

3

Double Century



0333CH03



THE STORY OF OUR NUMBERS

Tens of thousands of years ago, people started counting. They wanted to keep records of their things. So they made marks on the walls of caves and on the barks of trees.

Over time, they kept records of their things by making groups of 5, 10, 20, and 60.

Thousands of years ago, the ancient Indians created a method for writing any number, however large, using only ten symbols: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. It was one of the most ingenious and creative inventions in human history. It made possible the invention of TVs, computers, mobile phones, and more. This method of writing numbers is now used everywhere in every country in the world.

A very important part of this invention was the introduction and use of the symbol “0” to mean “nothing”. It is the number 0 that really made this system of writing numerals work!

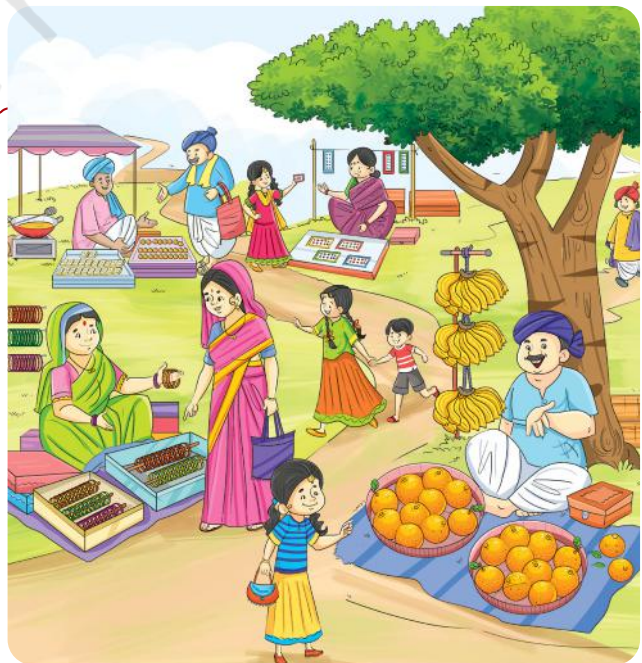
Over the next few months, we will learn how to write all numbers, however large, using just these ten symbols.



Let us Do

1. Look at the picture. Estimate and write the number of each of the following objects.

- a. Oranges :
- b. Bangles :
- c. Laddoos :
- d. *Barfi* :
- e. *Bindis* :
- f. Bananas :





Let us Play

Fill the missing numbers on the board.

END		98	97				92	
			84	85				
	79				75			72
61	62		64				68	69
		58			55		54	
41	42			45			48	49
	39		37					32
21	22			25	26		28	30
	19	18			15			29
1	2	3		5		7		11
							9	

Answer the following on the basis of the Snakes and Ladders board:

- Which number will you reach if you take the ladder from 13?
.....
- If you are on the snake at number 25, which number will you reach?
- You are standing on 96. Which number on the die will take you to the snake's mouth?
- Show the number written on the tail of the longest snake using bundles and loose sticks.



Let us Think



I am a talking Pot.
Tell me any number, and
I will tell you the next.

I said 42, Pot
said 43



I said 39, Pot
said

I said 63, Pot
said

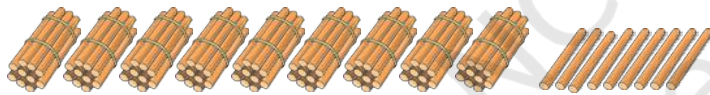
I said, Pot
said 90



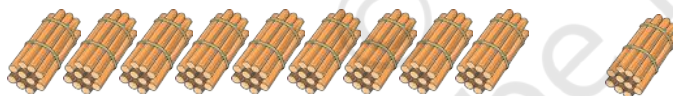
I said, Pot
said.....

I said **99**, Pot
said **100**

What is
100?



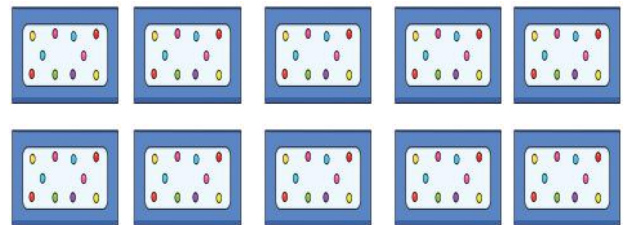
and one more  makes 100.
One more than 99 is 100.



10 bundles of 10 sticks each
is 100 sticks



Oh, he scored a century.
That is a 100 runs



10 Packets of 10 bindis each
makes 100.



Teacher's Note: Encourage children to represent numbers with matchsticks in the form of bundles and loose sticks.



These beads are also 100 in number.

