



Fun with Numbers



0325CH02

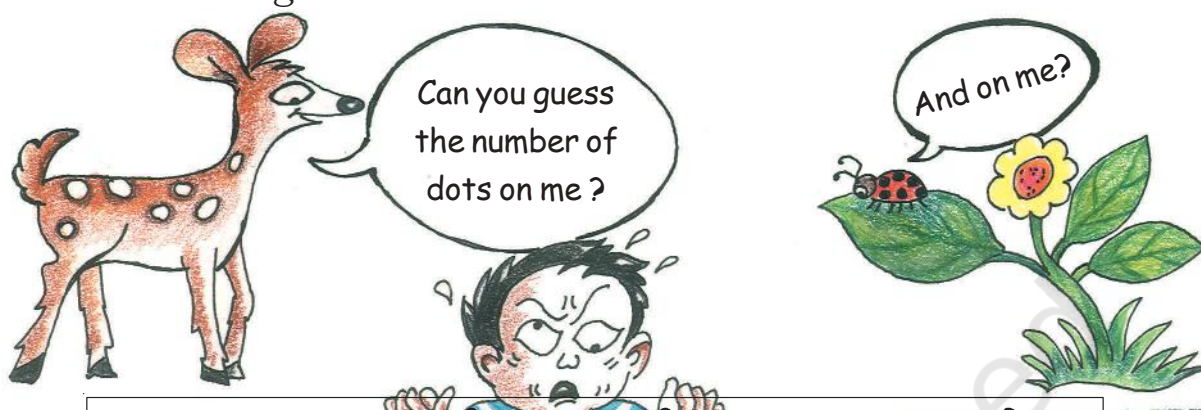


Radhika, Gauri, Vicky, Indra and Sunil were collecting *Imli* (tamarind) seeds.

- ❖ _____ 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 $96 + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$ 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 | <u> </u> |
| Player 2 | 97 | <u> </u> |
| Player 3 | 89 | <u> </u> |
| Player 4 | 99 | <u> </u> |

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.

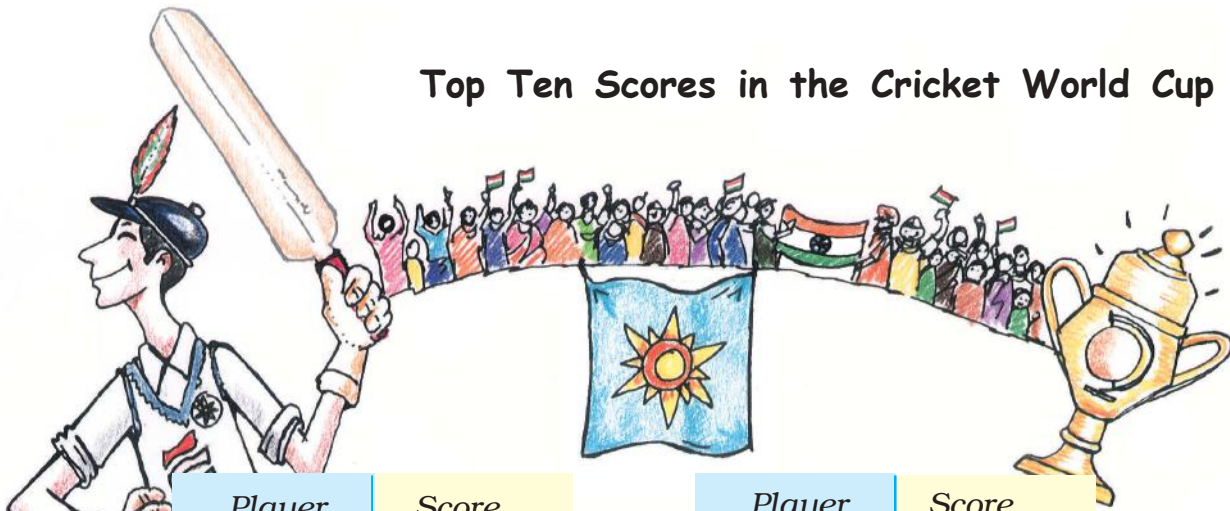


Fill in the Blanks:

| 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 | <div>Oh! 206! Guess how many more to make a triple century?</div> | |
| _____ | One hundred twelve | | |



