

Government of Karnataka

MATHEMATICS

Text cum Workbook

(Revised)

English Medium

1

1st Standard

KARNATAKA TEXT BOOK SOCIETY (R)

100 Feet Ring Road, Banashankari 3rd stage, Bengaluru-85



The Textbook Society, Karnataka has been engaged in producing new textbooks according to the new syllabi which in turn are designed on NCF – 2005 since June 2010. Textbooks are prepared in 12 languages; seven of them serve as the media of instruction. From standard 1 to 4 there is the EVS, mathematics and 5th to 10th there are three core subjects namely mathematics, science and social science.

NCF - 2005 has a number of special features and they are:

- connecting knowledge to life activities
- learning to shift from rote methods
- enriching the curriculum beyond textbooks
- learning experiences for the construction of knowledge
- making examinations flexible and integrating them with classroom experiences
- caring concerns within the democratic policy of the country
- make education relevant to the present and future needs.
- softening the subject boundaries- integrated knowledge and the joy of learning
- the child is the constructor of knowledge

The new books are produced based on three fundamental approaches namely.

Constructive approach, Spiral approach and Integrated approach.

The learner is encouraged to think, engage in activities, master skills and competencies. The materials presented in these books are integrated with values. The new books are not examination oriented in their nature. On the other hand, they

help the learner in the total development of his/her personality, thus help him/her become a healthy member of a healthy society and a productive citizen of this great country, India.

Mathematics is essential in the study of various subjects and in real life. NCF 2005 proposes moving away from complete calculations, construction of a framework of concepts, relate mathematics to real life experiences and cooperative learning.

Many students have a maths phobia and in order to help them overcome this phobia, jokes, puzzles, riddles, stories and games have been included in textbooks. Each concept is introduced through an activity or an interesting story at the primary level. The contributions of great Indian mathematicians are mentioned at appropriate places.

The Textbook Society expresses grateful thanks to the chairpersons, writers, scrutinisers, artists, staff of DIETs and CTEs and the members of the Editorial Board and printers in helping the Textbook Society in producing these textbooks.

G. S. Mudambadithaya

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Managing Director Karnataka Textbook Society® Bangalore, Karnataka

Chairperson's note to teachers

This First Standard Mathematics Textbook is prepared according to the revised syllabus based on NCF, 2005. The basic feature highlighted in NCF (2005) and seriously adopted in this textbook is that "The child is the constructor of his/her own knowledge". The focus in this textbook is on **experiential learning** which is based on both **hands on** and **minds on** activities.

The introduction of new mathematics syllabus and textbooks should be always backed up by a wealth of activities, illustrations and problems through which children can play and explore mathematics. There is no better guidance than well chosen illustrations that appeal to the intuition and focus the imagination and through which the child can construct his/her own mathematical knowledge. Such self-discovery leads to a much deeper understanding and a confidence in the subject, which the children can never forget and upon which he/she can build further.

The First Standard Mathematics Textbook is designed keeping all the above mentioned facts in view and also the intellectual development of children at that age level. Considering the point that the children are at **concrete operation stage** during this age, a large store of pictures are provided, which represent real life objects and situations. As mathematics is a very challenging and vibrant subject connected to the real world at every level, these illustrations help children to connect mathematics with real life situations. They also provide opportunities for children to indulge in challenging and exciting tasks of discovery and creativity as well.

Mathematics teaching should be child-centred and also learning-centred. It is the responsibility of the teachers to generate interest and stimulate enthusiasm in the subject. Teachers are expected to play the role of facilitators and create constructive learning environments with the help of illustrations suggested in this textbook and many more similar to or beyond them.

Hope that the material presented in this textbook will trigger the imagination, thinking and reasoning skills in children and support them to construct meaningful mathematical knowledge. Constructive suggestions for further improvement of this textbook are always welcome.

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About the Revision of Textbooks

Honourable Chief Minister Sri Siddaramaiah who is also the Finance Minister of Karnataka, in his response to the public opinion about the new textbooks from standard I to X, announced, in his 2014-15 budget speech of constituting an expert-committee, to look into the matter. He also spoke of the basic expectations there in, which the textbook experts should follow: "The textbooks should aim at inculcating social equality, moral values, development of personality, scientific temper, critical acumen, secularism and the sense of national commitment", he said.

Later, for the revision of the textbooks from class I to X, the Department of Education constituted twenty seven committees and passed an order on 24-11-2014. The committees so constituted were subject and class-wise and were in accordance with the standards prescribed. Teachers who are experts in matters of subjects and syllabi were in the committees.

There were already many complaints, and analyses about the textbooks. So, a freehand was given in the order dated 24-11-2014 to the responsible committees to examine and review text and even to prepare new text and revise if necessary. Eventually, a new order was passed on 19-9-2015 which also gave freedom even to re-write the textbooks if necessary. In the same order, it was said that the completely revised textbooks could be put to force from 2017-18 instead of 2016-17.

Many self inspired individuals and institutions, listing out the wrong information and mistakes there in the text, had sent them to the Education Minister and to the Textbook Society. They were rectified. Before rectification we had exchanged ideas by arranging debates. Discussions had taken place with Primary and Secondary Education Teachers' Associations. Questionnaires were administered among teachers to pool up opinions. Separate meetings were held with teachers, subject inspectors and DIET Principals. Analytical opinions had been collected. To the subject experts of science, social science, mathematics and languages, textbooks were sent in advance and later meetings were held for discussions. Women associations and science related organistation were also invited for discussions. Thus, on the basis of all inputs received from various sources, the textbooks have been revised where ever necessary.

Another very important aspect has to be shared here. We constituted three expert

committees. They were constituted to make suggestions after making a comparative study of the texts of science, mathematics and social science subjects of central schools (NCERT), along with state textbooks. Thus, the state text books have been enriched based on the comparative analysis and suggestions made by the experts. The state textbooks have been guarded not to go lower in standards than the textbooks of central school. Besides, these textbooks have been examined along side with the textbooks of Andhra Pradesh, Kerala, Tamil Nadu and Maharashtra states.

Another clarification has to be given here. Whatever we have done in the committees is only revision, it is not the total preparation of the textbooks. Therefore, the structure of the already prepared textbooks have in no way been affected or distorted. They have only been revised in the background of gender equality, regional representation, national integrity, equality and social harmony. While doing so, the curriculum frames of both central and state have not been transgressed. Besides, the aspirations of the constitution are incorporated carefully. Further, the reviews of the committees were once given to higher expert committees for examination and their opinions have been inculcated into the textbooks.

Finally, we express our grateful thanks to those who strived in all those 27 committees with complete dedication and also to those who served in higher committees. At the same time, we thank all the supervising officers of the Textbook Society who sincerely worked hard in forming the committees and managed to see the task reach its logical completion. We thank all the members of the staff who co-operated in this venture. Our thanks are also due to the subject experts and to the associations who gave valuable suggestions.

Narasimhaiah

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LESSON-1

Spatial Understanding

After studying this unit, you can

we use the vocabulary of spatial relationship such as, top-bottom, on-under, inside-outside, above-below, near-far, before-after.

Top - Bottom

Anant is painting at the **top** of the building.





Bird is sitting at the **top** of the tree.

Monkey is sitting at the **top** of the pillar.





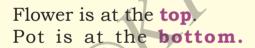
Fire is touching the **bottom** of the pot.

Milk is at the **bottom** of the glass.





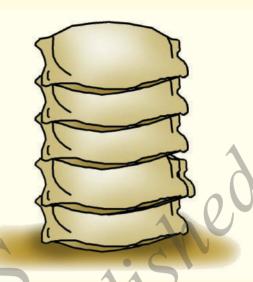
Hole is at the **bottom** of the pot.





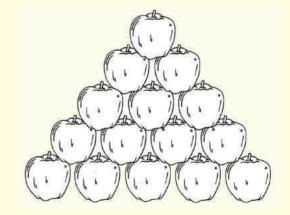
Tick (\checkmark) the pot at the **bottom.**

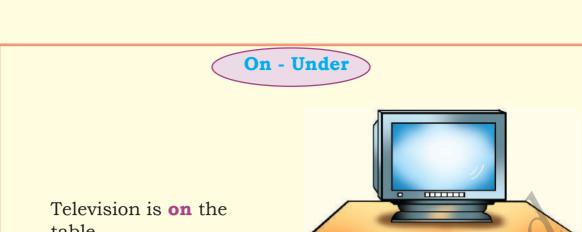
Tick (\checkmark) the sack at the **top.**

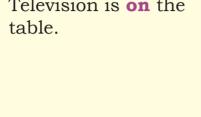


Tick (\checkmark) the disc at the **bottom**.

Colour the apple at the **top.**









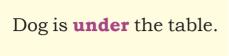


Mat is **on** the floor.

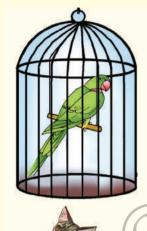


Photograph is **on** the wall.

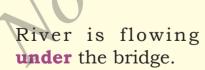








Cat is **under** the cage.





Tick (\checkmark) the vase **on** the table.





Tick (\checkmark) the boy sitting **on** the bench.

Colour the lamps **under** the staircase.





Tick (\checkmark) the cat **under** the cot.

Inside-Outside

Fruits are **inside** the basket. Leaves are **outside** the basket.





Mother is **inside** the house. Father is **outside** the house.

Chickens are **inside** the basket.





Tick (\checkmark) the dog **inside** the kennel.

Tick (\checkmark) the flowerpot **inside** the house.



Tick (\checkmark) the fruits **inside** the basket.



Tick (\checkmark) the children **outside** the cart.





Above - Below

Eyes are **below** the eyebrows. Mouth is **below** the nose. Nose is **above** the mouth. Eyebrows are **above** the eyes.



Lamp is **above** the table. Table is **below** the lamp.

A circus artist is holding the rod **above** his head.

A girl is watching from **below**.





Tick (\checkmark) the bird flying **above** the tree.

Colour the ball **above** the head of the Joker.



Tick (\checkmark) the butterfly **below** the flower.



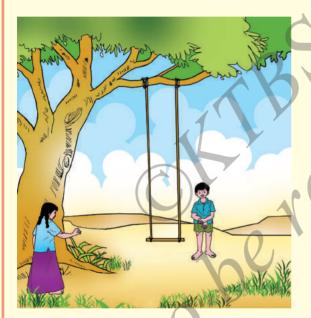
Tick (\checkmark) the bird flying **below** the kite.



Near-Far

Mother is **near** the child. Moon is **far** away from the child.

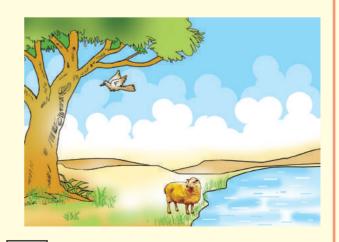




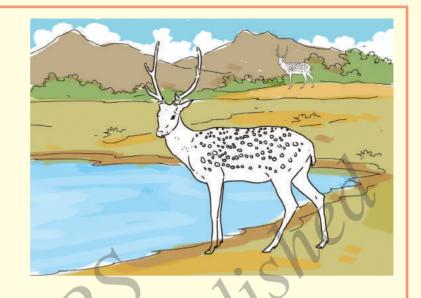
Ravi is standing **near** the swing.

Mary is standing **far** from the swing.

Bird is **near** the tree. Sheep is **far** from the tree. Sheep is **near** the pond. Bird is **far** from the pond.



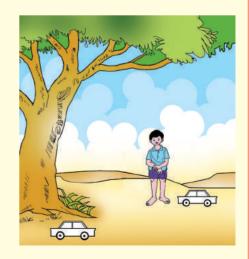
Colour the deer **near** the pond.



