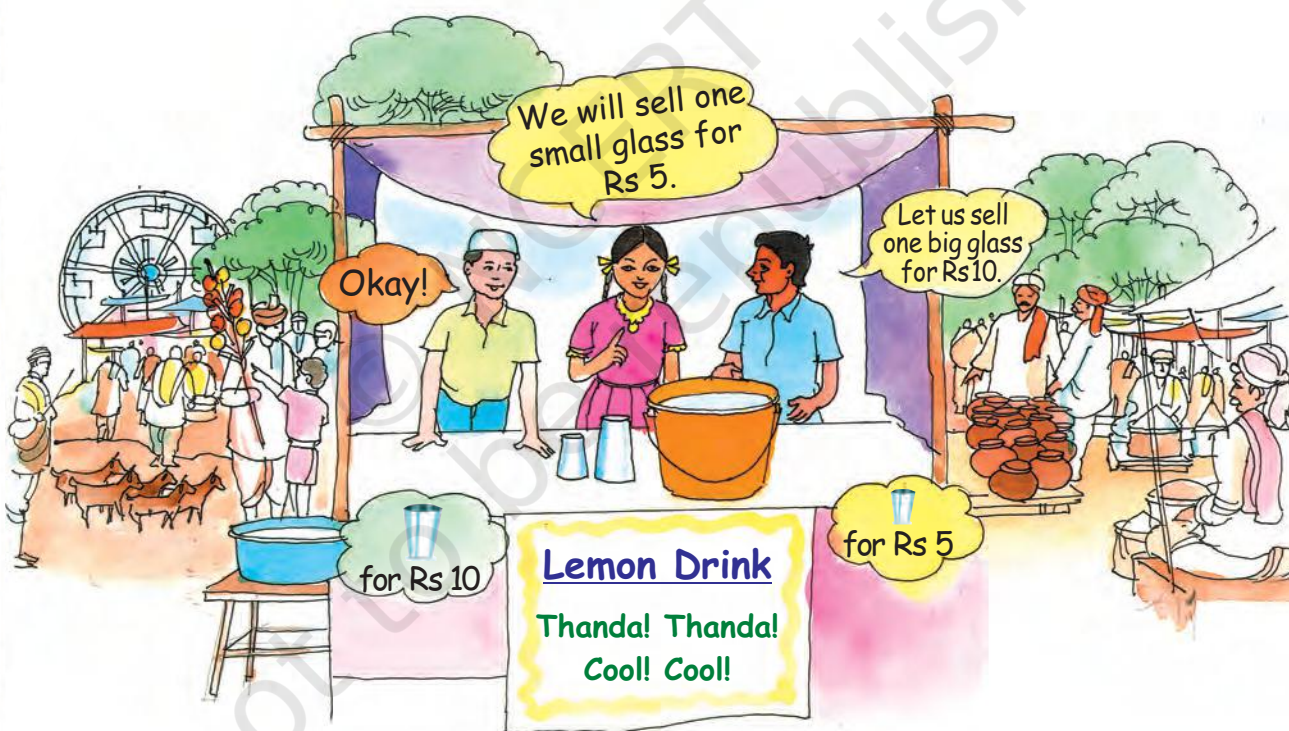
How many lemons will you need? _____

How many spoons of sugar will you take? _____




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? _____

Chaitra found that two  small glasses fill one  big glass.

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

How many  small glasses will fill half the  jug?

Fun in Filling Vessels



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

First guess and then try it out.






Now, fill a different  bottle with the same cup.

Which bottle holds less water?

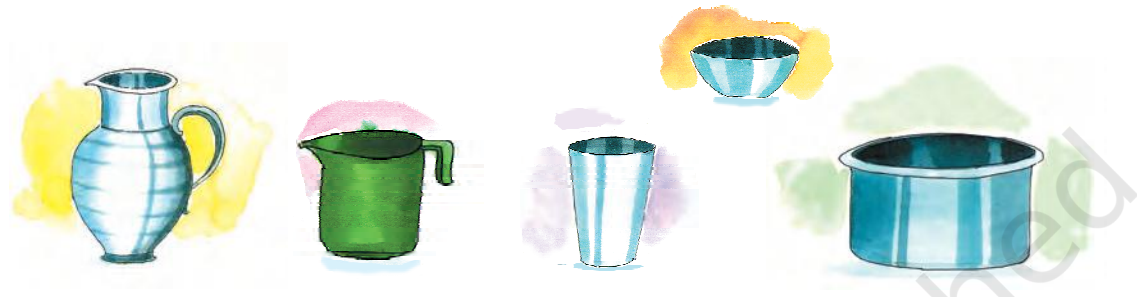
Try it with another  bottle.

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. _____


Which vessel holds the most water? _____

Now, you collect different vessels from your kitchen.

Use the same  cup to fill each of them.

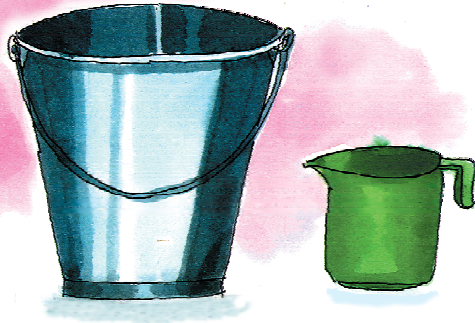
Count the number of cups of water each of them can hold.

First guess and then do it.

The vessel you used	Cups of water to fill it
	

Ring the one which holds more water.

(a)



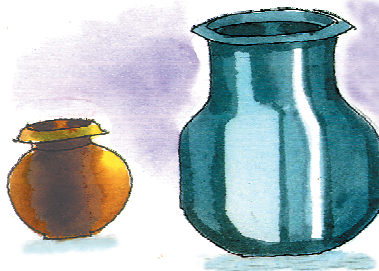
(b)





(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?

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.

Now, do it.

Count the number of seeds used. _____

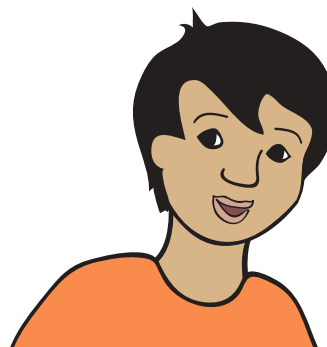
Now put the same number of marbles in the second glass.

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.



Guess and then find out:

- a) How many mugs of water fill one bucket?

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

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



How much water will fill a balloon?



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

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



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.