Mathematics

STANDARD ONE

TERM 1

Textbook Team

Authors

Dr.S. MALARVIZHI

Chairperson, Lecturer, District Institute of Education & Training Triplicane, Chennai - 5.

S. CHANDRASEKARAN

Graduate Teacher Govt. Higher Sec. School, K. Velur, Vellore.

N. PREMKUMAR

Block Resource Teacher Educator Block Resource Centre Ellapuram, Thiruvallur.

M. DHANARAJA

Block Resource Teacher Educator Block Resource Centre Poondi, Thiruvallur.

E. RAJENDRAN

Block Resource Teacher Educator Block Resource Centre Poonamallee, Thiruvallur.

N.K. RAJESH KANNA

Block Resource Teacher Educator Block Resource Centre T. Nagar, Chennai.

S. ANANDHI

Sec. Grade Assistant Panchayat Union Primary School Nadukkupparn, Thiruvannamatai.

S. PARAMESWARAN

Sec. Grade Assistant Panchayat Union Primary School Mudhunal, Ramanathapuram.

Translated by

N. UMA MAHESWARI, Teacher TNPL Matric Hr.Sec. School, Velayuthampalayam, Karur.

JOHN MORAES, Teacher St.Francis Xavier's Anglo-Indian Hr.Sec. School, Broadway, Chennai.

Expert Team

Dr.R. RAMANUJAM, Professor, Indian Institute of Mathematics, Chennai.

S. PADMAVATHI, The School, Krishnamurthi Foundation of India, Chennai.

Review Committee

V.A. SIVAGNANAM, Formerly Director of School Education, Chennai.

M.K. SUBRAMANIAN, Formerly Deputy Director, DTERT, Chennai.

T.M. SOUNDARARAJAN, Headmaster, Sri Ahobila Madam Oriental Hr.Sec. School, Chennai.

Artist Team

K. Ramamurthi, K. Thirunavukarasu,

Layout

A.M. Abdulmajeed, R. Anandhan

Dear Friends.

This textbook is intended to facilities joyful learning for the children and to evolve and build upon their learning skills.

This book is enriched by stories, picture sequences, songs, number games, life-oriented mathematics and group activities. All these facilitate the learning of shapes, figures, numbers, measurements, patterns and data.

The activities incorporated are rightly chosen and carefully designed in such a way to enable learners to explore the mathematical concepts by touching, seeing, listening, practising, talking, discussing, analysing and colouring.

The exercises related to the understanding of relationship between numbers and their basic operations, provide opportunities for the children to imbibe the concepts and express them.

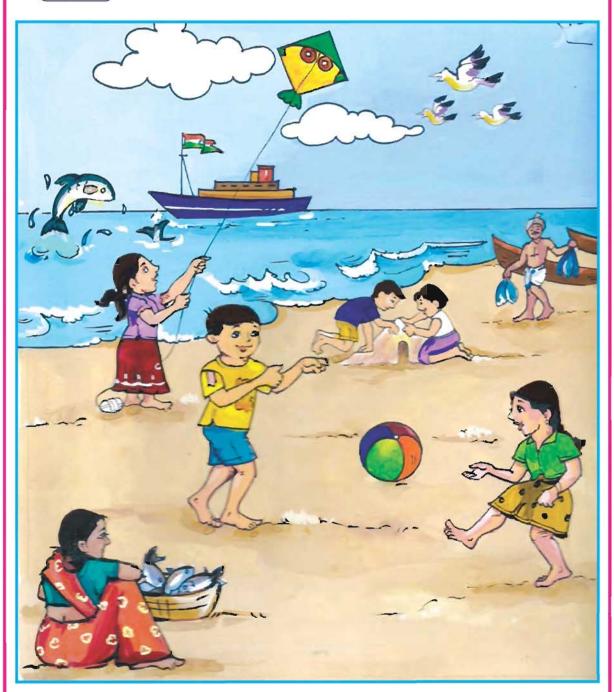
'I can' activities are incorporated as an inbuilt process of evaluation so as to enable the children to assess their attainment level.

This textbook seeks to build a forum for dynamic and creative interaction between the teacher and the children.

Authors

1

Shapes and Figures



Let the children look at the picture carefully. Using the picture, interact children regarding objects and people that are near-far; up - down; inside - outside.

Up - Down





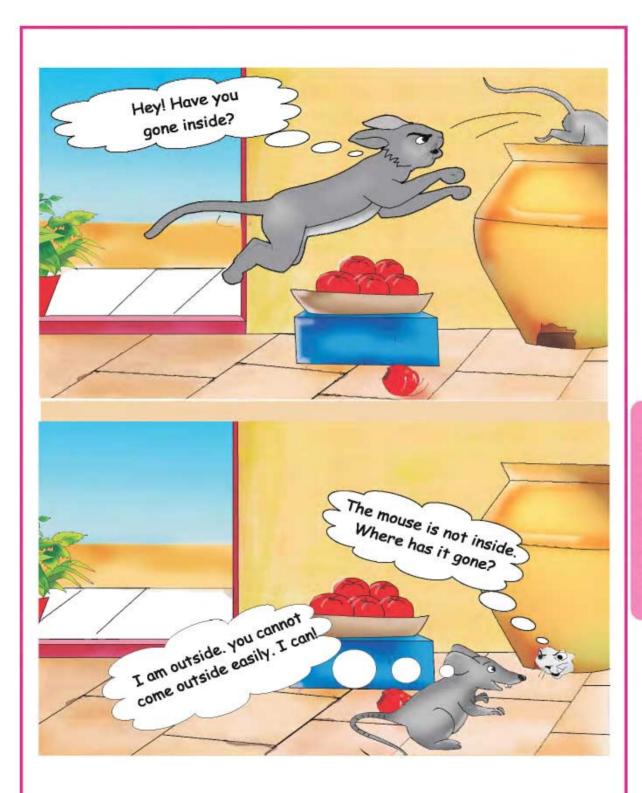
Using the pictures, help the children understand the concept 'up - down' and engage them in similar activities in the class room.