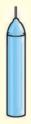


Colour the butterfly **far** from the flower.

A boy is playing with 2 cars. Colour the car **near** him green and the car **far** from him blue.



Before - After







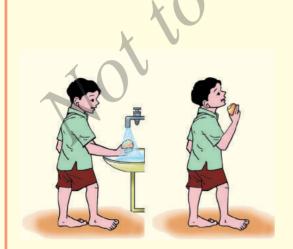
Candle after lighting.



Flowerpot before lighting.



Flowerpot after lighting.



Wash the mango **before** eating.

Eat the mango **after** washing.

Tick (\checkmark) the activity that comes **before.**





Tick (\checkmark) the activity that comes **after.**





LESSON-2

Solids Around Us

After studying this unit, you can

- resort and classify objects based on their shapes.
- * observe and explain how the shapes affect the movement of objects like rolling and sliding.
- ridentify two dimension flat objects with shapes such as square, triangle, rectangle and circle.
- draw free hand figures of triangles, rectangles, squares and circles.

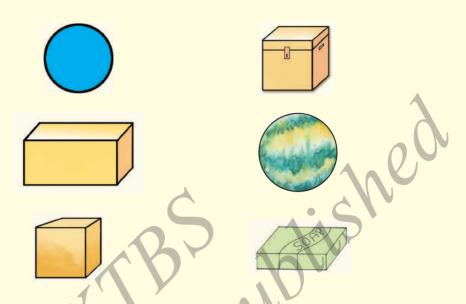
Look at the pictures given below.



Objects of the same shape can be grouped. Observe the following.

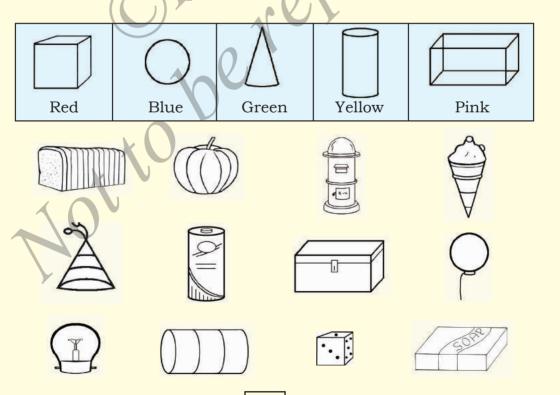


Objects of the same shape can be grouped. Observe the following. Match the objects of same shape.

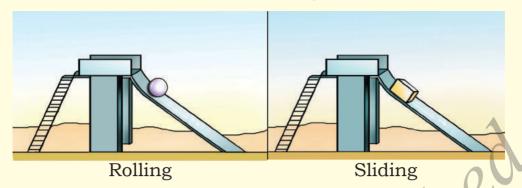


Sorting Shapes

Colour the same shapes, with the same colours as directed.



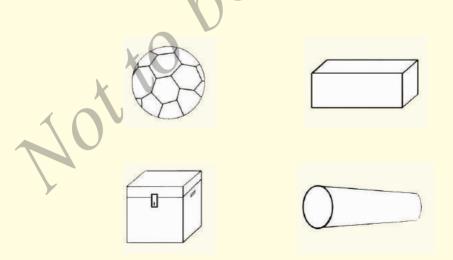
Movement of objects



Tick (\checkmark) the object that rolls.



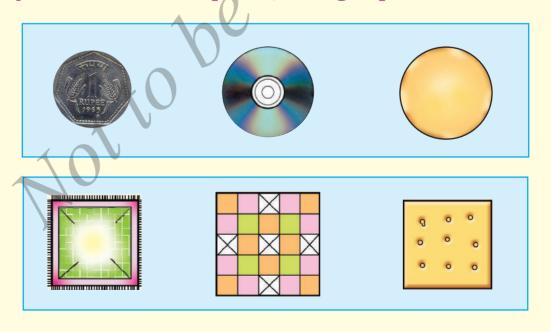
Colour the objects that slide.

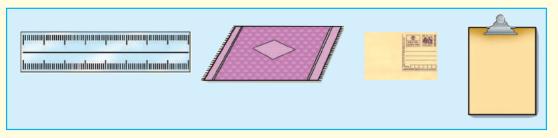


Observe the shape of top surface of the given objects.

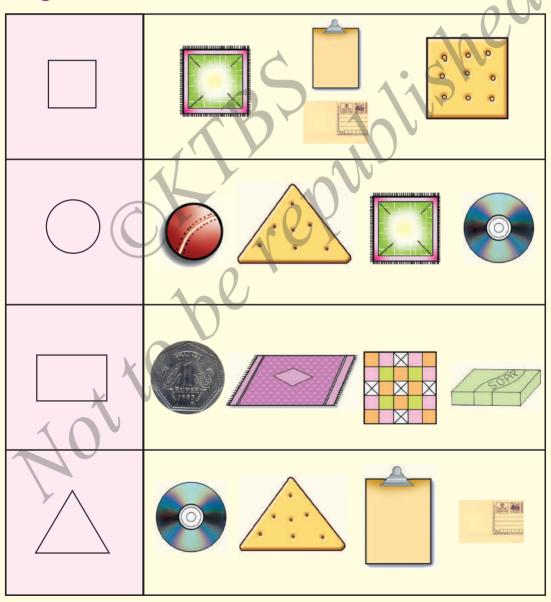


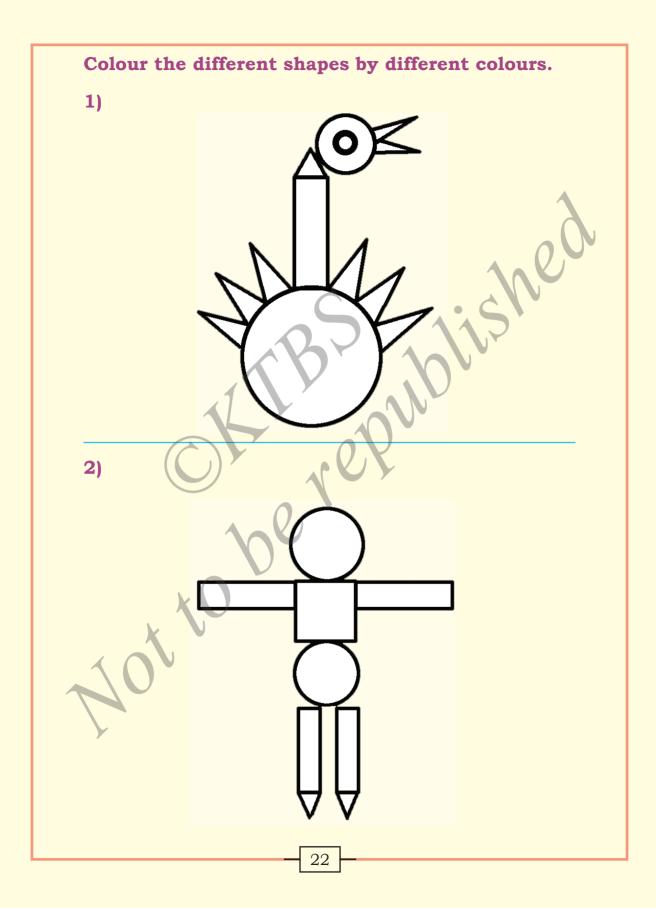
Objects of the same shape have been grouped. Observe them.

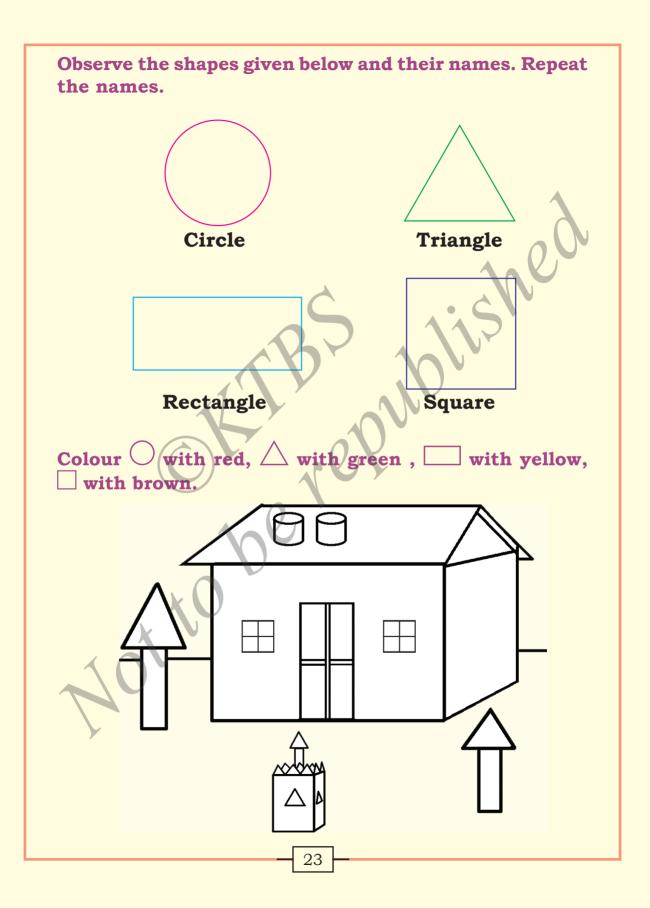




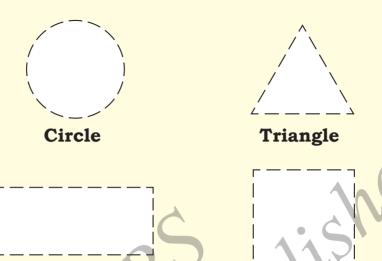
Tick (\checkmark) the shape which is similar to the given shape.







Join the dots and complete the picture.



Square

Rectangle

Draw the above shapes (free hand) and practice.

LESSON-3

Digits (1-9)

After studying this unit, you can

- match the objects having equal number.
- identify more-less.
- count objects from 1 to 9.
- ridentify, read and write numbers from 1 to 9.
- ridentify and write before and after number.

Observe the trees, birds, ants, balloons, ducks, children in the picture given below. How many of them are there?

Let us learn about this.



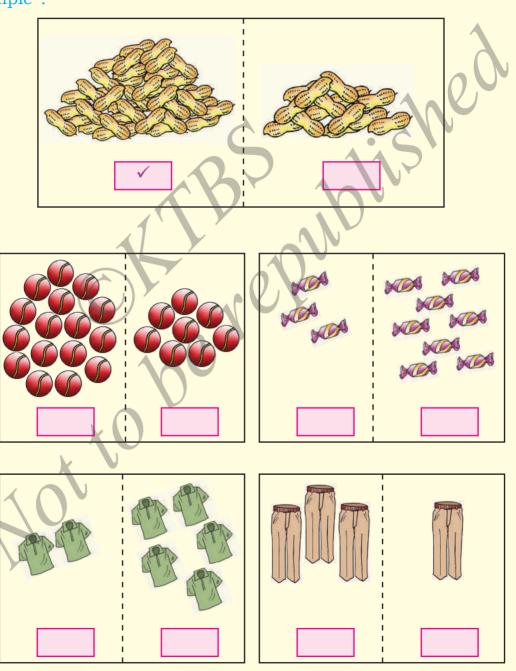
Match as shown.



