

2

Fun with Numbers



0325CH02

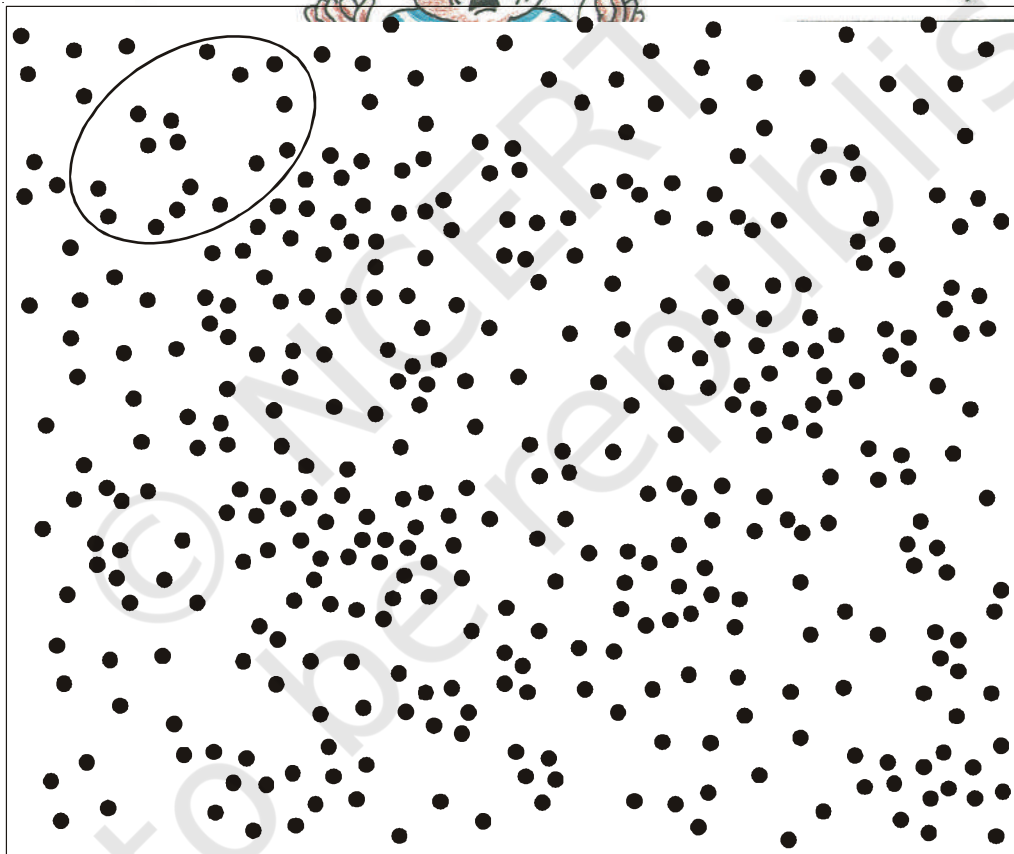
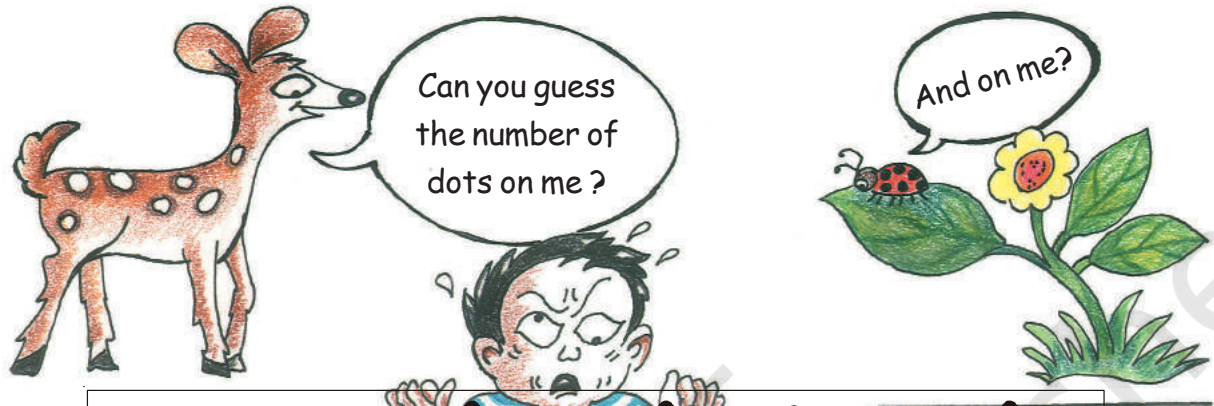


Radhika, Gauri, Vicky, Indra and Sunil were collecting *Imlu* (tamarind) seeds.