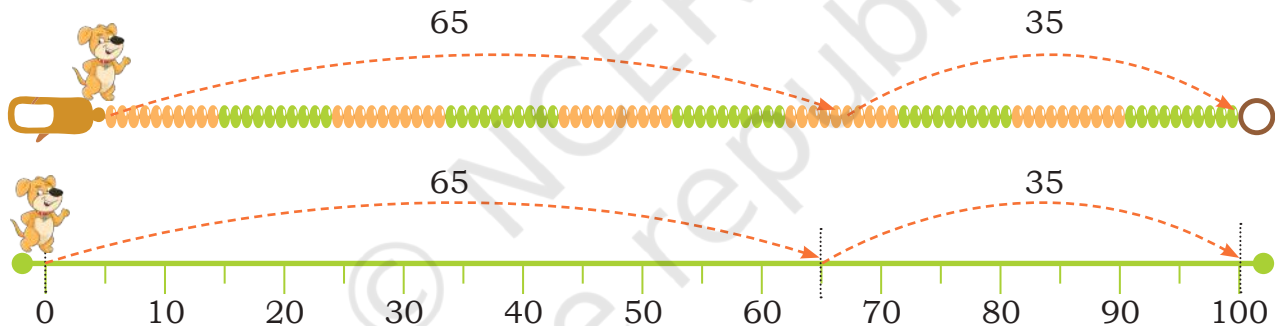


Let us Do

1. Fill in the blanks.

Making 100	Number sentence
	70 and 30 makes 100
	__ and __ makes 100
	__ and __ makes 100

Bholu made 100 by jumping on 65 and jumped 35 more.



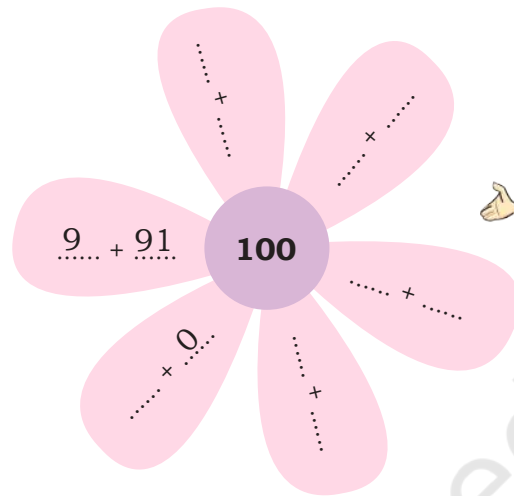
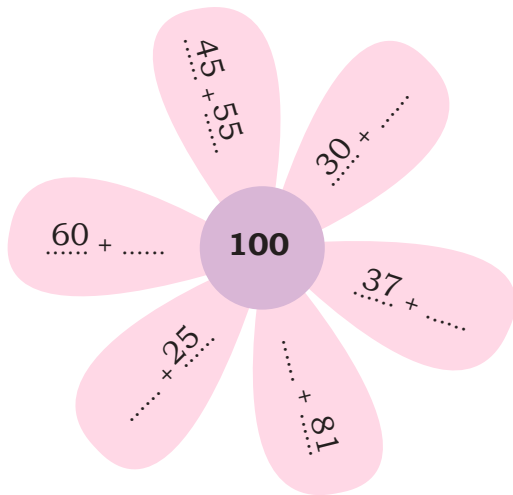
Make 100 by different jumps on this number line.



2. Use matchstick bundles and a *ginladi* to make 100 in different ways. Fill the table below.

60 and 40 makes	45 and makes 100.
..... and 25 makes 100.	..... and 85 makes 100.
..... and makes 100.	..... and makes 100.

3. Write numbers in the blank spaces inside the flower petals so that the numbers in each petal add up to 100.



Let us Explore

How many are 100?

1. Open a full box of matchsticks.

- Estimate the number of matchsticks in the box:
- Count the number of matchsticks in the box:
- How close was your estimate?
- How many boxes of matchsticks will get the total close to 100 matchsticks? boxes.



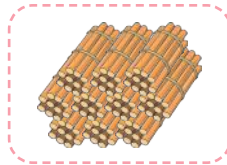
2. Take a handful of seeds like kidney beans, chickpeas, etc.

- Estimate the number of seeds you have in your hand:
- Count the number of seeds in your hand:
- How many handfuls of seeds will get the total close to 100 seeds? handfuls.





Are these 100?



Yes, 10 bundles of 10 sticks means one bundle of 100.



Let's observe the table and learn to write numbers beyond 100. Fill in the blank spaces.

	100 and 1 makes One Hundred One	101
	100 and 2 makes One Hundred Two	102
	100 and 3 makes One Hundred	103
	100 and 4 makes One Hundred	104
	100 and 5 makes One Hundred Five	.....
	100 and 6 makes One Hundred.....	106
	100 and 7 makes One Hundred Seven	.....
	100 and 8 makes One Hundred	108
	100 and 9 makes One Hundred .....	.....
	100 and 10 makes One Hundred Ten	110

Fill the blank spaces on the number line given at the edge of the page.