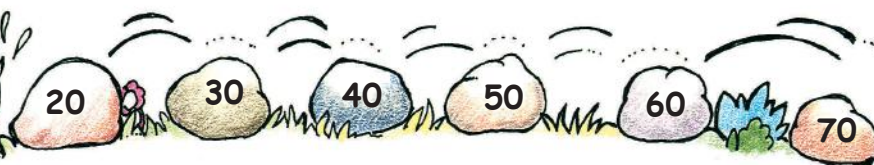
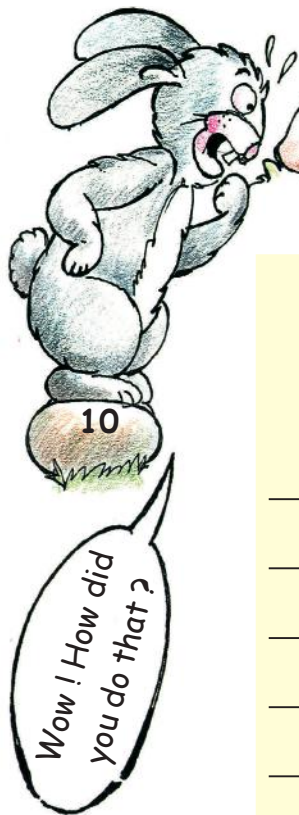
Top Ten Scores in the Cricket World Cup



| 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.