- ❖ _____ collected the most seeds.
- ❖ Sunil will collect _____ more seeds to be equal to Vicky.
- ❖ If Radhika gets 6 more seeds, she will have _____.
- ❖ How many children have more than 40 seeds? _____
- ❖ _____ needs 3 more seeds to have 50.
- ❖ Sunil has 2 seeds less than 40 and _____ has 2 seeds more than 40.

Dot Game

Guess the number of dots in the circle. Now count and check your guess. Play this game with your friends by making circles. See who can guess best.

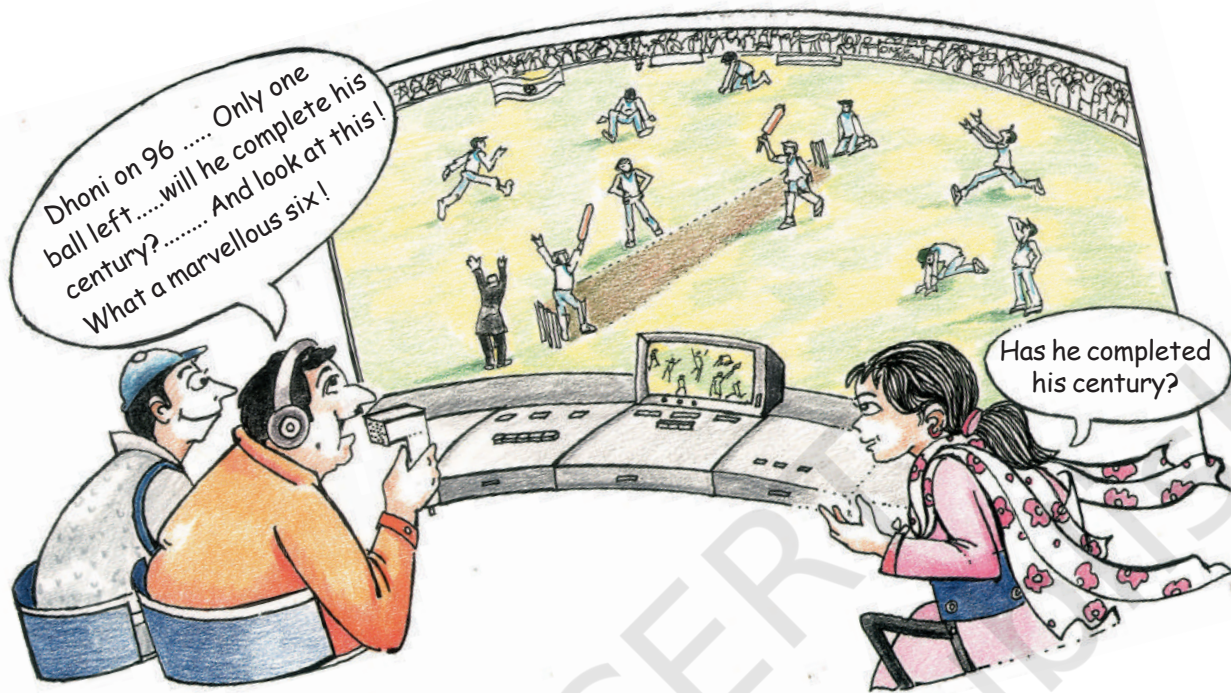


Children need interesting exercises to help them with visual estimation of numbers – of things arranged randomly and in symmetrical groups. Teachers could use other instances, such as bundles of leaves sold in the market, the school assembly, designs on mats, etc. to make them guess and estimate different numbers. In this book an ant has been used to show the child that a guess or estimate has to be made.



Dhoni's Century

One-day match between India and South Africa in Guwahati....., India batting first.....



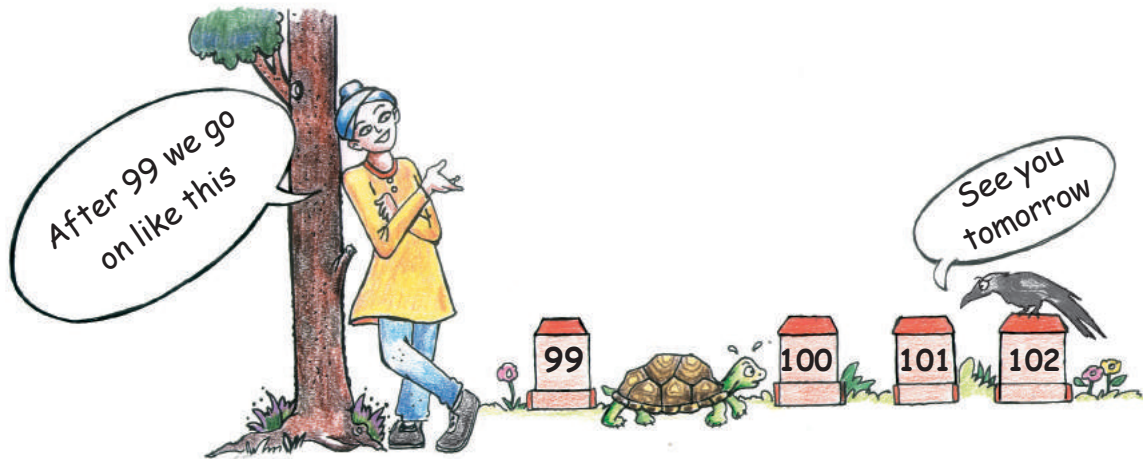
Fill in the blanks:

Dhoni scored $96 + \underline{\quad} = \underline{\quad}$ runs.

How many runs do these players need to complete a century?

	<i>Runs scored</i>	<i>Runs needed to complete a century</i>
Player 1	93	_____
Player 2	97	_____
Player 3	89	_____
Player 4	99	_____

Numbers are understood not by reciting them in order but by making associations in familiar contexts. Here the idea of a "century" of runs is used. Teachers could add other examples from children's lives to think about 3-digit numbers. Encourage them to speak about large numbers even if they cannot read or write them.



Fill in the Blanks:

99-112		195-206	
Number (in figures)	Number (in words)	Number (in figures)	Number (in words)
99	Ninety-nine	195	One hundred ninety-five
100	One hundred	196	One hundred ninety-six
101	One hundred one	197	One hundred ninety-seven
102	_____	198	One hundred ninety-eight
103	One hundred three	___	One hundred ninety-nine
104	One hundred four	200	Two hundred
___	One hundred five	201	Two hundred one
106	One hundred six	___	_____
107	_____	203	Two hundred three
___	One hundred eight	___	Two hundred four
109	One hundred nine	205	Two hundred five
110	One hundred ten	206	_____
111	One hundred eleven		
___	One hundred twelve		

Oh! 206! Guess how many more to make a triple century?



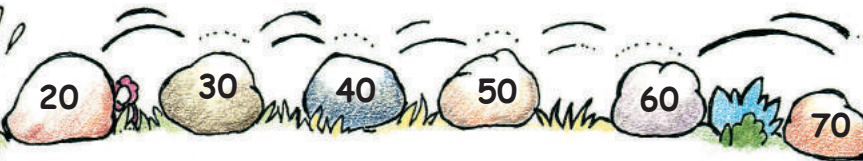
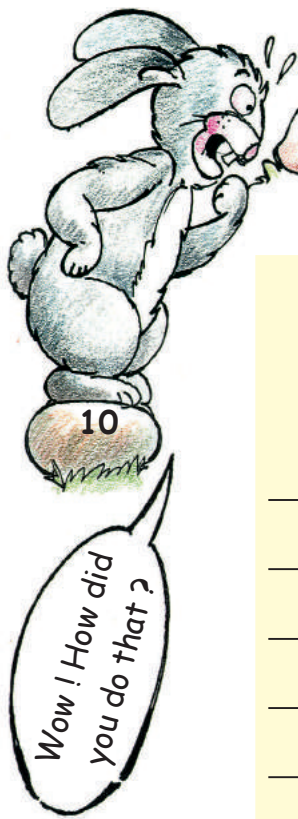
Top Ten Scores in the Cricket World Cup



Player	Score	Player	Score
A.P.J.	128	M.D.	178
A.S.	100	P.K.	105
C.K.	99	S.T.	141
D.M.	162	T.P.K.	112
K.S.P.	152	V.V.S.	127

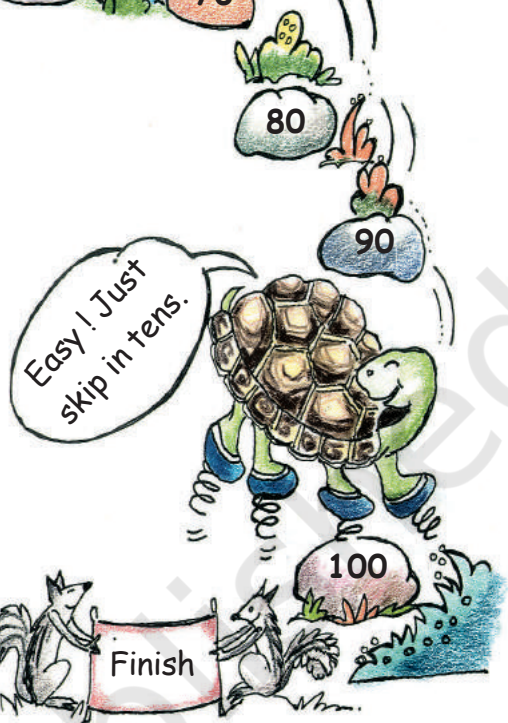


- * C.K. just missed his century. How many runs did he need to make a century? _____
- * _____ and _____ scored almost equal runs.
- * _____ scored a complete century, no less, no more.
- * Most runs scored by any batsman are _____.
- * _____ and _____ have a difference of just 1 run between them.
- * _____ scored 2 more than one and a half century.