Let us play

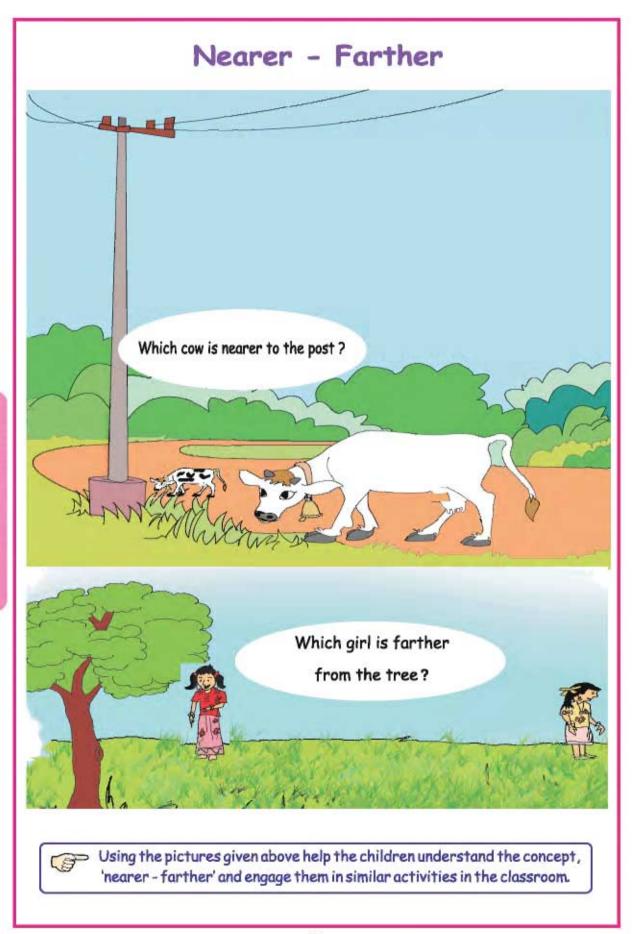
When the teacher says, sky', the children should look up. When the teacher says 'floor' the children must look down.

Inside - Outside The cat is outside the house. The mouse is (inside the house. I am hungry! There is nothing outside! is there anything inside? Wow! what a tasty feast inside! Oh! How do Are you in? I 90 out?





Narrate the picture story to the children. Help them understand the concept of 'inside - outside'. Let the children enact the story.



Nearest - Farthest

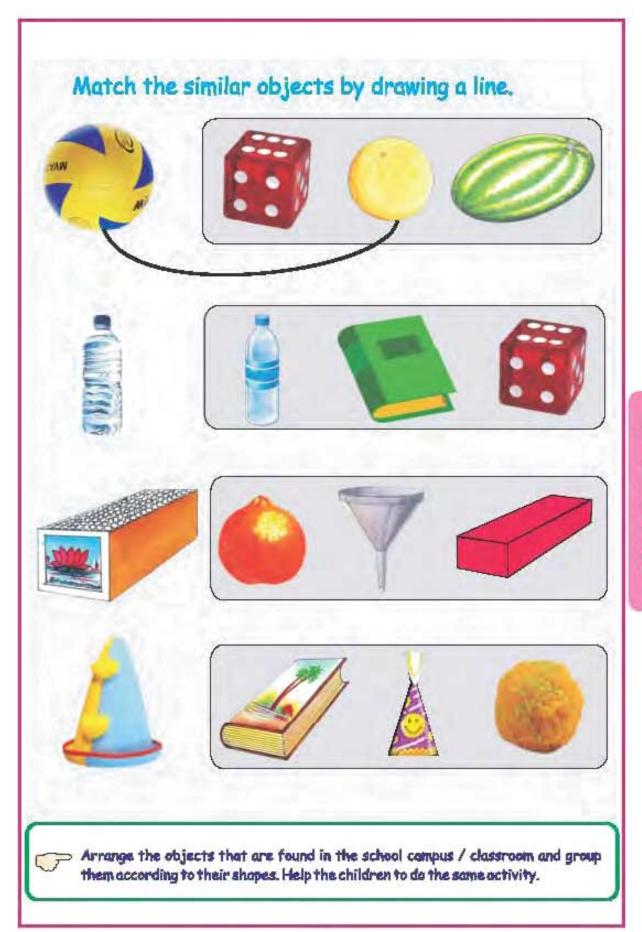


Who is the nearest one to the tap?

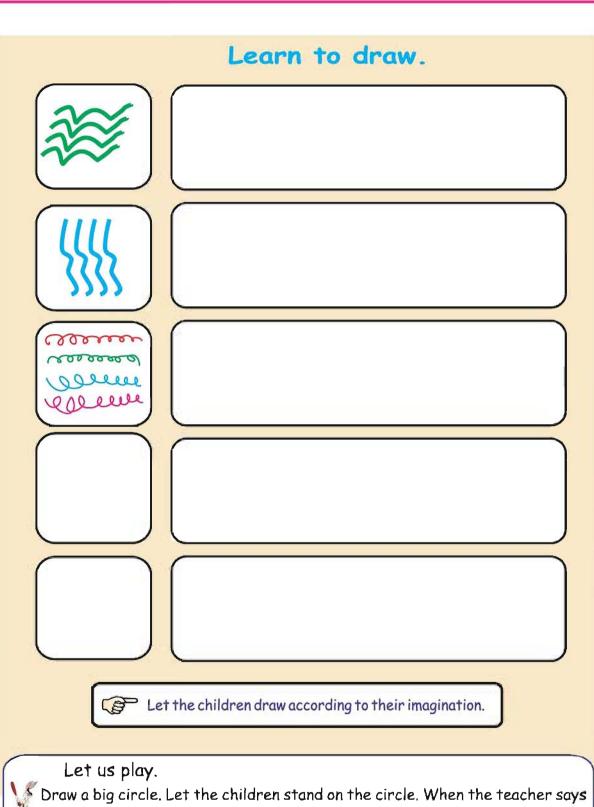


Using the classroom space, the teacher may evolve various activities to help children fully understand the concepts, 'up - down', 'nearer - farther' and 'nearest - farthest'.