More-Less

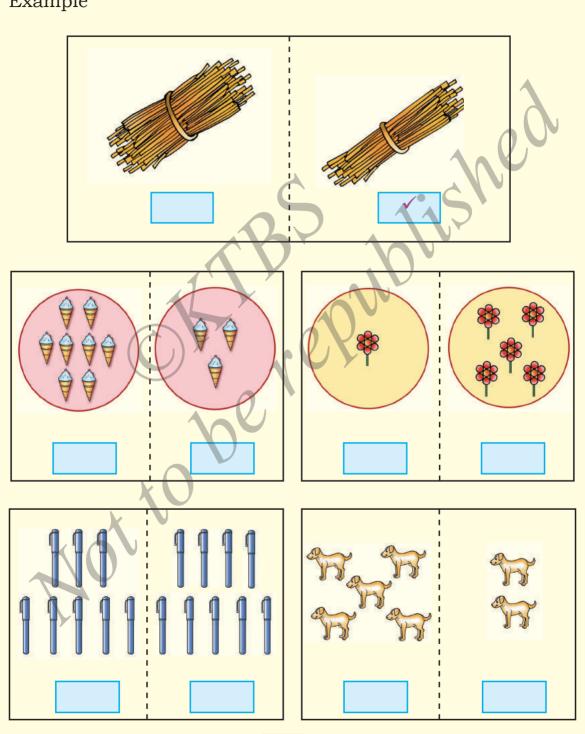
Look at the pictures given below. Tick (\checkmark) the part which has more.

Example:



Look at the pictures given below. Tick (\checkmark) the part which has less.

Example

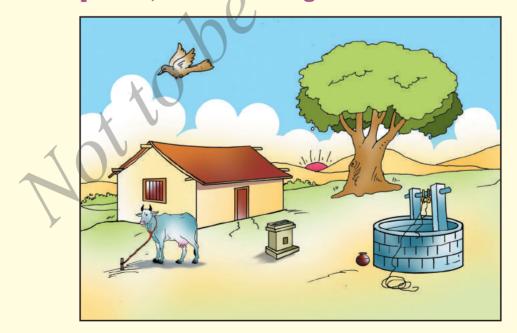




ONE



In this picture, name the things that are one in number.



TWO



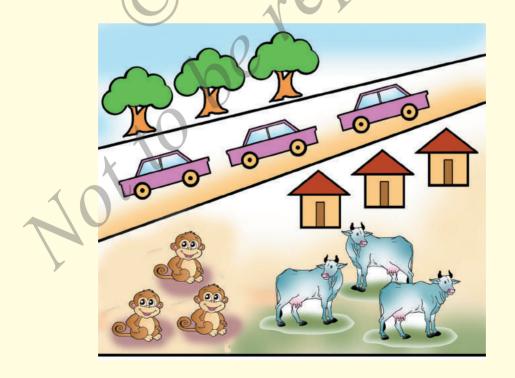
In this picture, name the things that are two in number.



THREE



In this picture, name the things that are three in number.



FOUR



In this picture, name the things that are four in number.



FIVE

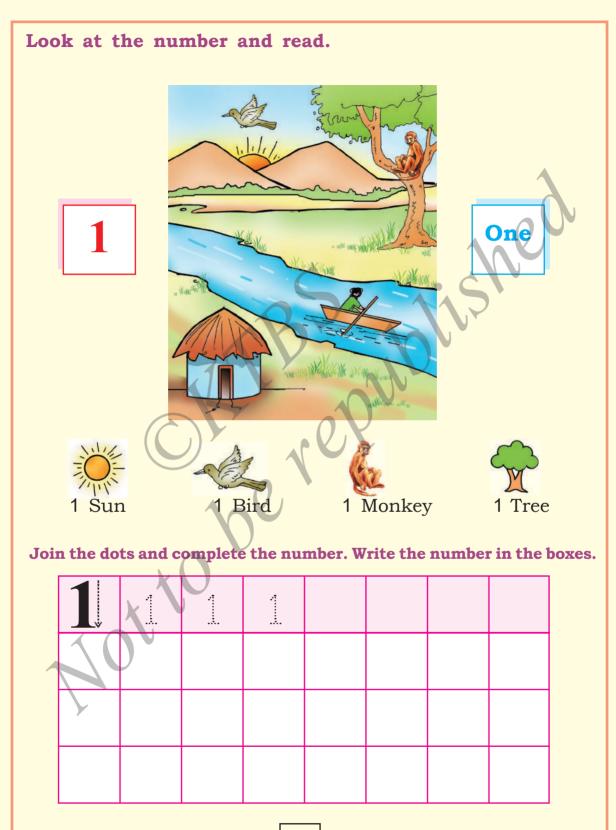


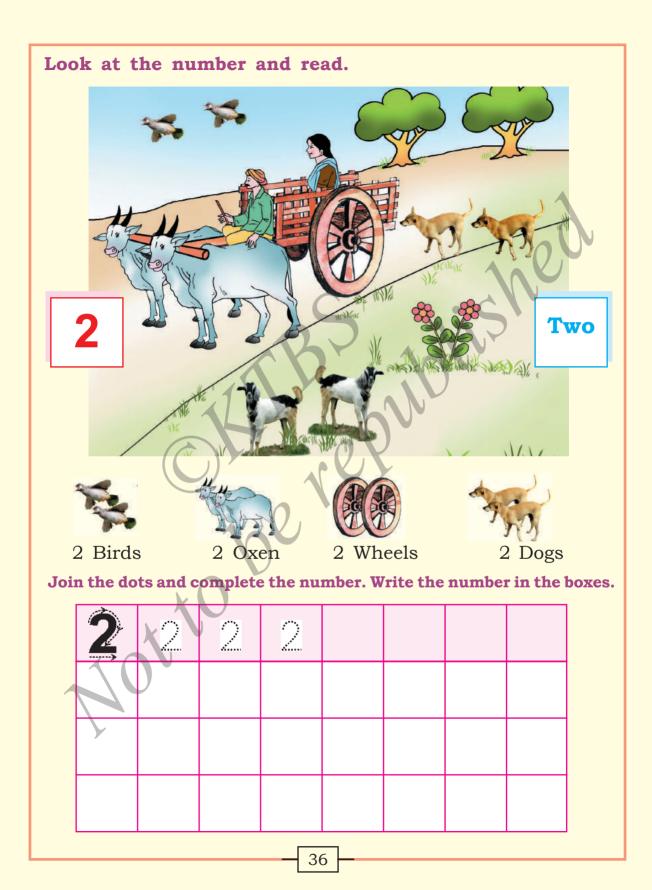
In this picture, name the things that are five in number.

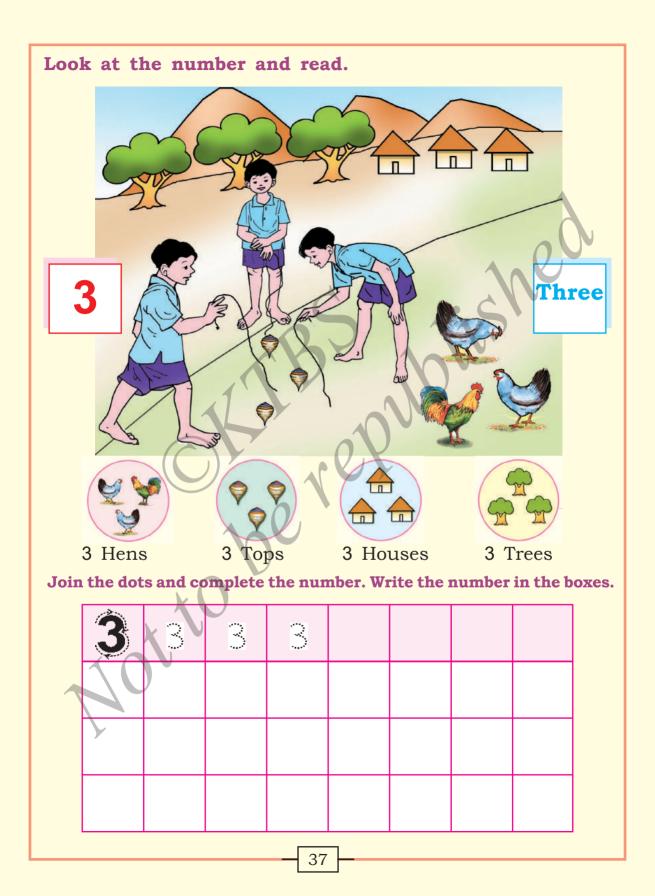


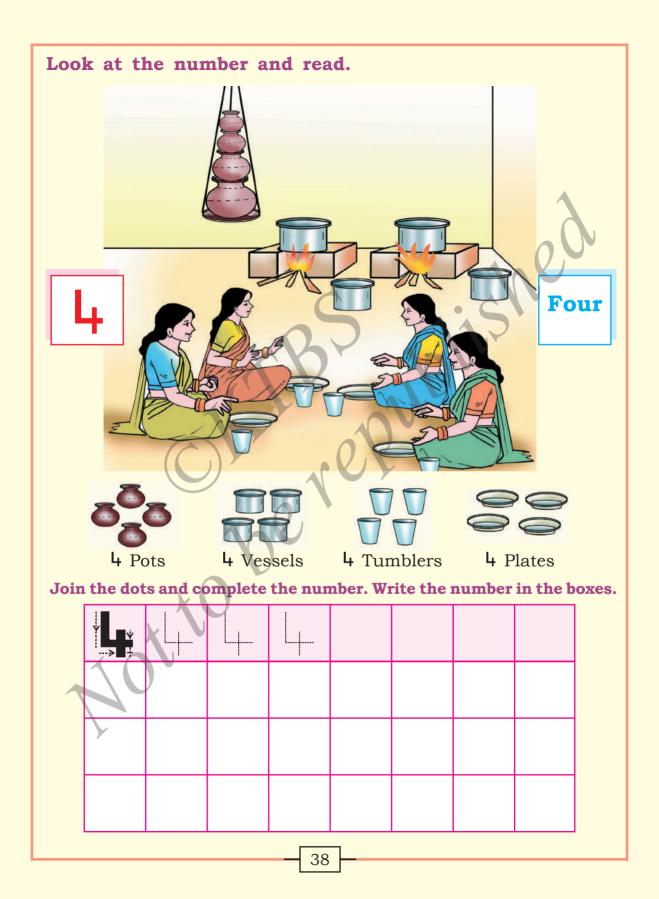
Identify the groups having equal number of objects. Match as shown.