Counting in 10's

10	110	310	_____
20	_____	_____	720
30	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	780
_____	190	_____	_____
100	200	400	_____



Counting in 50's

200	550
250	_____
_____	650
350	_____
_____	750
_____	_____
500	850











How far can you go like this?

What is the biggest number you can call out? _____

Colour the Numbers

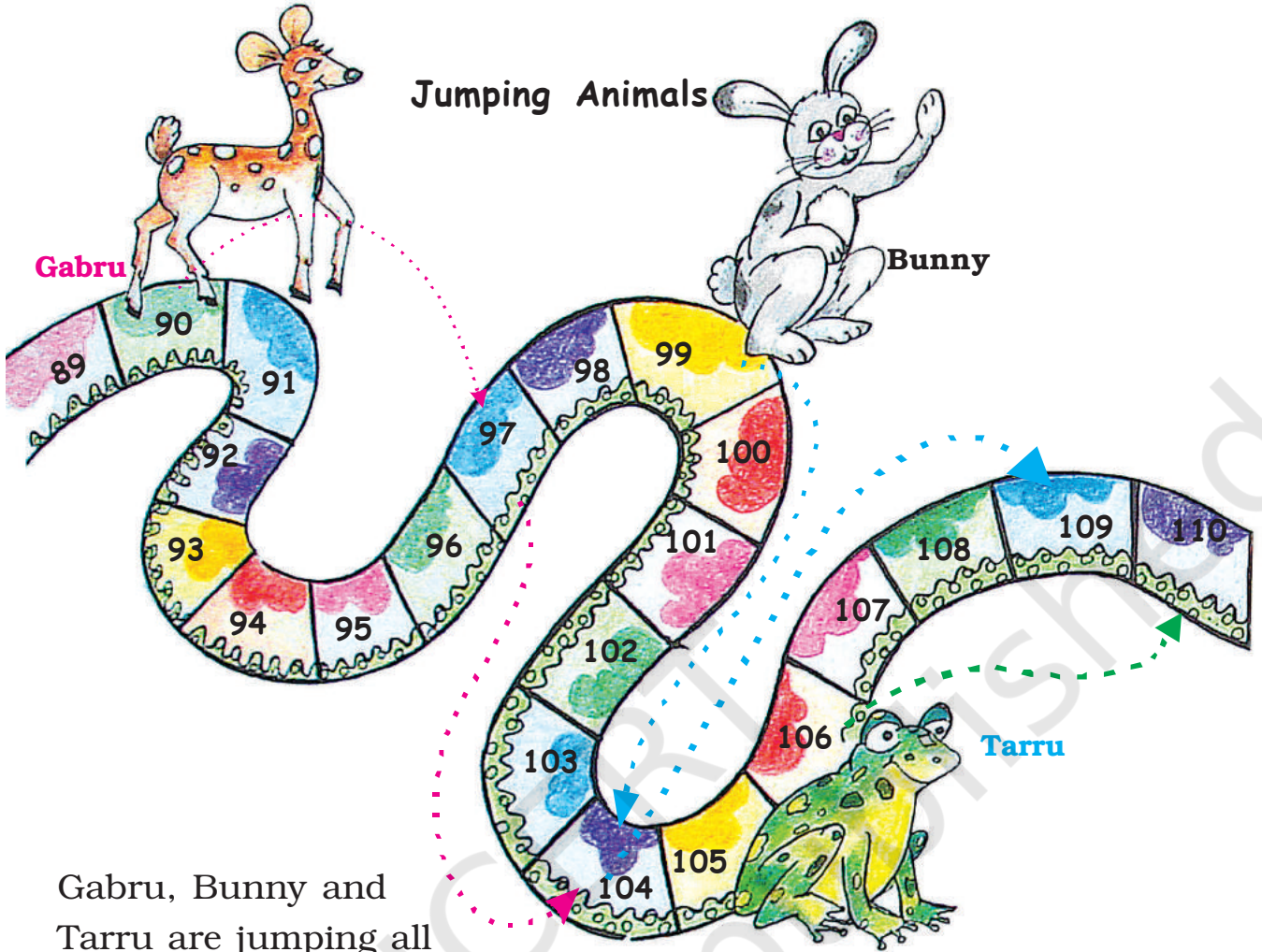
744	810	45	401	54
555	374	171	261	159
656	140	179	891	16
195	155	410	159	685
454	136	60	74	699
800	445	642	202	943

Find these numbers in the above chart. Colour them.