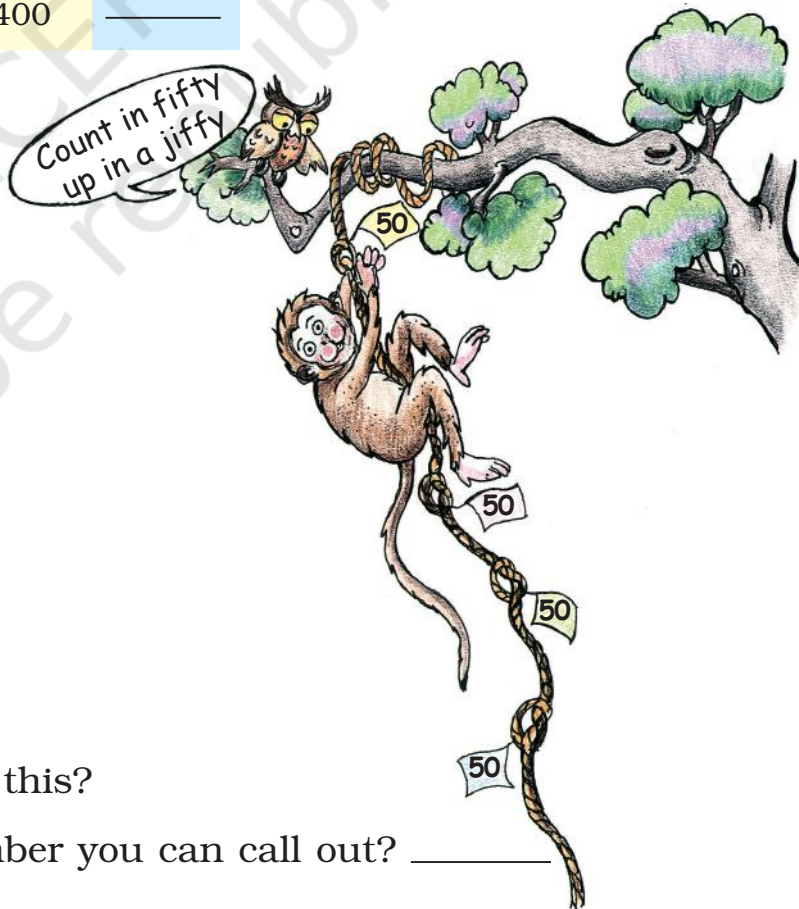
Counting in 10's

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



Counting in 50's

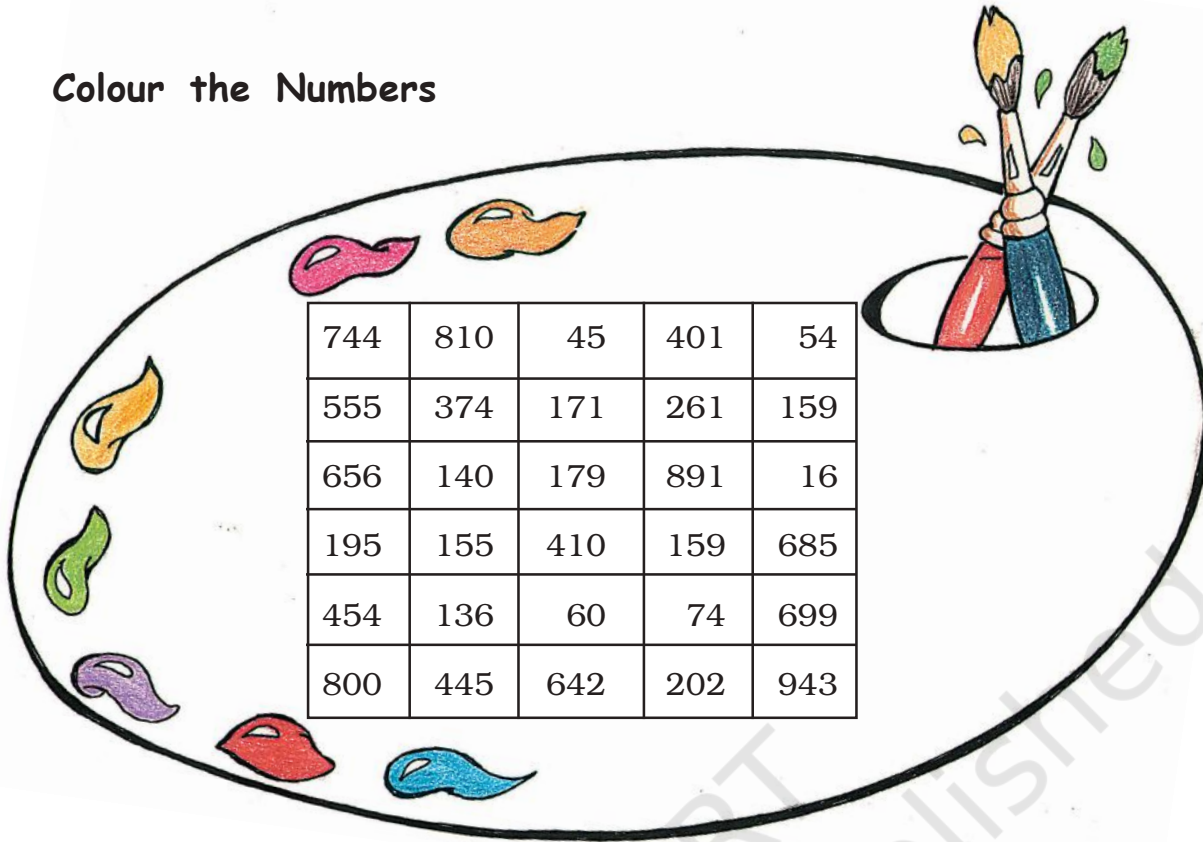
| | |
|-------|-------|
| 200 | 550 |
| 250 | _____ |
| _____ | 650 |
| 350 | _____ |
| _____ | 750 |
| _____ | _____ |
| 500 | 850 |








How far can you go like this?