Let us Do

- Let's continue making numbers above 100 using matchstick bundles and loose sticks.

In the table given below, identify the bundles and loose sticks and write the corresponding numbers.

Bundles and Sticks	Matchstick bundles			Number
	100	10s	1s	
	1	2	3	123

	104

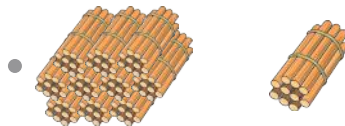
	120

Extend this table in your notebook till 150. Do you observe something common in all the numbers?

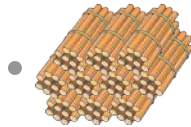


Match the numbers with the correct bundles and loose sticks.

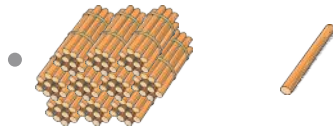
101



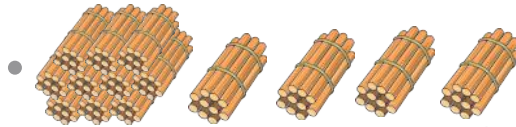
116



110



100



140



Oh! Talking Pot is back. It will say one more than whatever you say.



Bholu said



Pot said



Bholu said



Pot said

127
109
134

128
.....
.....

105
.....
100

.....
150
.....

Fill the blank spaces on the number line.



Show the following numbers on the number line below.

- Place an arrow on 125.
- Make a tree on 112.
- Make a smiley on 149.
- Put a cross **x** on 137.





Let us Play

Clap, Snap and Pat



One clap represents 100 One snap represents 10 One pat represents 1
 Two claps represent 200 Two snaps represent 20 Two pats represent 2

I can create numbers by clap, snap and pat. Guess the numbers I make.

Play this game in two teams. One team will show a number using clap, snap and pat and the other team will guess it.

Example: Clap – Snap Snap – Pat Pat Pat means 123
 (One hundred and twenty three)



Let's now count beyond 150.

Pictorial form	Matchsticks Bundles			Number sentence	Number name
	100	10s	1s		
	1	5	0	150	One hundred and fifty
	1	5	1	100 and 51	One hundred and fifty one
	.....	.....	.....	100 and 52	One hundred and fifty two
	1	.....	3	100 and	One hundred and fifty three
	1	5	.....	100 and	One hundred and fifty four
	1	5	.....	100 and 55	One hundred and fifty five
	1	.....	6	..... and 56	One hundred and fifty six
	.....	5	7	100 and	One hundred and fifty seven
	.....	.....	.....	..... and	One hundred and fifty eight
	.....	.....	.....	..... and	One hundred and fifty nine

Extend this table till 200 in your notebook. How much is 200?



199

189



Let us Do at Home

Fill a small container like a small bowl with seeds such as kidney beans, chickpeas, etc.



182

Look closely at the container to estimate how many seeds are in it. Your Estimate: seeds.

Now count and see how close your estimation is to the actual number of seeds. Counted seeds.

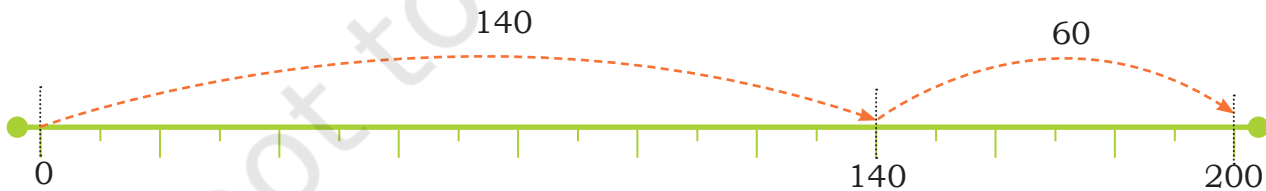


Guess how many times you need to fill the container to get close to 200 seeds? Your guess: times.

177



I can show 200 on the number line too.
 $150 + 50 = 200$
 $140 + 60 = 200$



Write the numbers in order on the stones.

167

150

158

163



Let us Do

Jumping Game



1. Draw jumps of 5 on the number line and write the numbers on the number line in the given spaces.



2. Continue jumps of 20 and write the missing numbers on the given number line.



3. Fill in the table.

1 less	Number	1 more
	160	
	129	
	187	
	134	
	158	

4. Show at least two different ways of making the following numbers.
- Use matchstick bundles to make 125.
 - Make 145 using a *ginladi*.
 - Make 170 on a number line.
5. Fill in the empty boxes appropriately.

Number	Pictorial form	Matchstick bundles			Number sentence
		100	10s	1s	
114					100 and 14 more
					100 and 32 more
172					
108					
					30 more than 150
		1	6	0	

6. Mark the following numbers on the number line.

a. 109, 112, 124, 134, 146



b. 155, 163, 178, 189, 198



c. 125, 142, 153, 174, 199