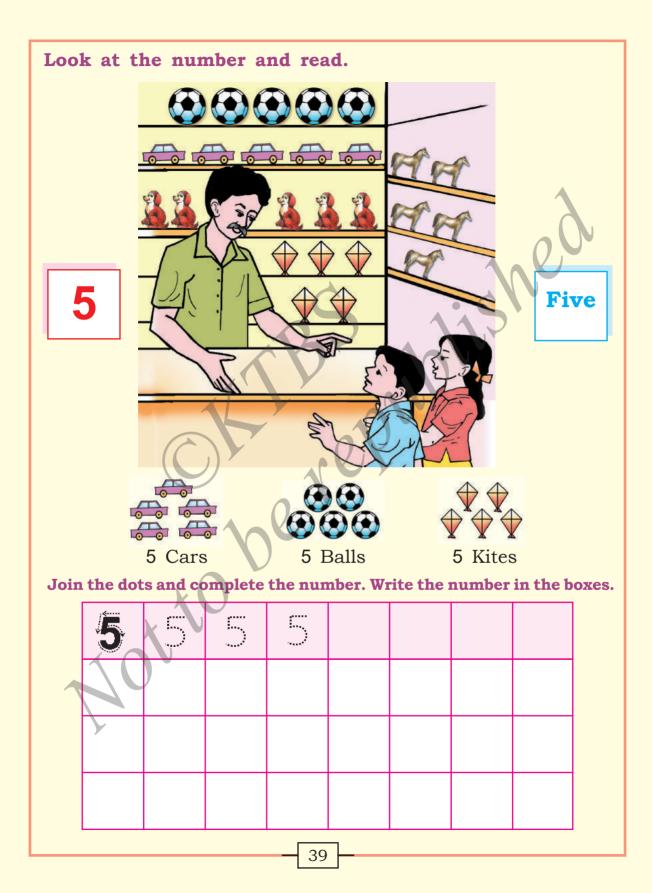




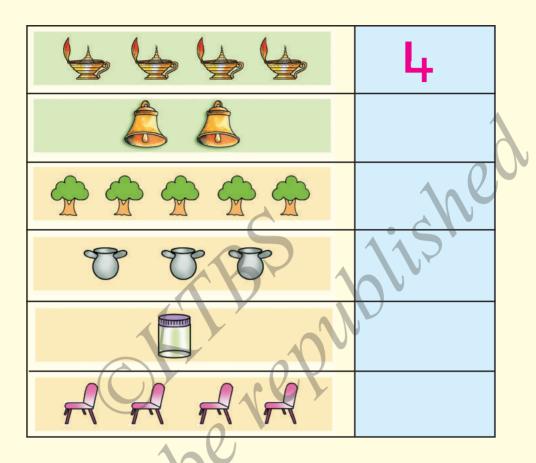




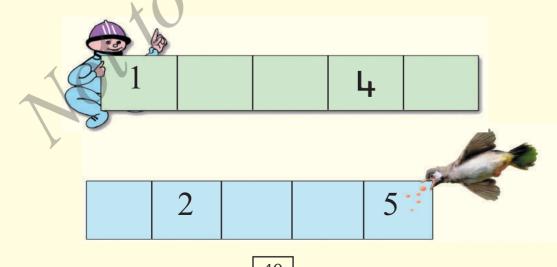




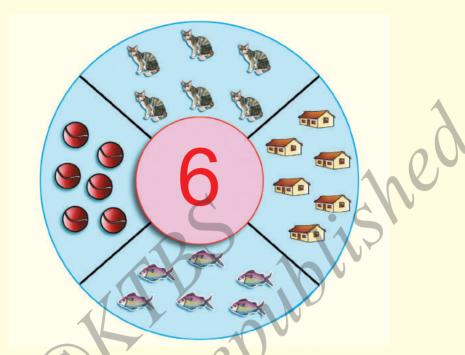
Count and write.



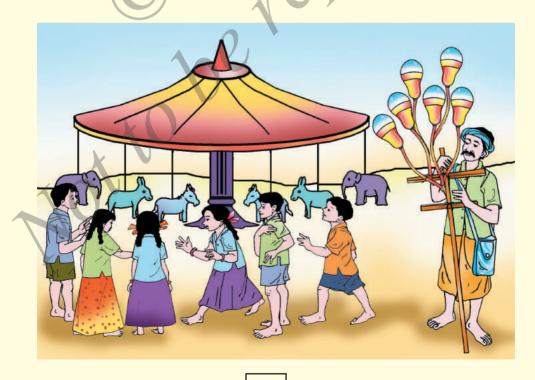
Fill in the missing numbers.



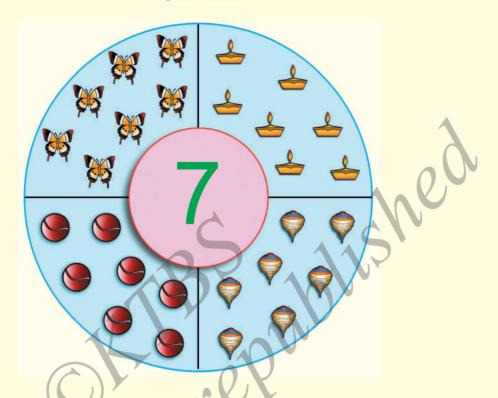
SIX



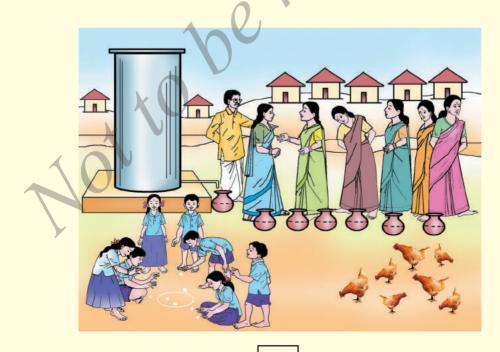
In this picture, name the figers that are six in number.



SEVEN



In this picture, name the things that are seven in number.



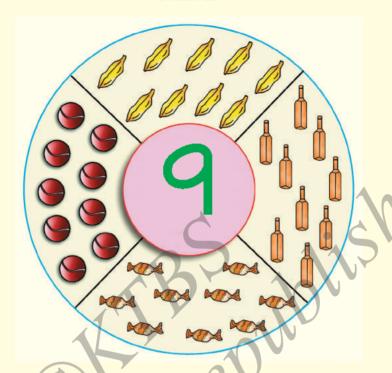
EIGHT



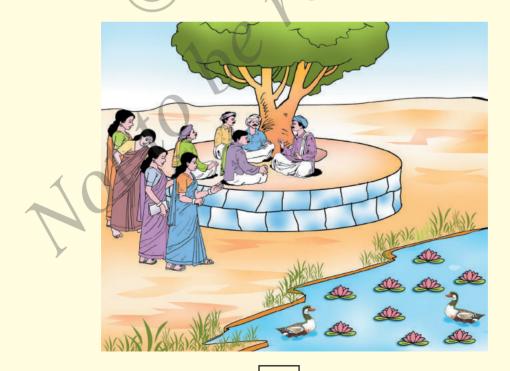
In this picture, name the things that are eight in number.



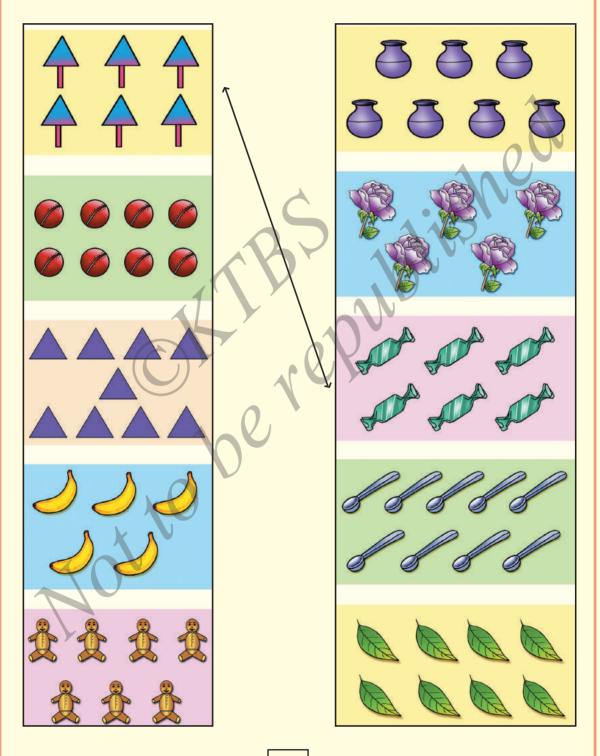
NINE

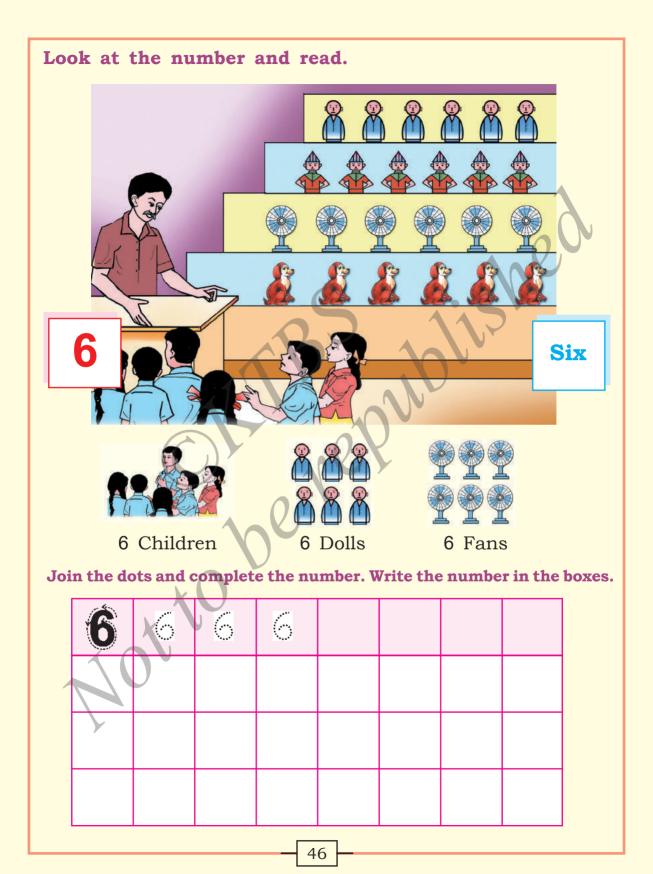


In this picture, name the things that are nine in number.

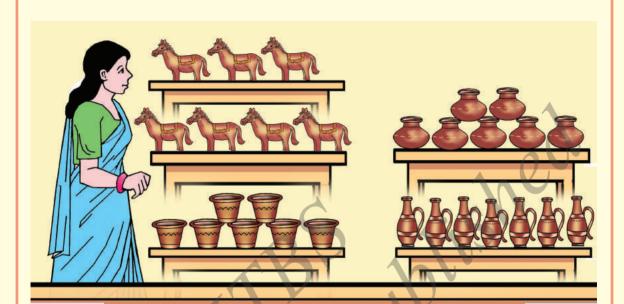


Match the groups having equal number of objects as shown.





Look at the number and read.