What is the biggest number you can call out? _____

Colour the Numbers

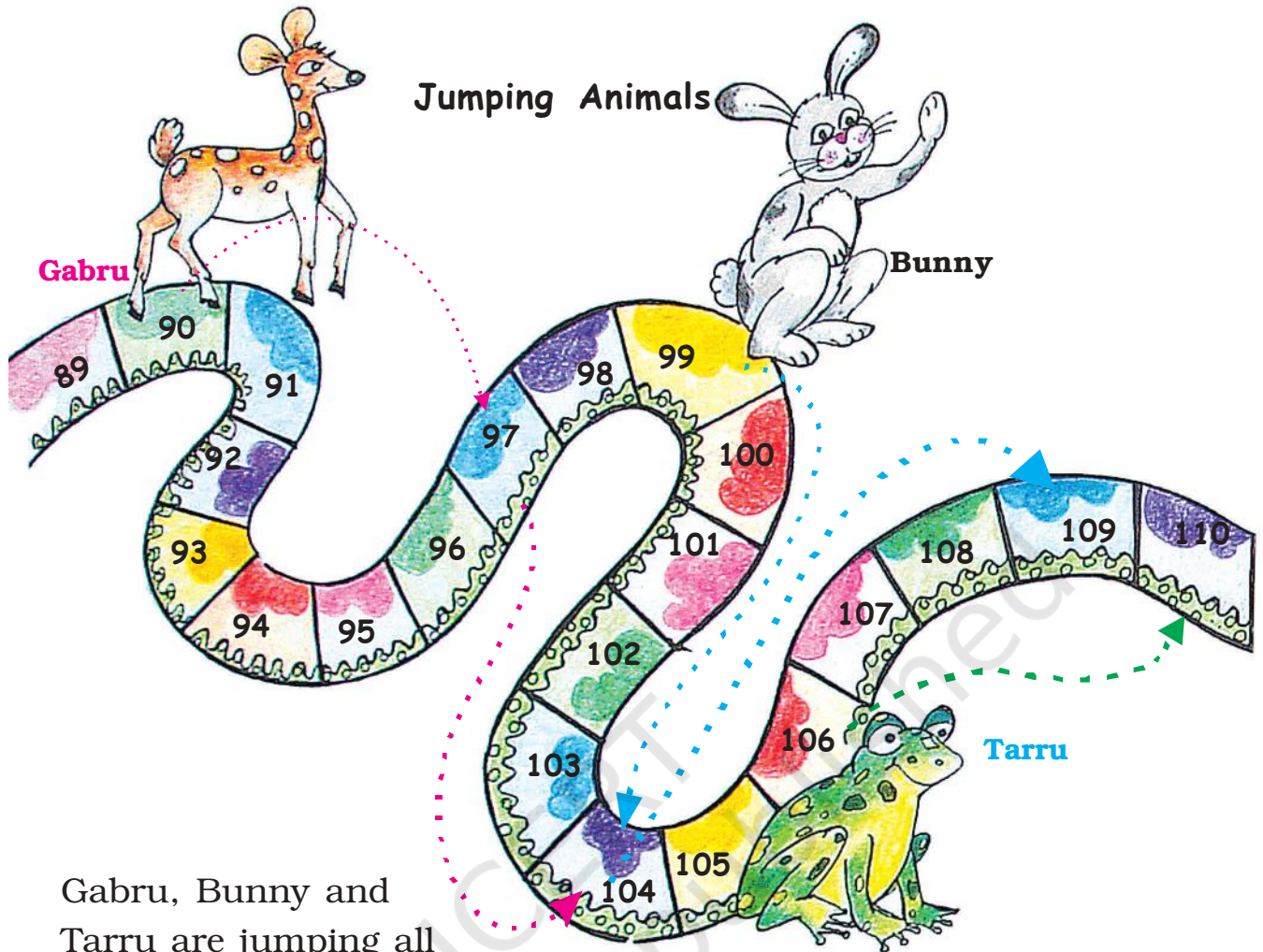


Find these numbers in the above chart. Colour them.