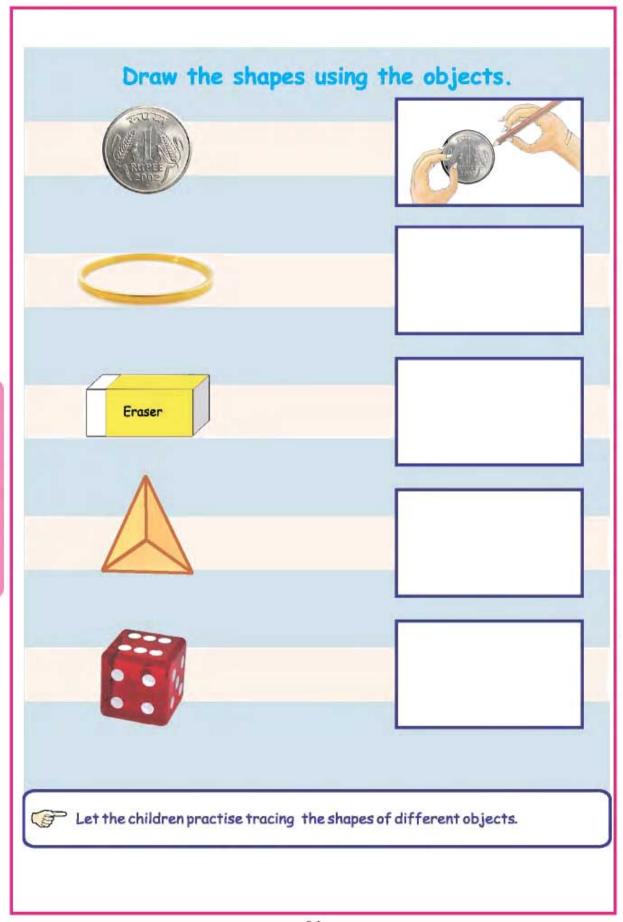
Match the same objects by drawing a line. Eraser

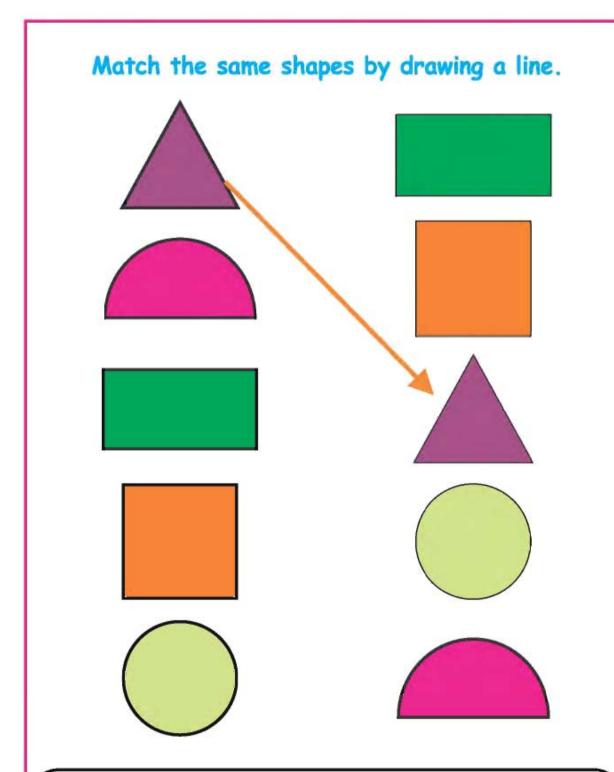


Round - Flat Tick (✓) the round object. Tick (√) the flat object. Tick (✓) the round object. Show different objects and let the children identify their shapes and texture (round, flat, smooth, rough).



Draw a big circle. Let the children stand on the circle. When the teacher says "in", the children jump inside the circle. When the teacher says "out", the children jump outside the circle. As the teacher calls out randomly, the children who fail to do the correct action are considered to be out.

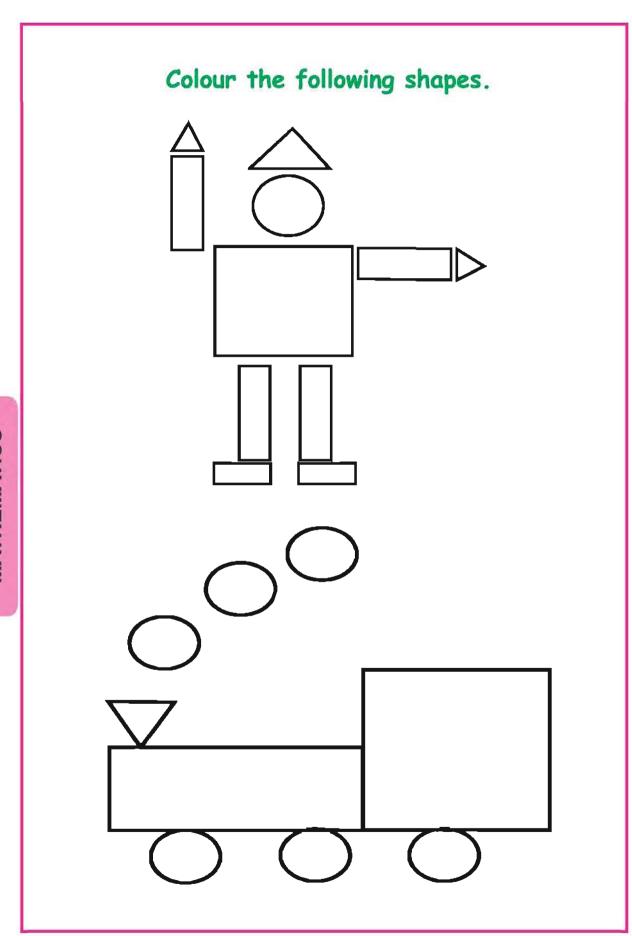






Let us play.