7

Seven







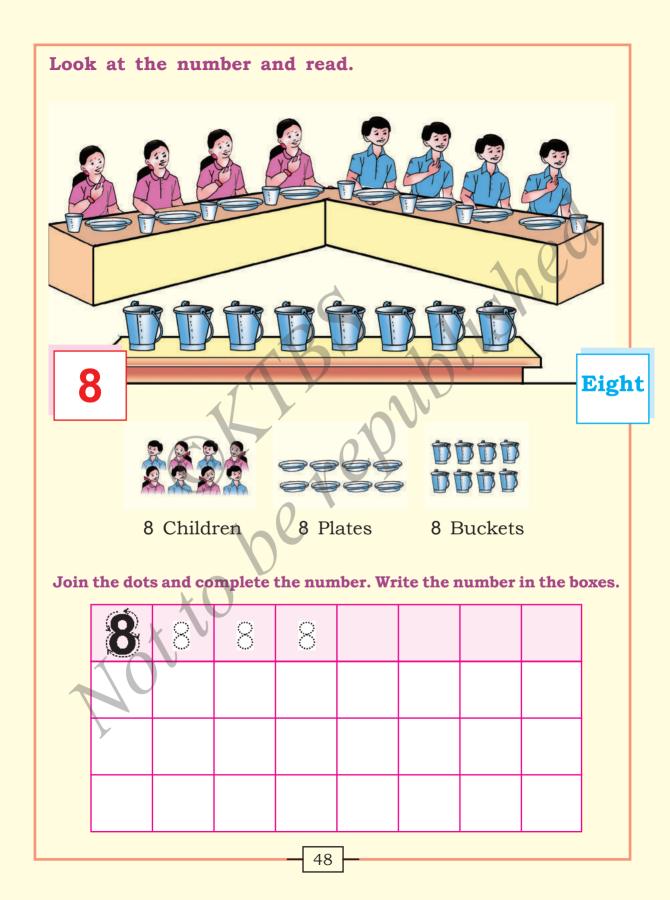
7 Jugs

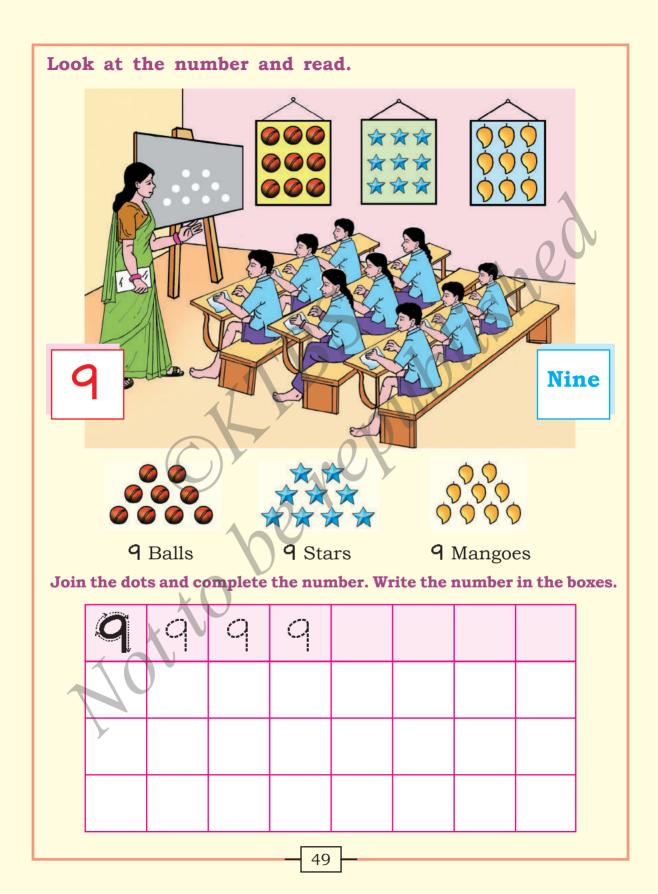
7 Flower pots

7 Pots

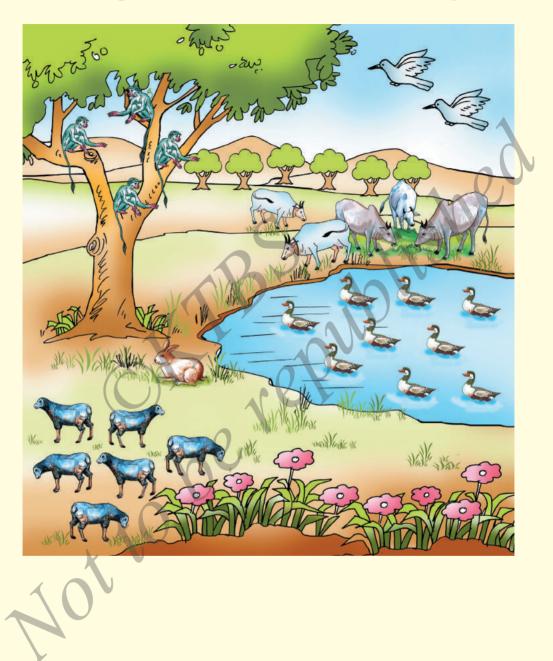
Join the dots and complete the number. Write the number in the boxes.

7	7	7		
No				
>				





Look at this picture, Count the different things.



Come, Let us count.

One one one One red apple Is on the table.





Two two two Red apples are two With me and you.

Three three three Three red apples are Hanging from the finger.





Four four four Four red apples Placed in a basket.

Five five five Five red apples Pick up any apple.





Six six six Apples are six Inside the sack.

Seven seven seven Apples are seven No apple is thrown.





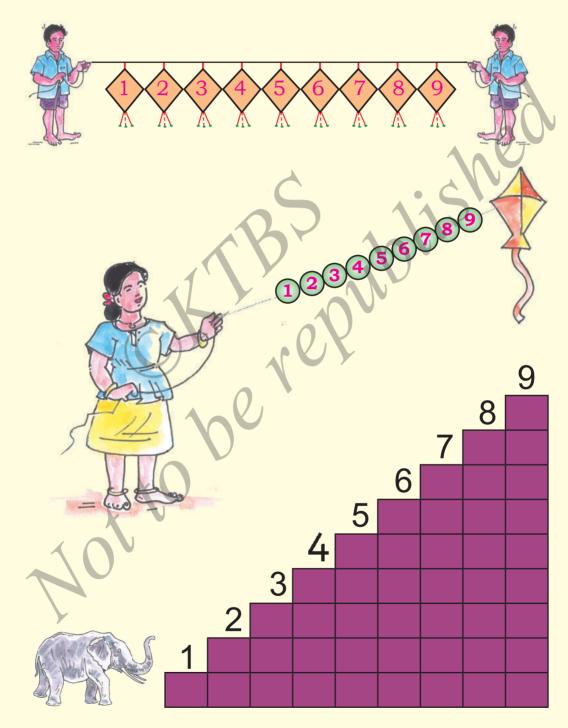
Eight eight eight Apples are eight Be ready to eat.

Nine nine nine Apples are nine Taste is very fine.

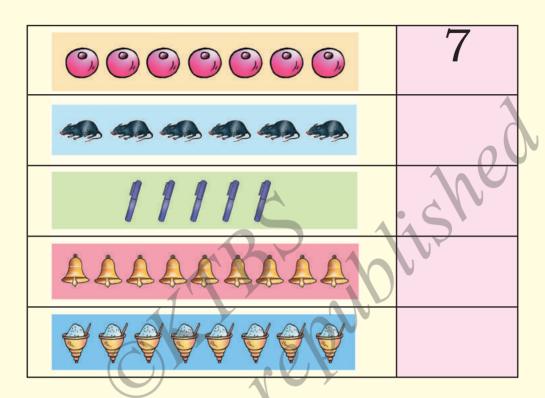


Number Buntings

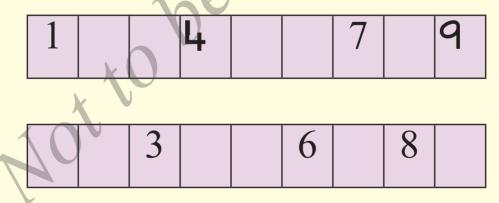
Look at the numbers written in order. Read them.



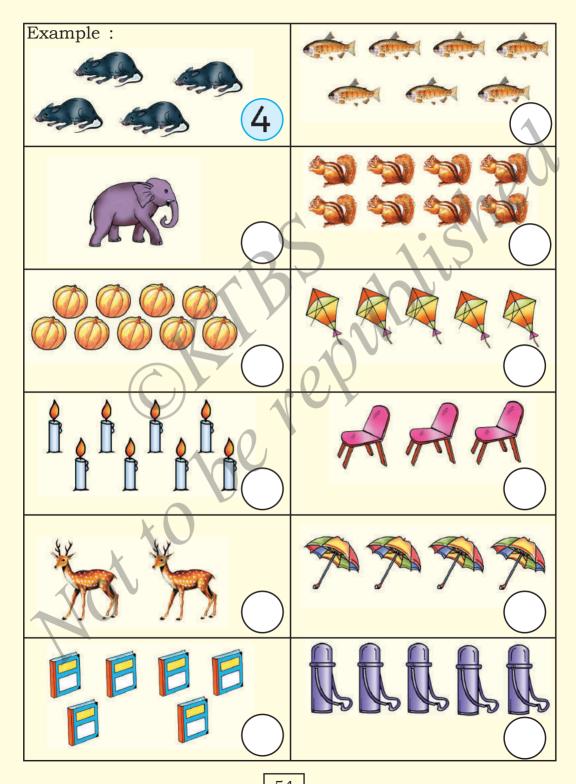
Count and write.



Fill in the missing numbers.



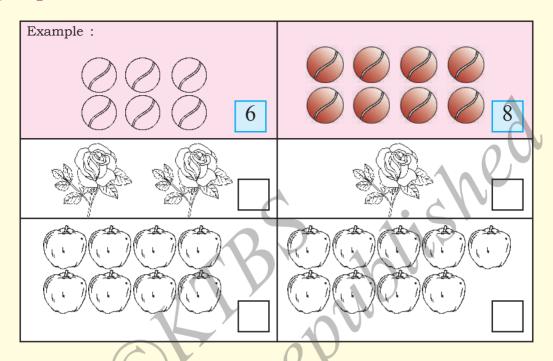
Count and write as shown.



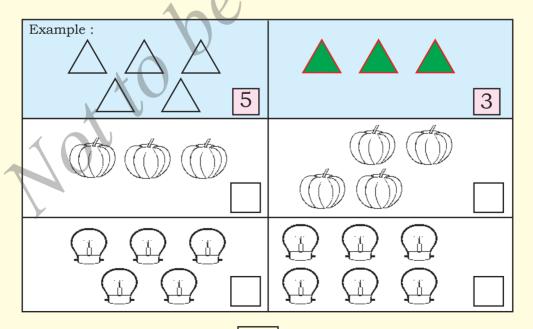
Read the numbers. Draw as many pictures as the number. Example: 55

Join the dots in order and colour the picture.

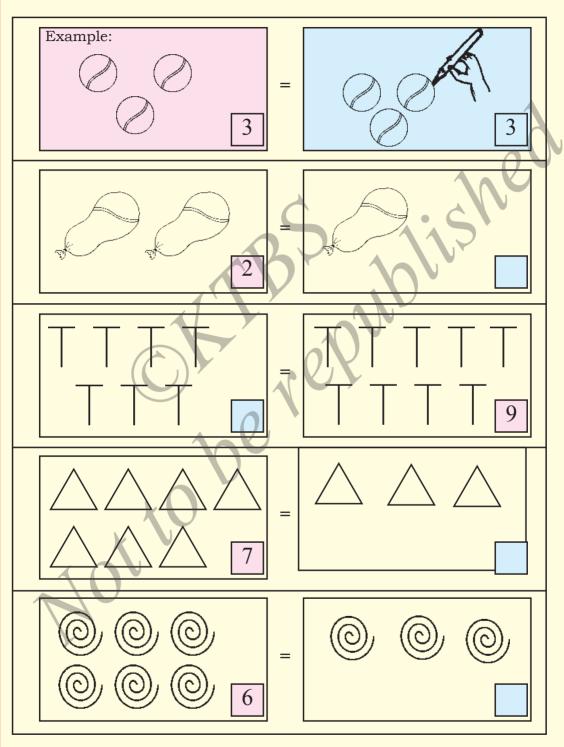
Count and write the number. Colour the objects of the group which has more.



Count and write the number. Colour the objects of the group which has less.



Draw pictures to make both the groups equal. Write the number.



Observe the numbers given in each strip. Circle the big number.

Example:



4, 2

6, 9

8, 7

9, 5

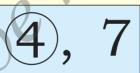
153

5,54

6, 8

Observe the numbers given in each strip. Circle the small number.

Example:



8, 7

|3, 7|

9, 4

2, 6

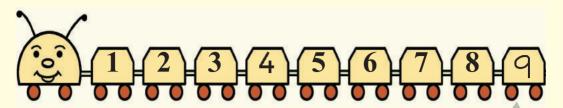
3, 1

9, 8

5, 6

7, 4

To find the next number of a given number.

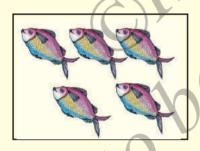


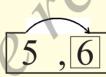


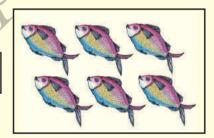




Which number comes after 5







Number after 6 is



Number after 2 is





Number after 7 isNumber after 4 isNumber after 3 isNumber after 8 is

Read the number in each strip and write its next number in the space provided.