  Green	 Red	 Yellow	
One hundred forty	Fifty-four	Four hundred forty-five	
Two hundred two	Sixty	Sixteen	
Two hundred sixty-one	One hundred ninety-five	One hundred fifty-nine	
Eight hundred	Five hundred fifty-five	Six hundred eighty-five	
$300 + 70 + 4$	$600 + 40 + 2$	$600 + 90 + 9$	
$600 + 50 + 6$	$100 + 70 + 9$	$70 + 4$	
$5 + 50 + 100$	$800 + 10$	$1 + 90 + 80$	



Jumping Animals

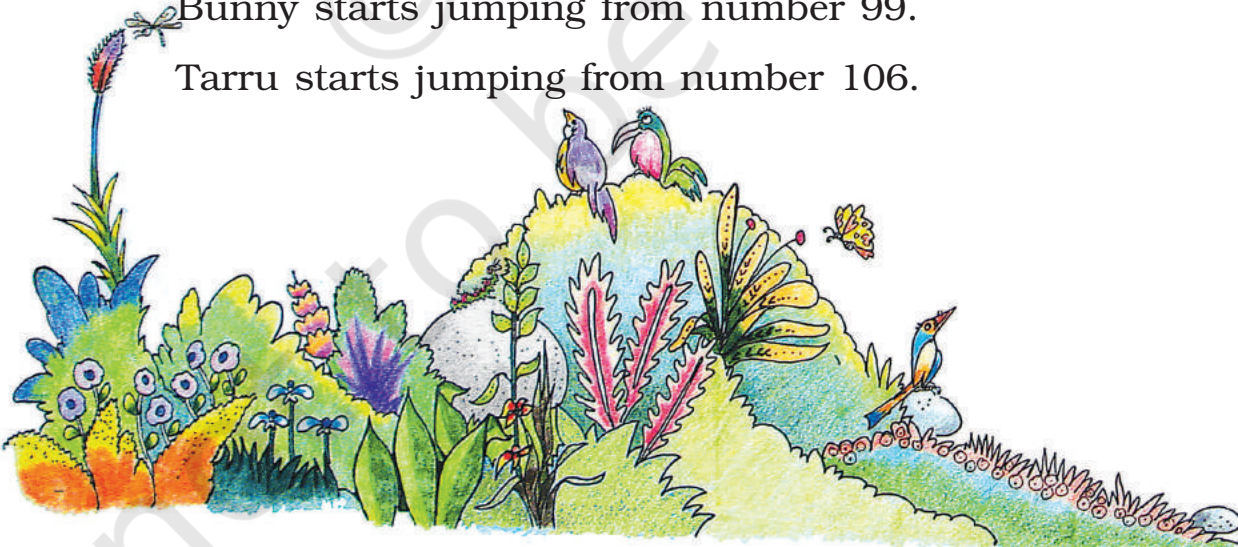


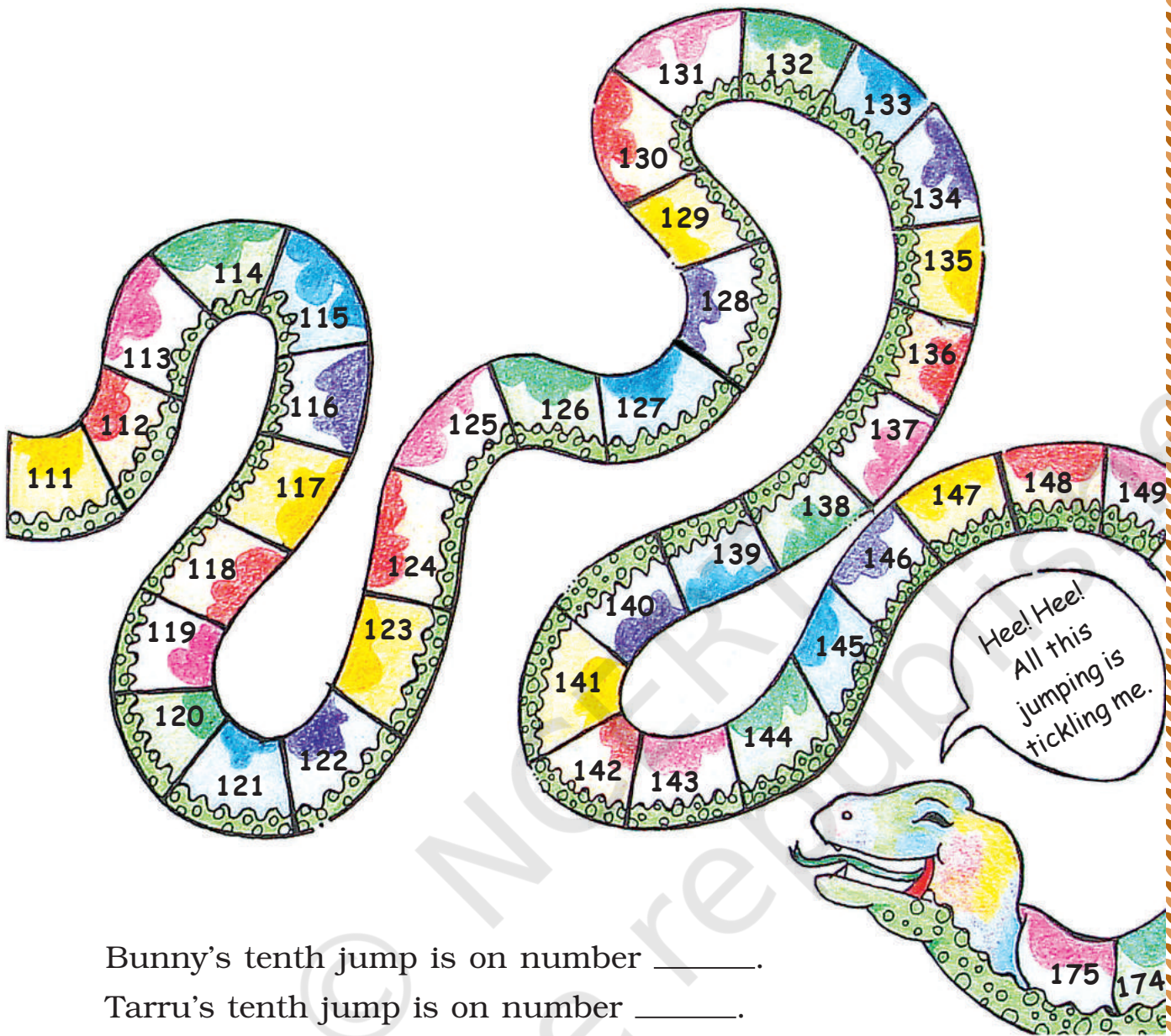
Gabru, Bunny and Tarru are jumping all the way. Gabru jumps on every 7th box, Bunny on every 5th box, Tarru on every 4th box.

Gabru starts jumping from number 90.

Bunny starts jumping from number 99.

Tarru starts jumping from number 106.





Bunny's tenth jump is on number _____.

Tarru's tenth jump is on number _____.