Draw a square, a triangle and a circle on the floor. As the teacher calls the name of the shapes, children identify them and stand on the shapes.



2

Numbers from 1 to 9

One, one, one Number Song
One leaping deer!





Two, two, two

Two tasty fruits!

Three, three, three

Three playful rabbits!





Four, four, four

Four watchful dogs!

Five, five, five

Five tasty ice creams here!





Six, six, six

Six peacocks dancing!

Seven, seven, seven

Seven ladders leaning on the wall!





Eight, eight, eight

Eight laddus for all of us!

Nine, nine, nine

Nine camels in a line!





Let children sing this number song with appropriate action. Three numbers may be taught a day. Other objects may also be used to teach each number.

More - Less

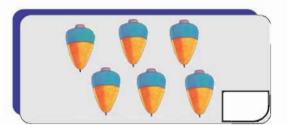
Tick(\checkmark) the box that has more objects.













 $Tick(\checkmark)$ the box that has less objects.

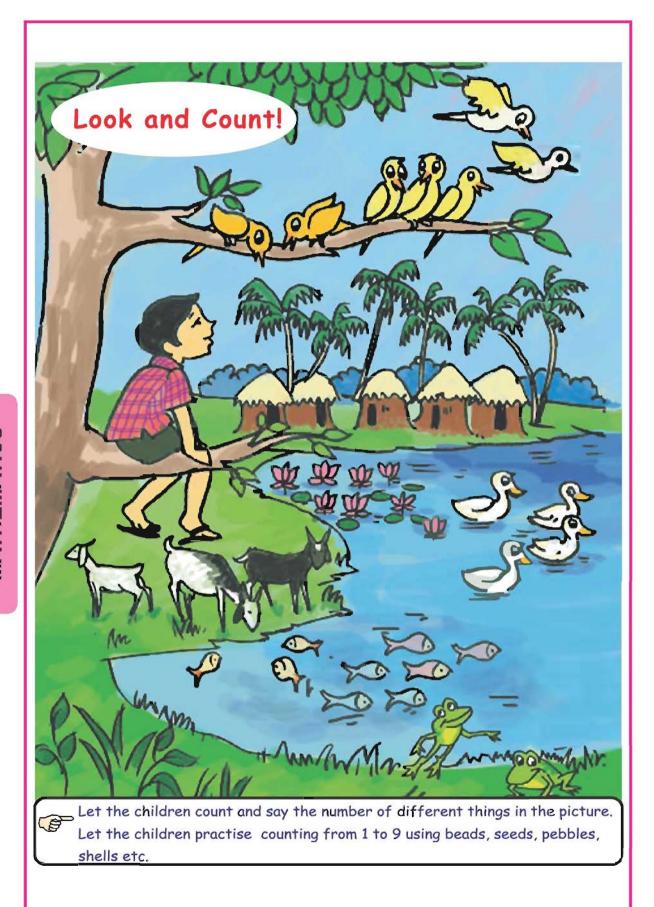




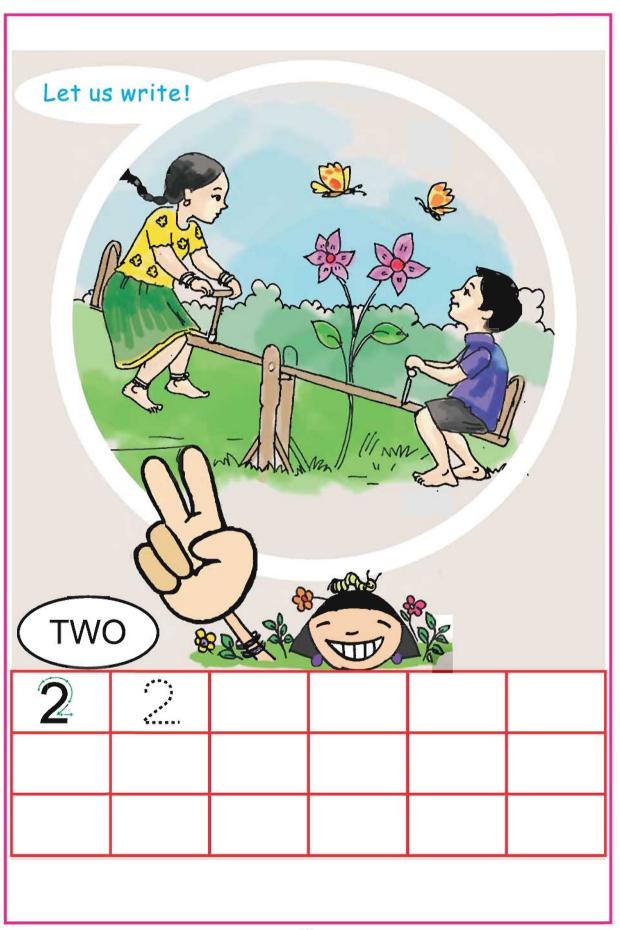




Count and match.