6, _____ 1,

1,

3,

5,

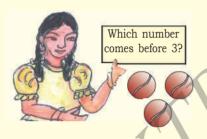
8,

7,

2,

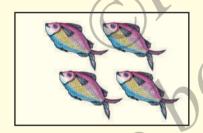
4,

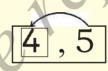
To find the previous number of a given number

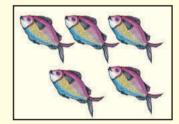




Number before 5 is 4

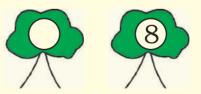






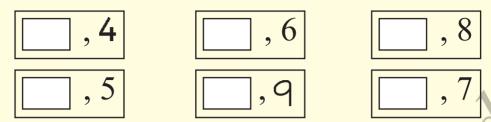
Number before 9 is Number before 8 is



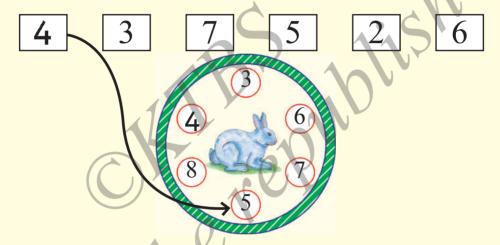


Number before 7 isNumber before 4 isNumber before 2 isNumber before 6 is

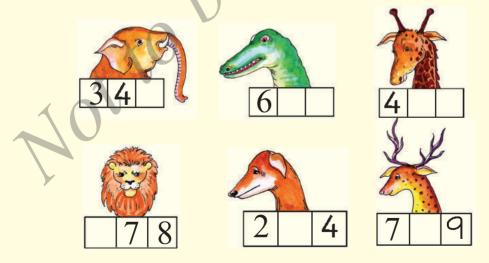
In each number strip, write the before number of the given number in the space provided.



Some numbers are given below. Match each of them with the number that comes after as shown.



Fill in the missing numbers.



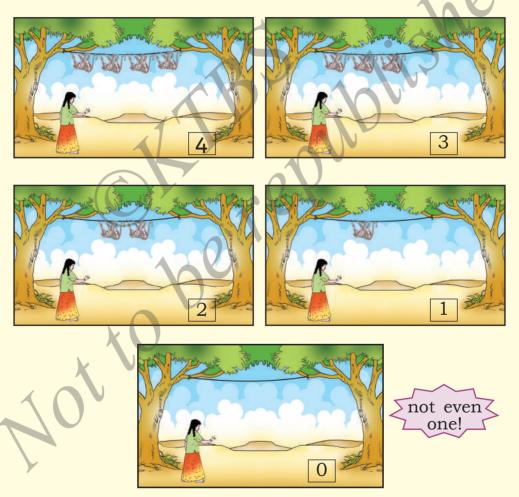
LESSON-4

Zero

After studying this unit, you can

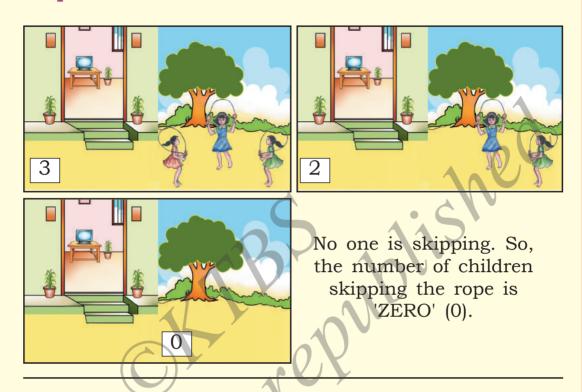
develop the concept of zero.

Look at the pictures. Count the number of monkeys dangling from the wire.



There are no monkeys dangling from the wire so, number of monkeys dangling form the wire is "Zero" (0)

How many children are playing with skipping rope in each picture?



How many fruits are there in each basket?

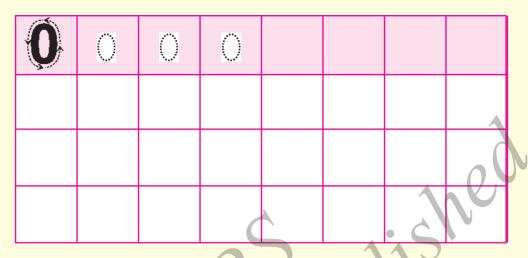


There are no fruits in the basket. So, number of fruits in the basket is 'Zero' (0).

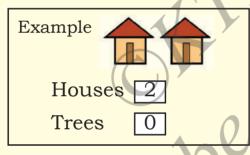
There is no one; 'there is nothing' these terms are represented by 'zero'. Zero is written as 'O'.

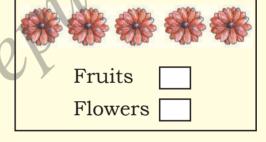
There are no monkeys dangling from the wire. So, number of monkeys dangling from the wire is ZERO.	
There are no fruits in the basket. So, number of fruits in the basket is ZERO.	
There are no chocolates in the jar. So, number of chocolates in the jar is ZERO.	
There are no flowers in the plant. So, the number of flowers in the plant is ZERO.	

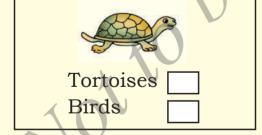
Trace and write.

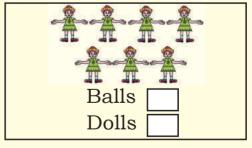


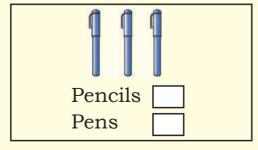
Look at the picture. Write the correct number in the given space.











LESSON-5

Addition (sum not more than 9)

After studying this lesson you can

- add using objects and pictures.
- identify and use the symbols '+' and '='.



One rabbit was sitting.

One more rabbit joins Making them two. Two rabbits were playing.

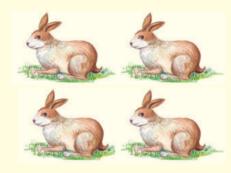






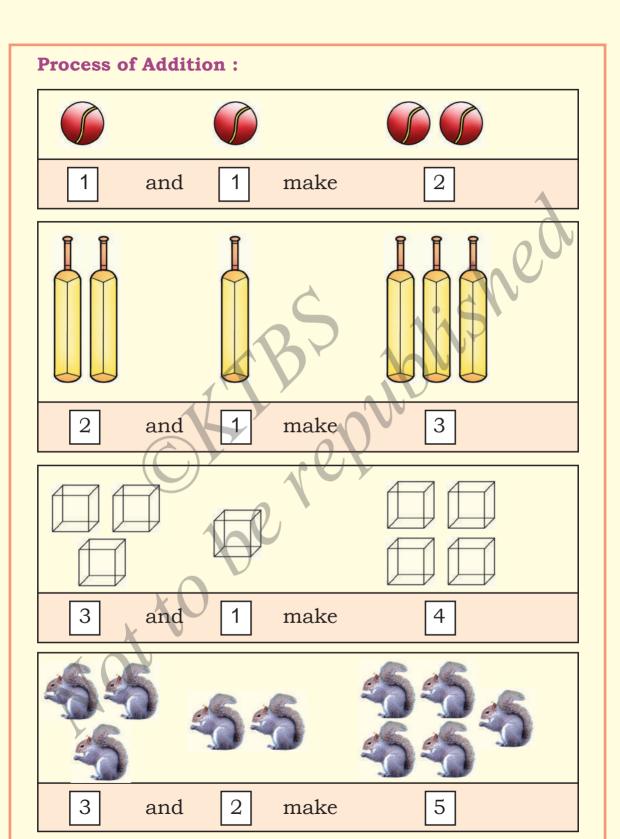
One more rabbit joins Making them three. Three rabbits are ready For a party.

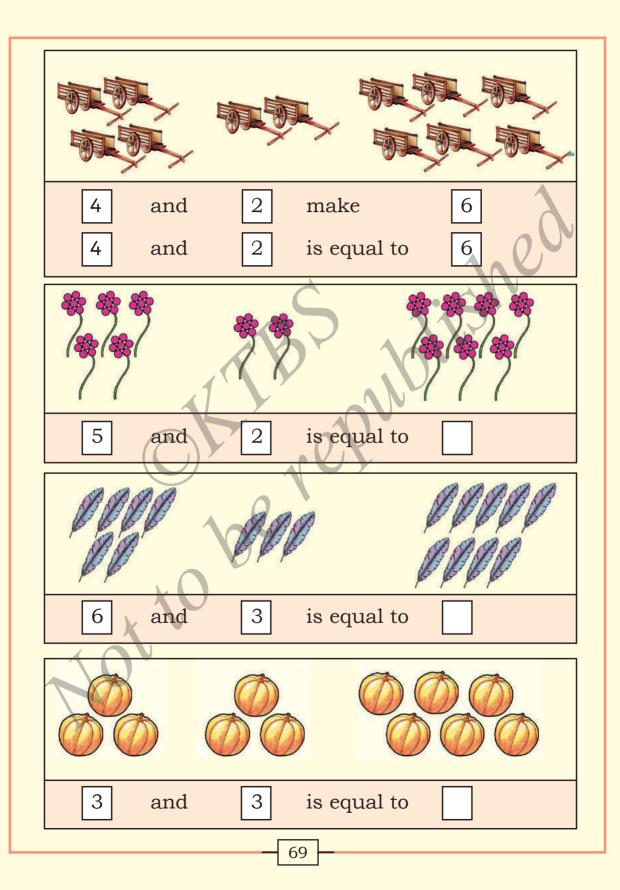
One more comes in Making them four. Four little rabbits are Now ready to race.





One more enters Making them five.

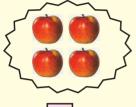




Sign for 'Addtion' and 'Equal'.

Observe the pictures.

How many fruits are there?







4

and

2

make

6

We write this addition as follows.

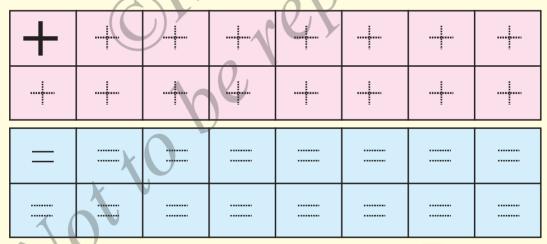
$$4 + 2 = 6$$

Look at the signs.

'+' means 'Add' Read as 'Plus'.

'=' means 'is equal to'.

Say and write (draw).



Look at the example. Do as directed. Put \square to +, and \square to = as shown.

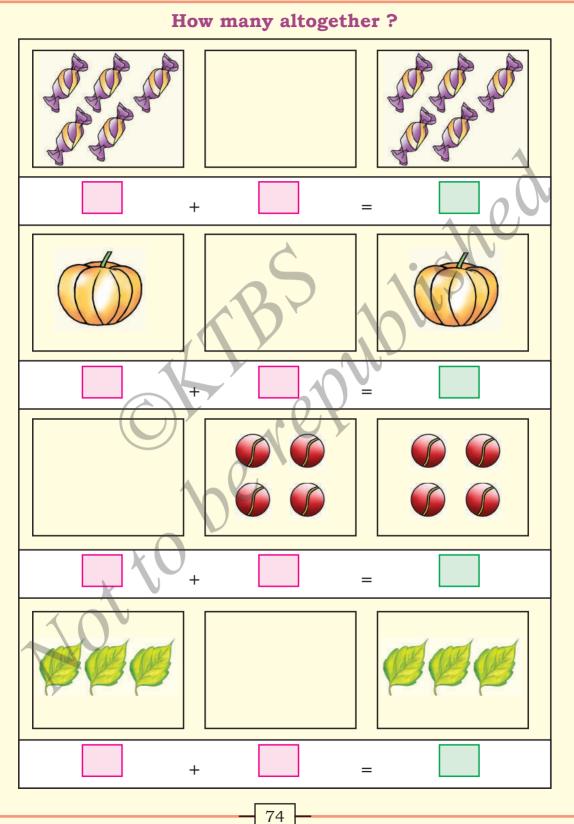
Example : + =

$$+ + + = + + = + +$$

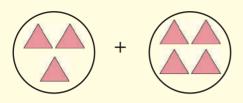
How many altogether?