|   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

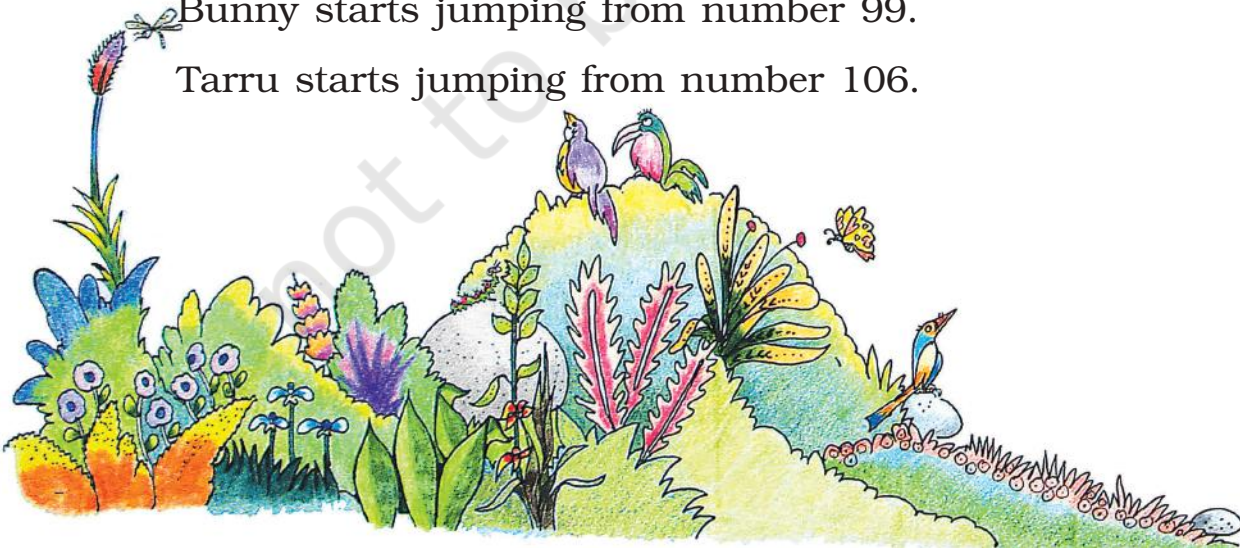


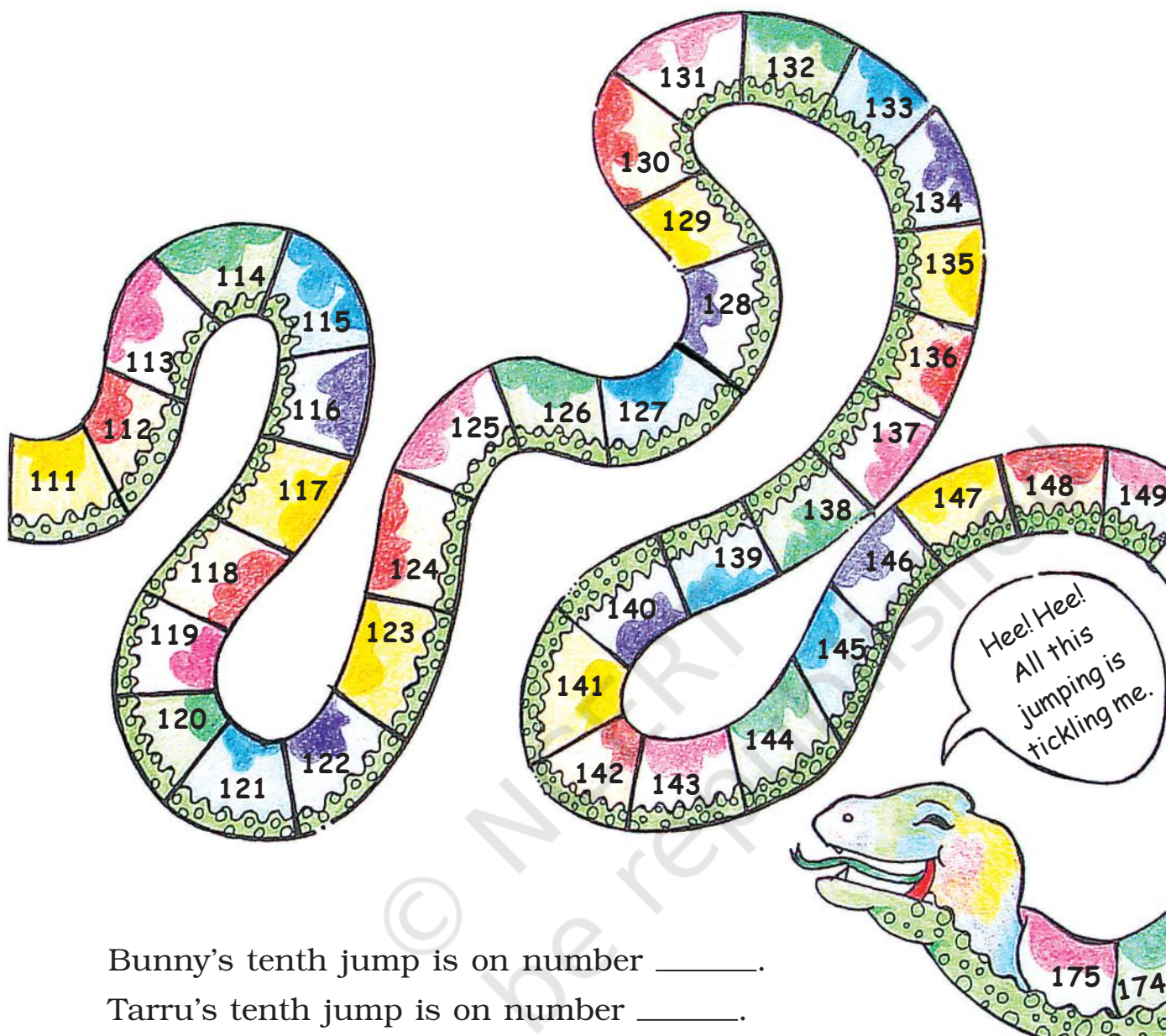
Gabru, Bunny and Tarru are jumping all the way. Gabru jumps on every 7th box, Bunny on every 5th box, Tarru on every 4th box.