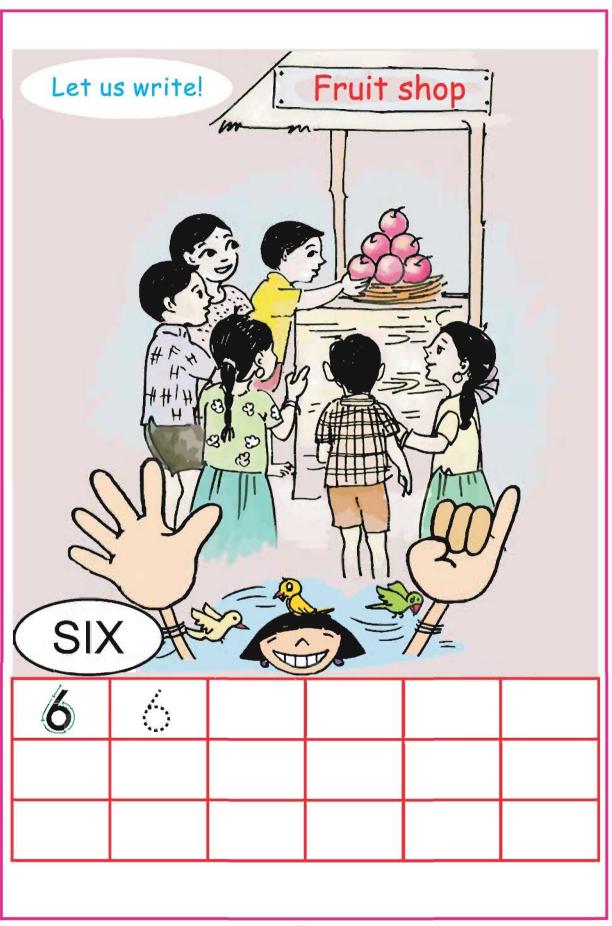


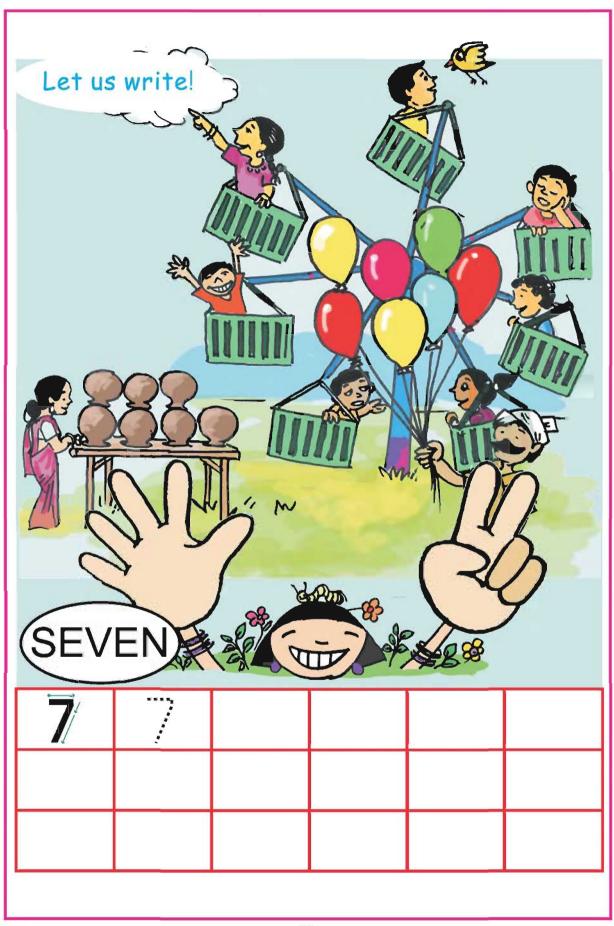


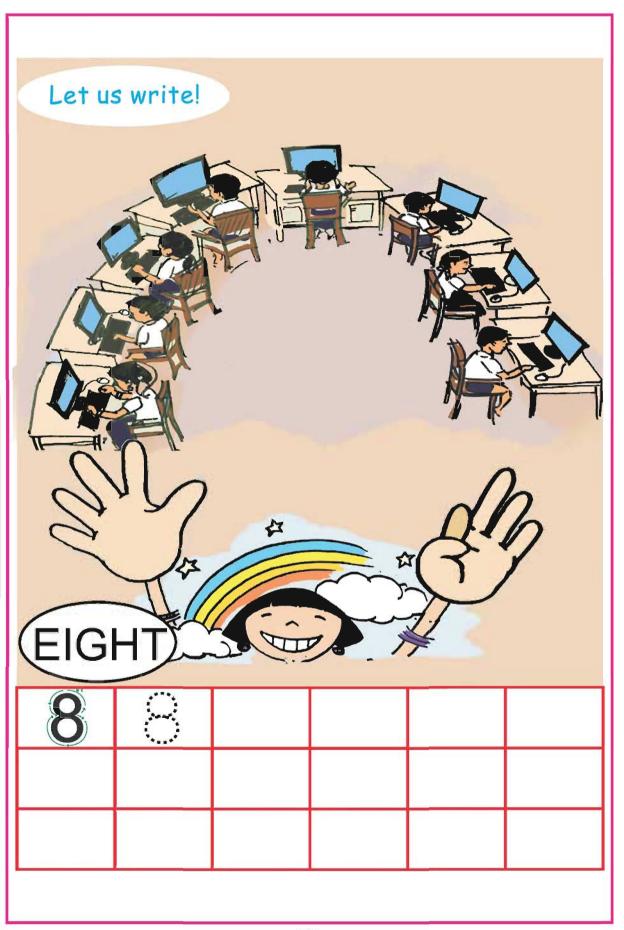


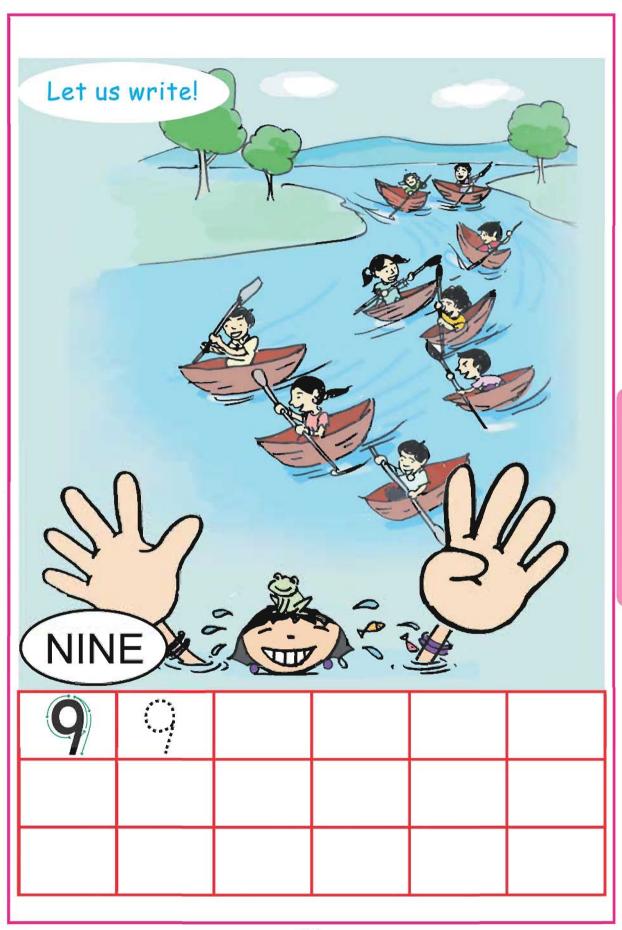