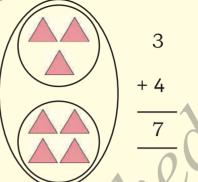
How many altogether?

How many altogether?



Addition



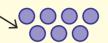


Observe the addition property Complete the remaining.

Add

> Add and Match <







LESSON-6

Subtraction

After studying this unit, you can

- subtract using objects and pictures
- ridentify and use the symbol '-'

Look at the following:











Takeaway From





Left



From Takeaway





Left



Takeaway From





Left



Sign for 'Subtraction'

Observe the pictures:

Out of 4 balloons, one bursts. How many are left?





From

4

takeaway

1

then

3

1eft

We write this subtraction as follows.

$$4 - 1 = 3$$

Observe the sign '-'

'—' means 'Subtract' - Read as 'minus' and we already know '=' means 'is equal to'

Say and Write:

•	+		••••	••••	••••	••••	••••	••••
Ì	-	••••	••••	••••	••••	••••	••••	••••

Put \bigcap for +, $' \triangle'$ for = and \bigcap for -

Example:

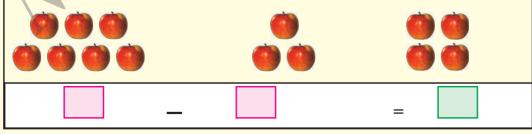


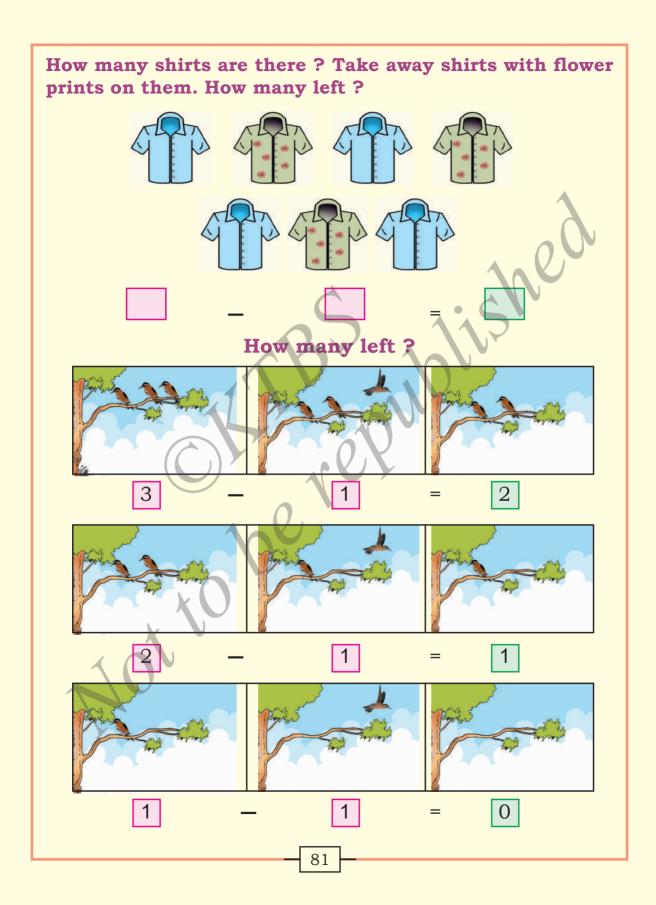


+ _ = + _ _ + _ =

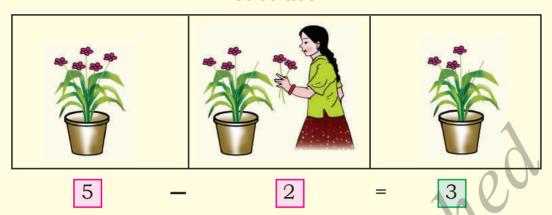
= + _ + = _ - + _ +

Look at the following: is equal to Takeaway is equal to 8

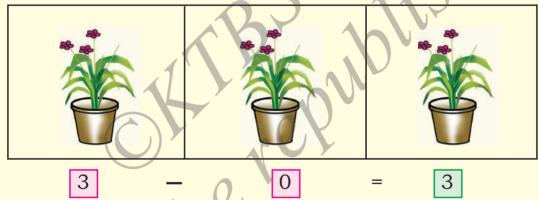




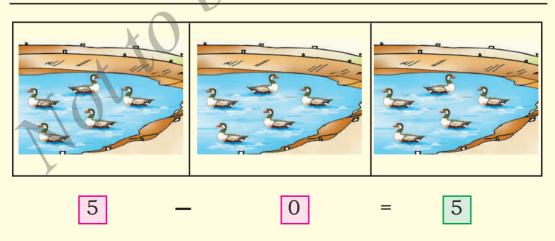
Subtract



Out of 5 flowers, 2 are taken, 5 - 2 = 3.



There are 3 flowers, no body takes it, 3 - 0 = 3.



5 Ducks floating. No duck moves away, 5 - 0 = 5.

Take away the coloured objects.

Example:













Subtract

Subtract

8

Subtract and match as shown.

$$7 - 2$$

8

8 - 7

2

9-4

1

8 - 0

\८

7-4

3

$$6 - 4$$

Write the suitable number in the blanks.

- 1

2

=



1

★

7

_

V

5

9

- 6

=

_

2

0

8

_

3

=

_

5

=

2

LESSON-7

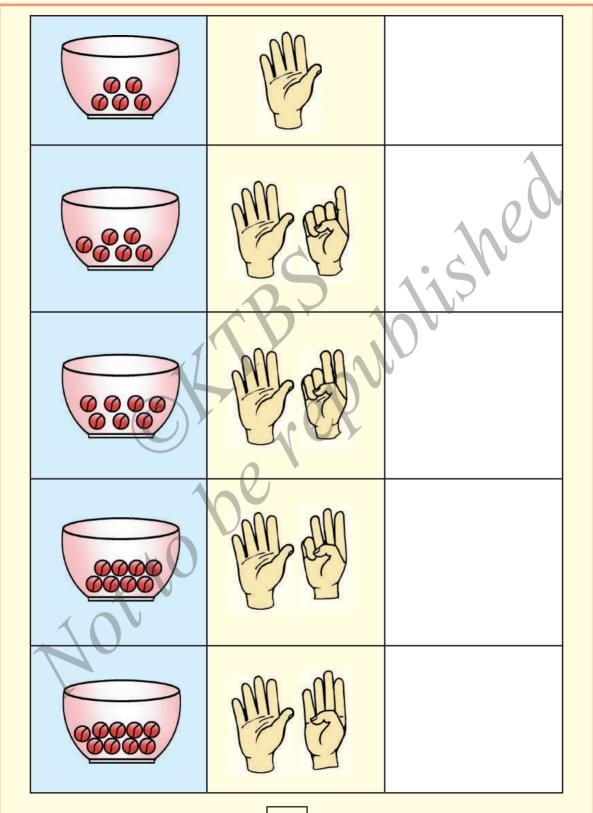
Number 10

After studying this unit, you can

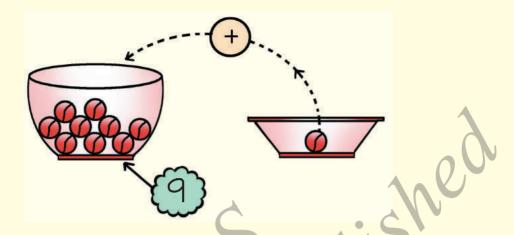
- ridentify and write the number 10.
- recount the objects using numbers.

Follow the instruction:-

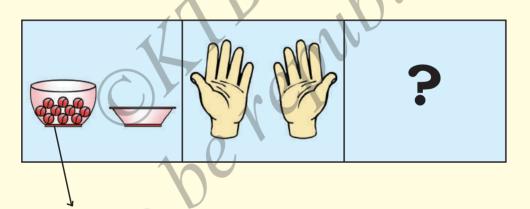
Count the marbles in the bowl.	Show your fingers and say the number	Write the number
000		



Put one more marble into the bowl.



How many marbles do, 9 marbles and 1 more make?

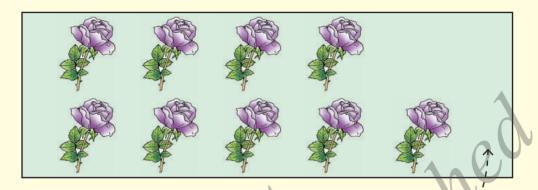


There are TEN marbles.

TEN is written as



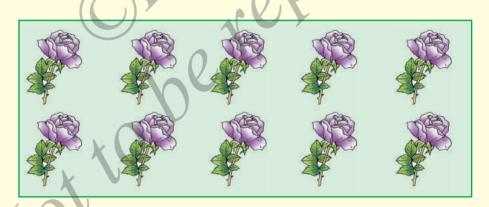
Count the roses in the tray and write the number in the box.



There are _____ roses.

Put one more rose into the tray.

Now, count the roses in the tray.



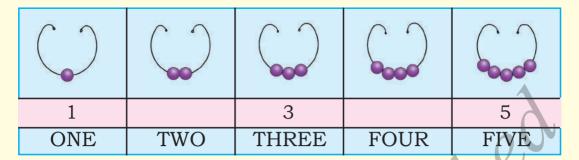
There are **TEN** roses

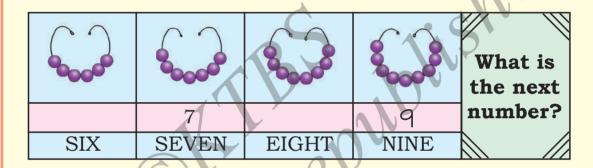
TEN is a number.
The next number of 9 is 10.

TEN is written as

10

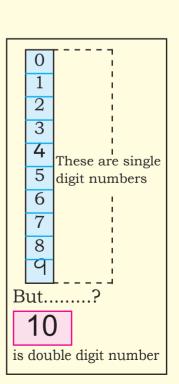
Count the beads in each necklace and write the missing numbers.





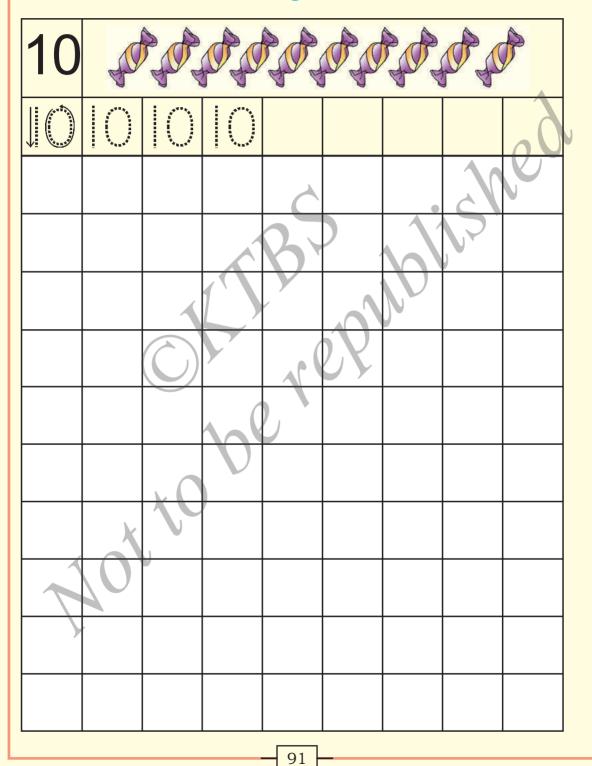


- The numeral (symbol) for number TEN is 10.
- → There are two digits in the number 10.
- ♦ They are 0 and 1.
- → 10 is a two digit number.