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, _____, _____, _____.

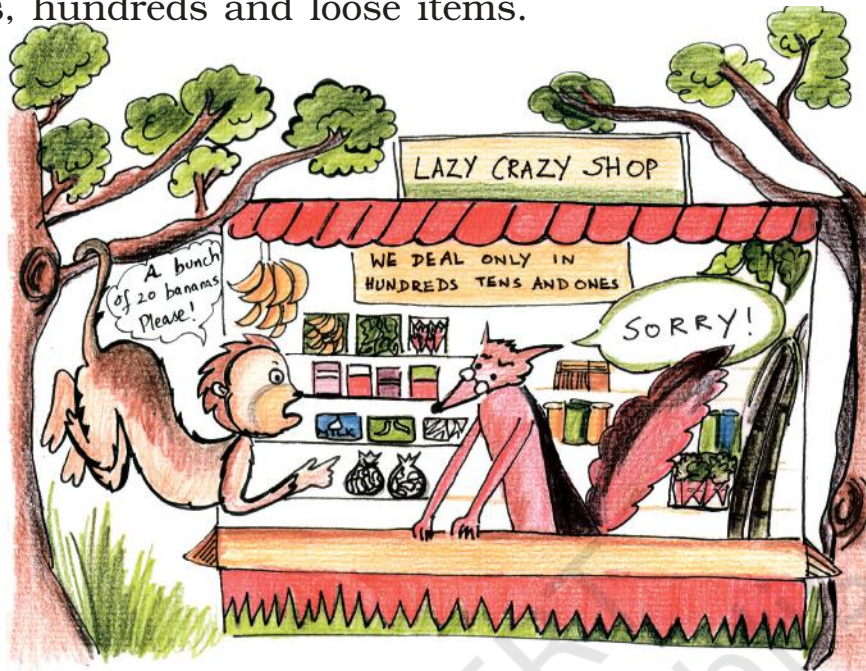
* 209, 207, 205, _____, _____, _____.

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






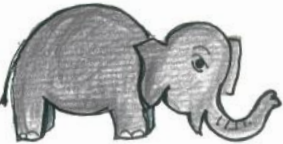










Lazy Crazy Shop

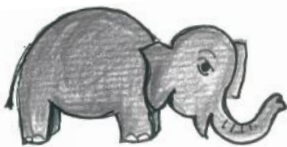
This is the jungle shop. Lazy Crazy gives things only in packets of tens, hundreds and loose items.