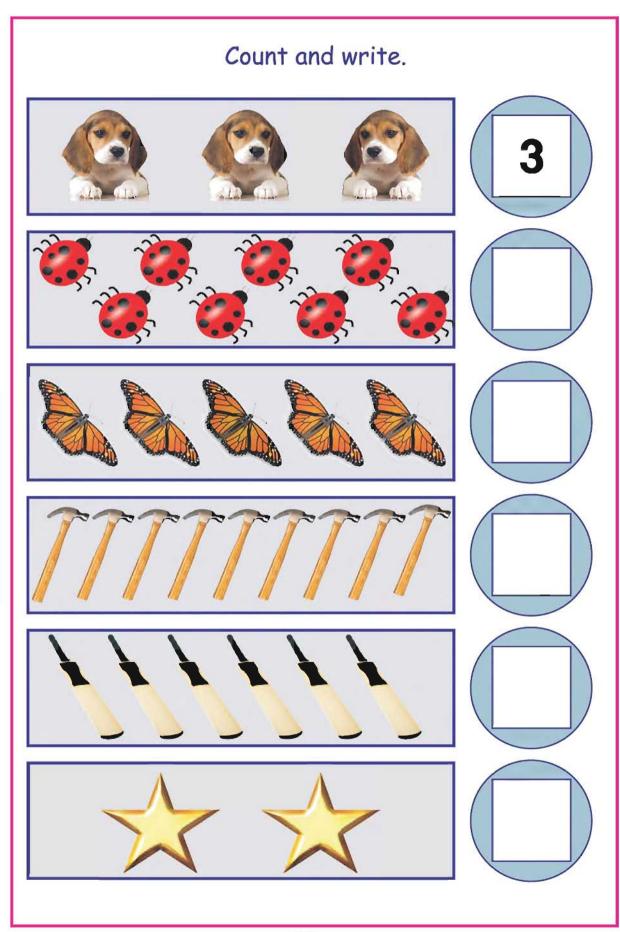


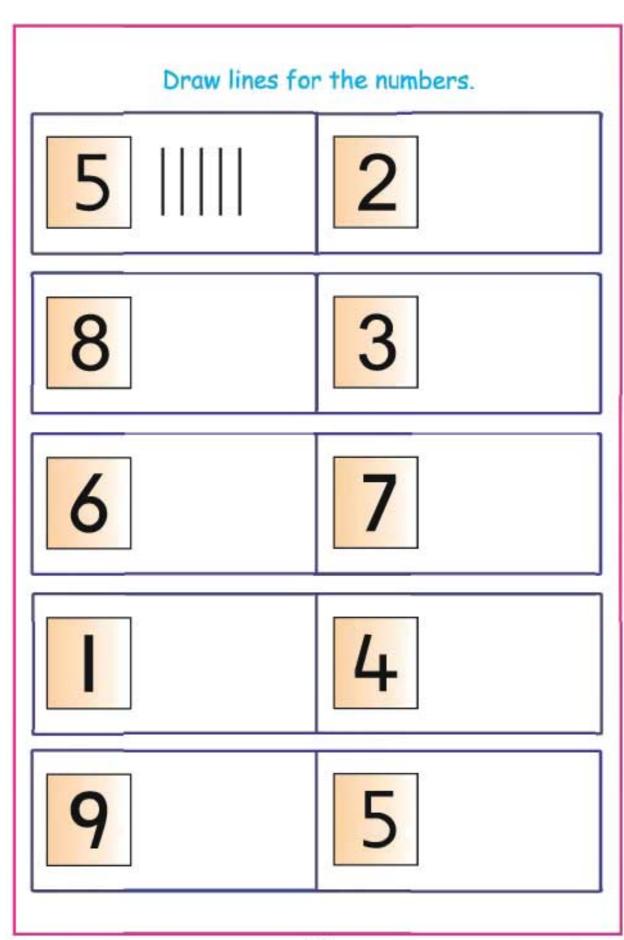




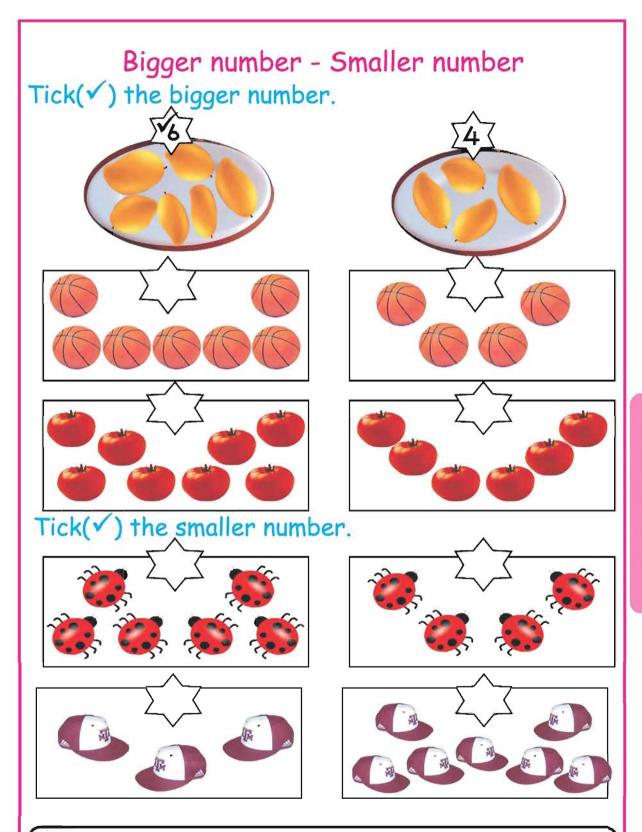