Gabru's tenth jump will be on number _____.

Gabru and Bunny both jump on numbers 104, _____ and _____.

Find out:

- ❖ Tarru and Bunny jump on numbers _____, _____, _____ and _____.
- ❖ Is there any number where all three of them jump? _____
- ❖ Guess who will finish in the least jumps? _____ In how many jumps? _____

Class, Jump!



Jump 2 steps forward:

104, 106, 108, _____, _____, _____, _____.

Jump 2 steps backward:

262, 260, 258, _____, _____, _____, _____.

Jump 10 steps forward:

110, 120, 130, _____, _____, _____, _____.

Jump 10 steps backward:

200, 190, 180, _____, _____, _____, _____.

Continue the pattern:

550, 560, 570, _____, _____, _____, _____.

910, 920, 930, 940, _____, _____, _____, _____.

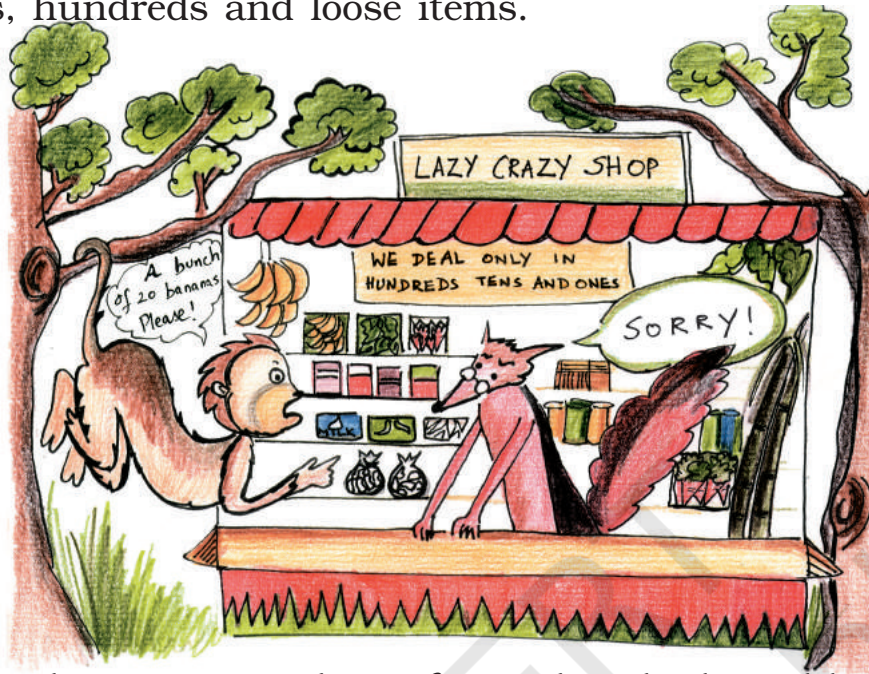
* 209, 207, 205, _____, _____, _____, _____.