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

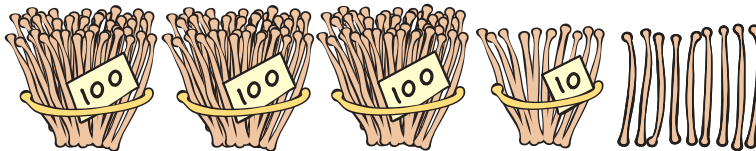


In this chapter several stories and exercises are used to help children understand the decimal number system. The term 'place value', which often confuses children, has not been used at all. Teachers could also find out about other locally used number systems, if any, especially while working in tribal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

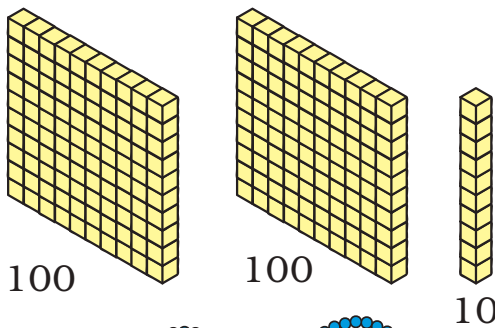
How Many are these?



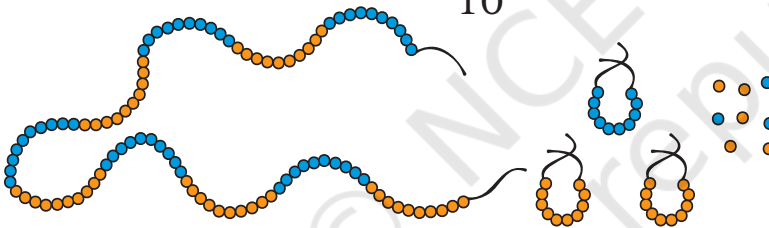
_____ rupees



_____ sticks



_____ blocks



_____ beads



_____ rupees

Who am I?