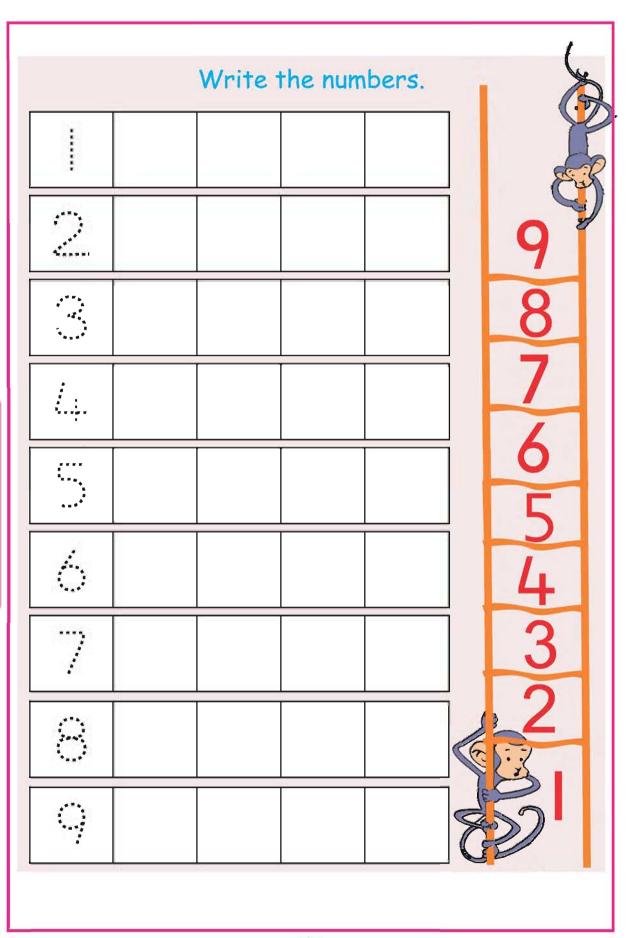


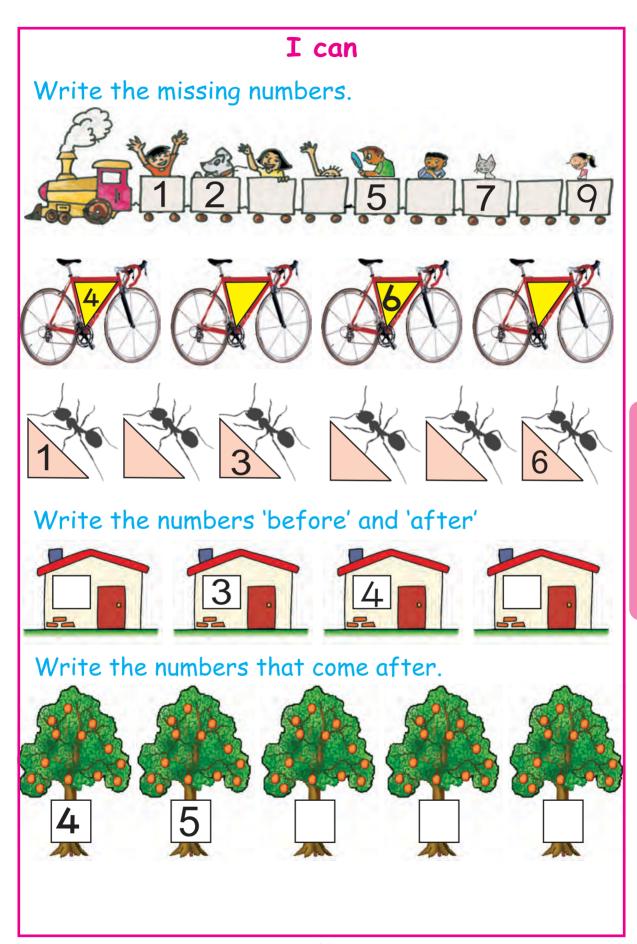
Match the number names. FIVE FOUR THREE SEVEN SIX EIGHT NINE