* 401, 402, 403, _____, _____, _____, _____.

















Lazy Crazy Shop

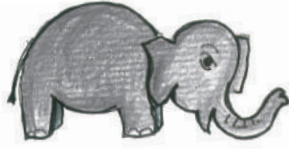
This is the jungle shop. Lazy Crazy gives things only in packets of tens, hundreds and loose items.



Find out how many packets of tens, hundreds and loose items each animal will take. Fill in the blanks.

		Packets of 100	Packets of 10	Loose items
  143		_____		
  210	_____	_____	_____	_____
  242	_____	_____	_____	_____
  552	_____	_____	_____	_____

Lazy Crazy also has a crazy way of taking money. He takes only in  notes,  notes and  coins. Now find out how they will pay him for what they have taken.



Rs 420



Rs 143



Rs 242



Rs 55

Who am I? Match with the number.

- a) I come between 40 and 50 and there is a 5 in my name.
- b) I have 9 in my name and am very close to 90.
- c) If you hit a 4 after me, you score a century.
- d) I am equal to ten notes of 10.
- e) I am century + half century
- f) I am exactly in between 77 and 97.

96

150

45

89

87

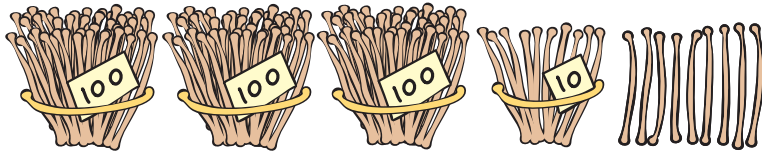
100

In this chapter several stories and exercises are used to help children understand the decimal number system. The term 'place value', which often confuses children, has not been used at all. Teachers could also find out about other locally used number systems, if any, especially while working in tribal communities.

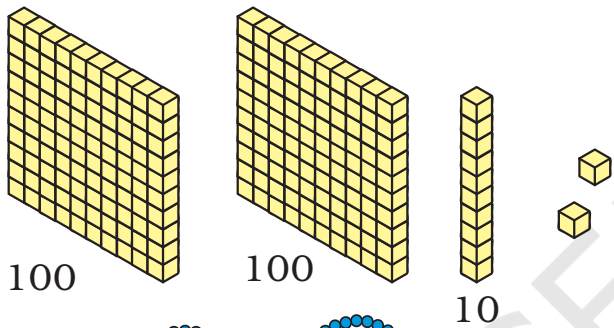
How Many are these?