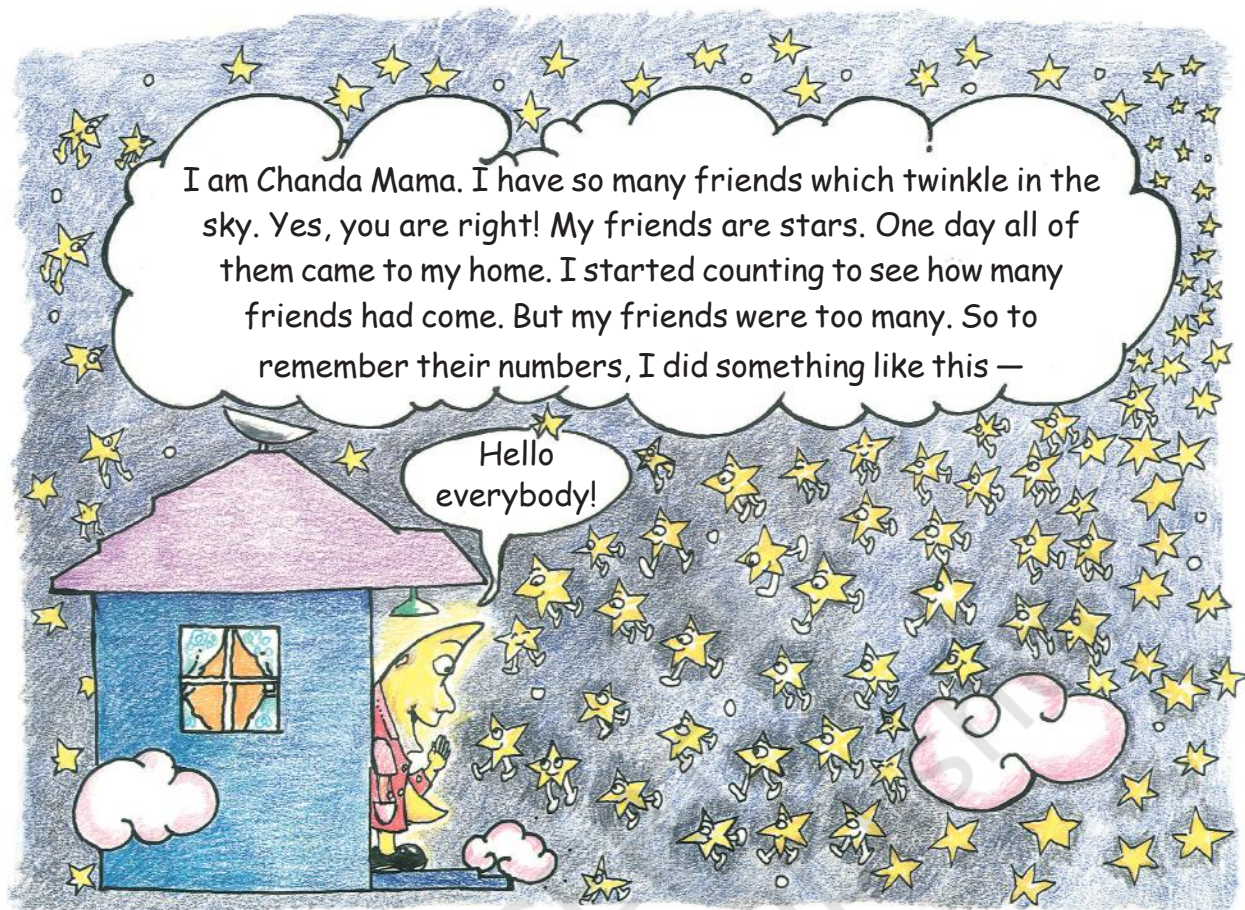
There is no biggest number

Take any you can find

Add me to get the next one

To count, keep me in mind.





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.

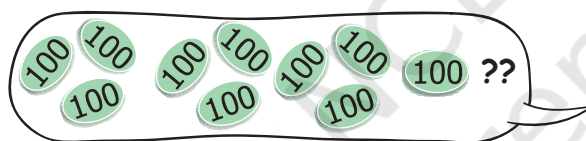
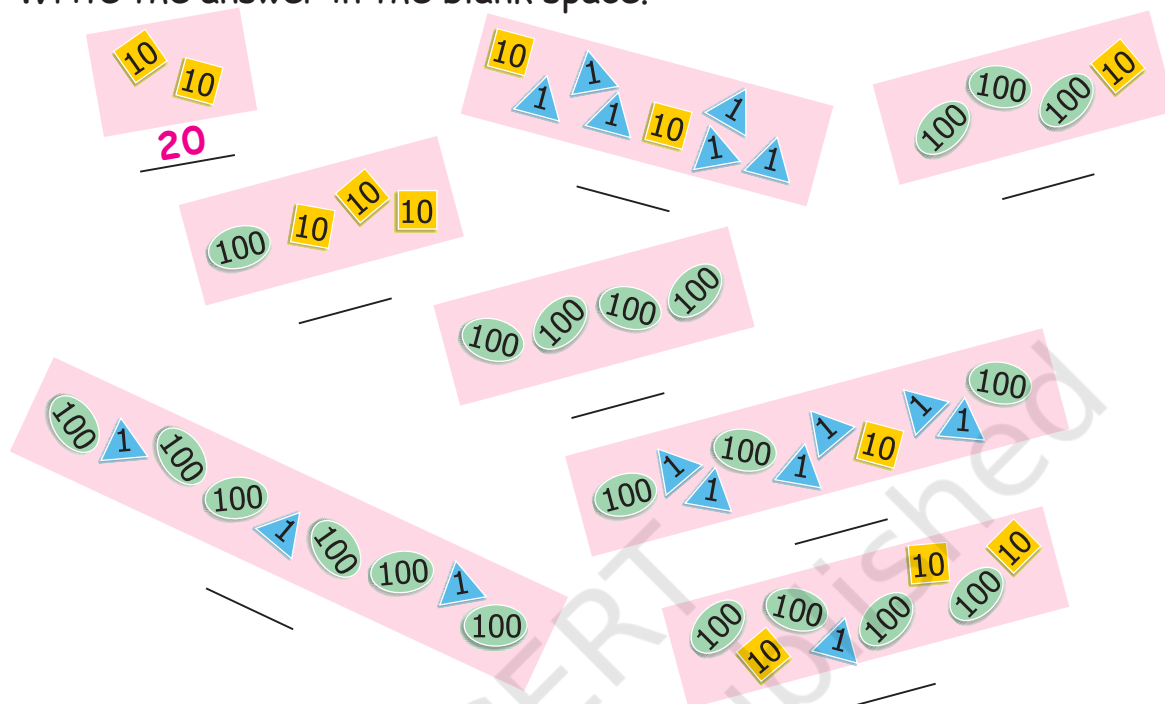




Which cards will I have in my pocket if I have counted up to...

- 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.



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