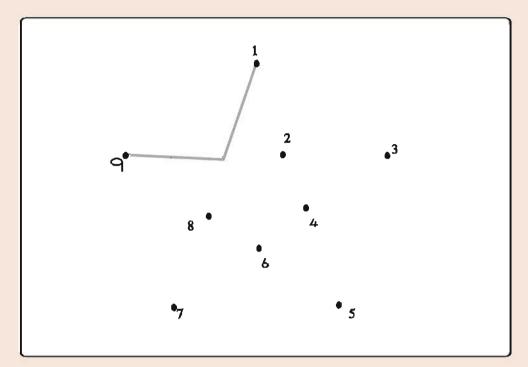


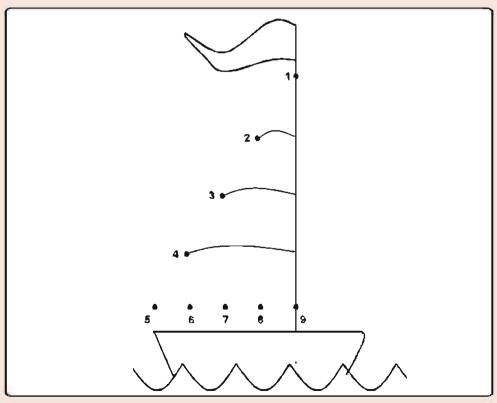
Introduce the concept of 'more - less' using various objects. Later, help the children to understand 'bigger' and 'smaller' numbers.





Join the dots following the numbers.





3

Addition

One lonely rabbit waiting for a friend One more joined it And then there were two.

Two little rabbits

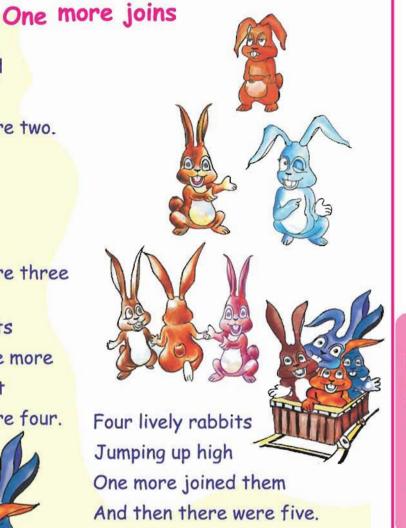
Playing a game

One more joined it

And then there were three

Three frisky rabbits
Wishing there were more
Along came a rabbit
And then there were four.





Five little rabbits
Hopping in the sun
Together they played
And had a lot of fun.



Addition denotes 'total', 'together' and 'altogether'.
Addition can be introduced in this way.

Draw a circle. Ask 3 children to stand within it. Ask the other children, 'How many children are inside the circle?' Allow two more children to stand inside the circle. Now, ask the children, 'How many children are there inside the circle altogether?'

Let us go to school together!

My classmate from the next street joined me when I went to school.

We are 2 in number

$$|+|=2$$





As we walked together, her brother joined us.

Now, we are 3 in number

$$2 + 1 = 3$$

As we crossed the school playground, 2 more classmates started walking with us.

Now, we are 5 in number

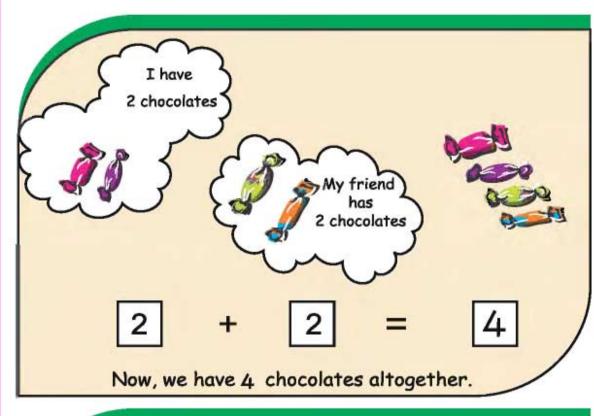
$$3 + 2 = 5$$

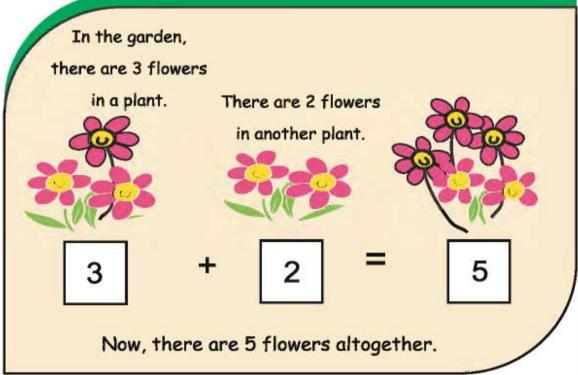




Using different objects, the teacher may introduce addition and demonstrate various activities.

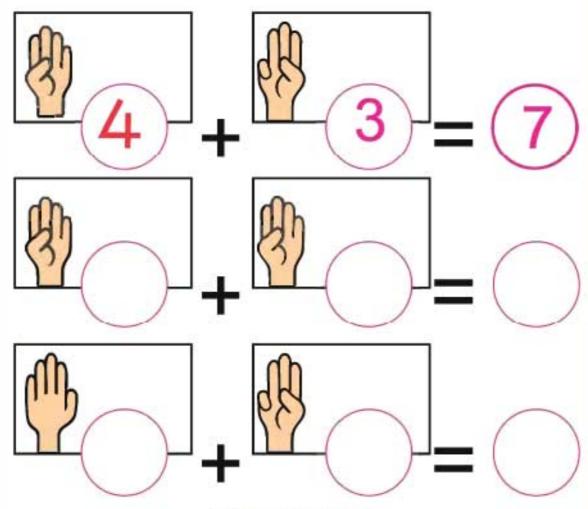
How many?





If they join together. balloons and balloons balloons altogether toffees and toffees toffees altogether balls and balls balls altogether and parrots parrots parrots altogether

Count the fingers and add.



Fill in the table.

+	1	2	3	4	5
1					
3			5		
3				7	
4					

Draw lines for the numbers and add.

1 + 3 = 4	1 +3 4
2 + 3 =	2 +3
5 + 3 =	5 +3
5 + 4 =	5 + 4

Add and match.