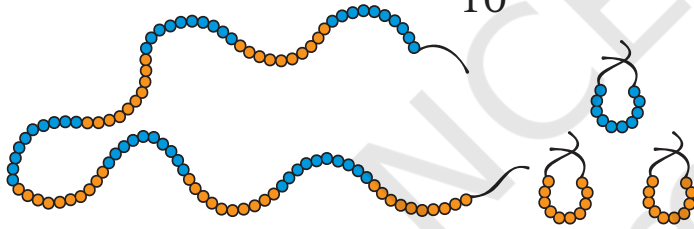
_____ rupees



_____ sticks



_____ blocks



_____ beads



_____ rupees



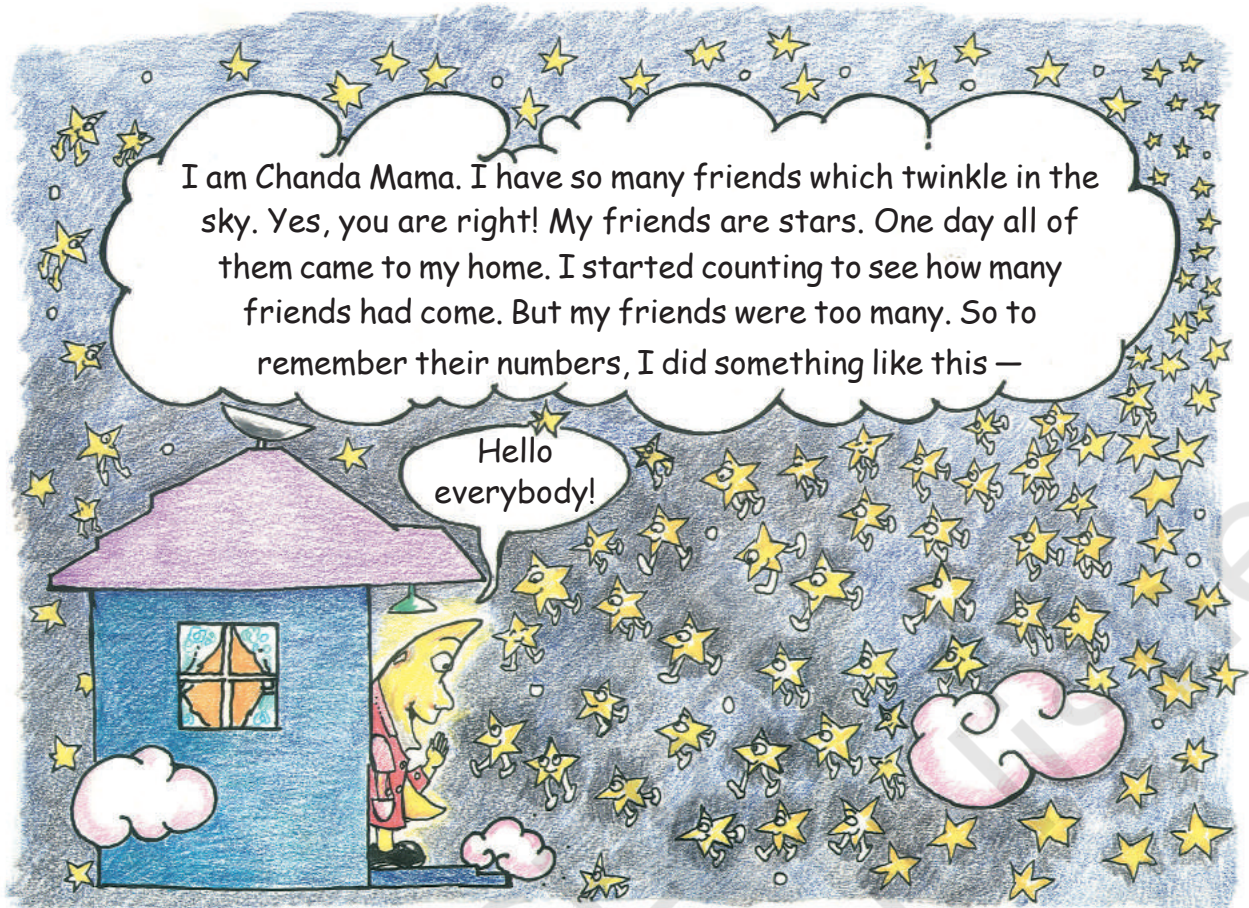
Who am I?

There is no biggest number

Take any you can find

Add me to get the next one

To count, keep me in mind.



I am Chanda Mama. I have so many friends which twinkle in the sky. Yes, you are right! My friends are stars. One day all of them came to my home. I started counting to see how many friends had come. But my friends were too many. So to remember their numbers, I did something like this —

Hello everybody!

Moon Mama Counts his Starry Friends

I counted one star and kept one **1** card in my pocket.

1 for one star. **1 1** for 2 stars.

1 1 1 1 1 for how many stars? _____

When I had 10 **1** cards, I changed it with this card **10**.

1 1 1 1 1 1 1 1 1 1 → **10**

But my friends kept coming. So I had to count more stars. My pockets were getting full. So when I had 10 cards like this **10** I changed it with a **100** card.

10 10 10 10 10
10 10 10 10 10 → **100**



But I have so many, many, friends that my pockets kept getting full. Just see how many cards I had.





Which cards will I have in my pocket if I have counted up to...

- a. 19 →
- b. 21 →
- c. 95 →
- d. 201 →
- e. 260 →
- f. 300 →
- g. 306 →
- h. 344 →
- i. 350 →
- j. 400 →



When I had 10 10 cards in my pocket, I knew I had counted 20 stars. Now you tell me the number of stars counted in each case. Write the answer in the blank space.

Card 1: 10 10 → 20

Card 2: 10 1 1 10 1 1 → _____

Card 3: 100 100 100 10 → _____

Card 4: 100 100 100 100 → _____

Card 5: 100 1 100 1 100 100 1 100 → _____

Card 6: 100 1 100 1 10 1 100 → _____

Card 7: 100 100 1 100 10 100 10 → _____

100 100 100 100 100 100 ??



Nice new patterns



Guess how many starry friends I have in all... !!!