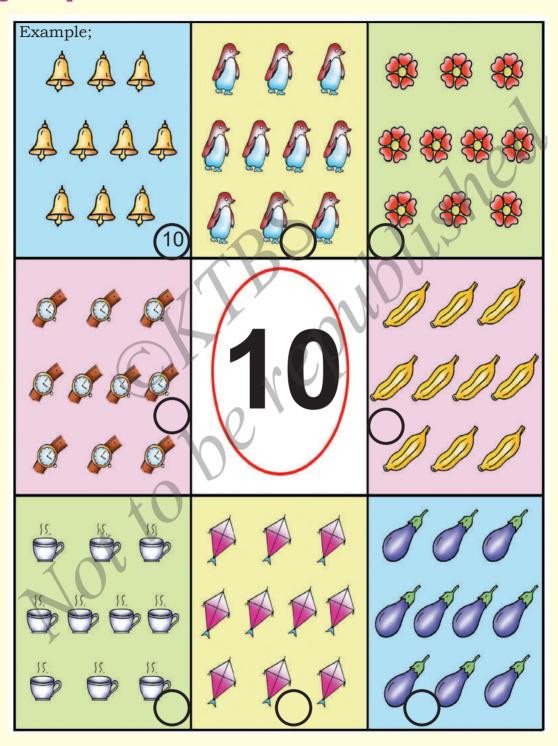


Practise yourself:

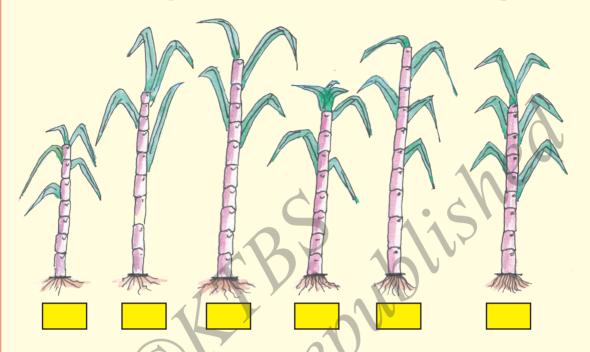
Write the number 10 in the given boxes.



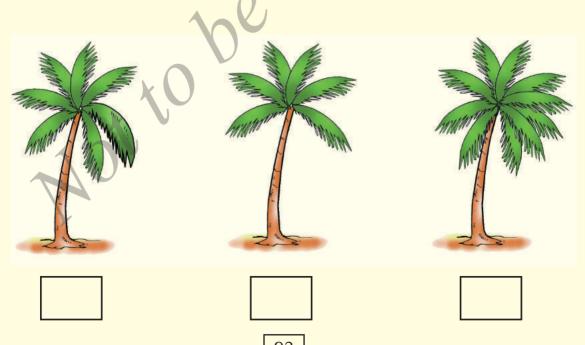
Count the objects in each box and write the number in the given space.



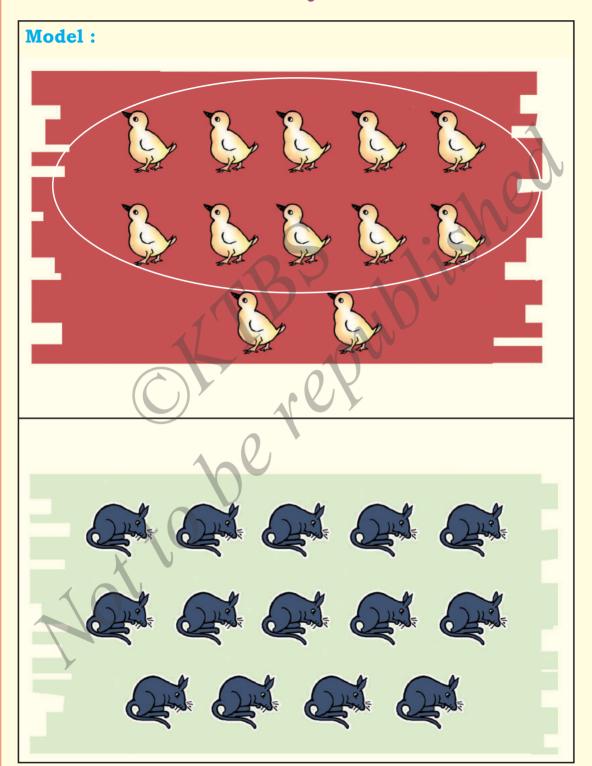
Put ✓ mark for the sugarcane which has TEN parts. Put * mark for the sugarcane which does not have TEN parts.

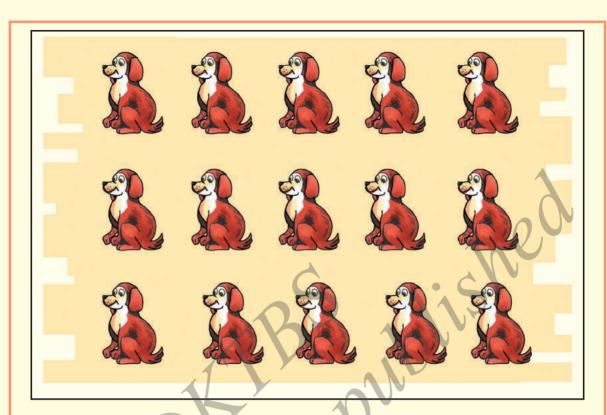


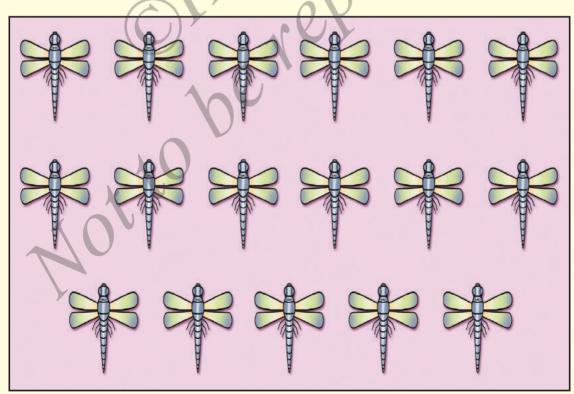
Put ✓ for the coconut tree which has TEN leaves. Put * for the coconut tree which does not have TEN leaves.



Count and circle around 10 objects as shown.





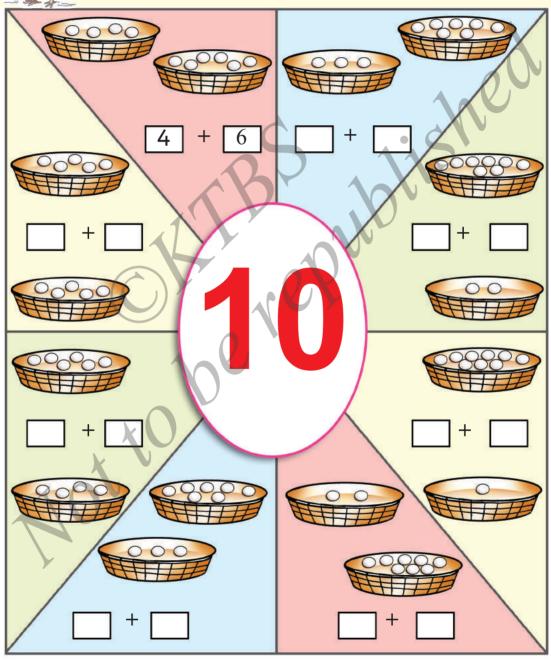


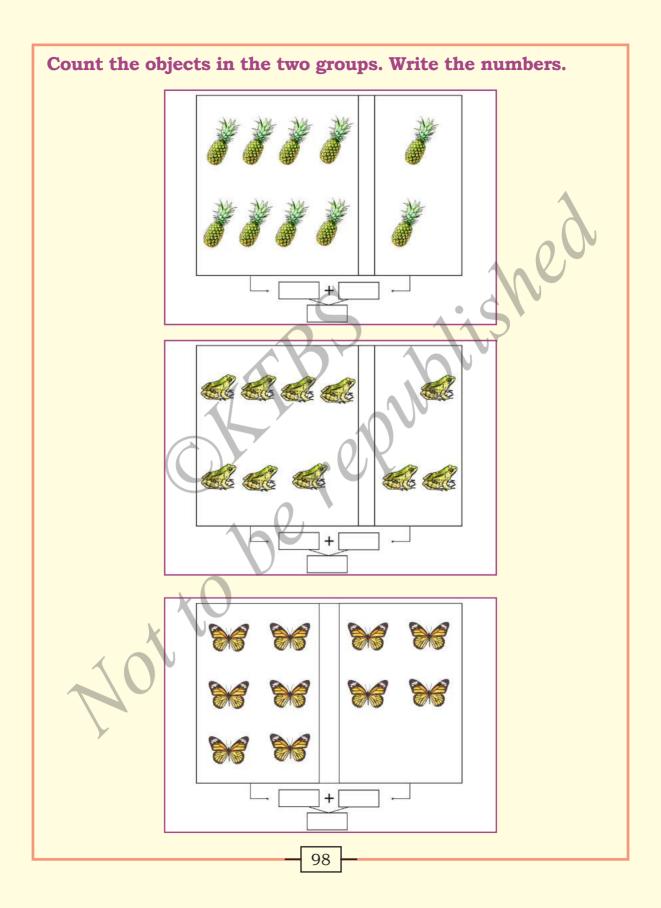
Draw similar : each box.	figure or fig	gures to m	ake them 1	TEN figures in
Model:				
				00
				$\mathcal{M}_{\mathcal{O}}$
		2	. 11	
<u></u>			10,	
		4	100	
		~ C		
			\wedge	\wedge
\wedge	X ON			
2				
(1)	(1)			
1	(1)	(7)		
	9			

"TEN in many ways"



Can you count my eggs?





LESSON-8

Units and Tens

After studying this unit, you can

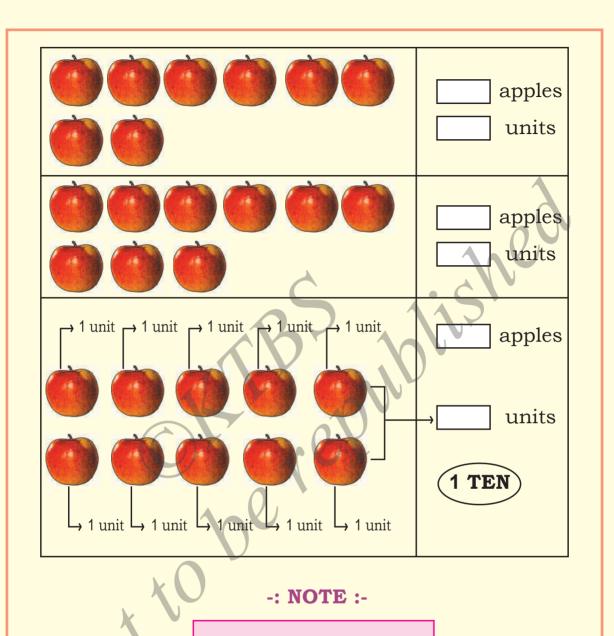
- form groups of tens and units in a collection.
- we use the terms tens and units.
- represent groups of tens and units through pictures.

Count the apples. Write the number of apples in the box.

Each apple is a unit

Write the number of Units in the given box.

	apple
1	unit
	apples
	units



Every object you count is ONE UNIT.

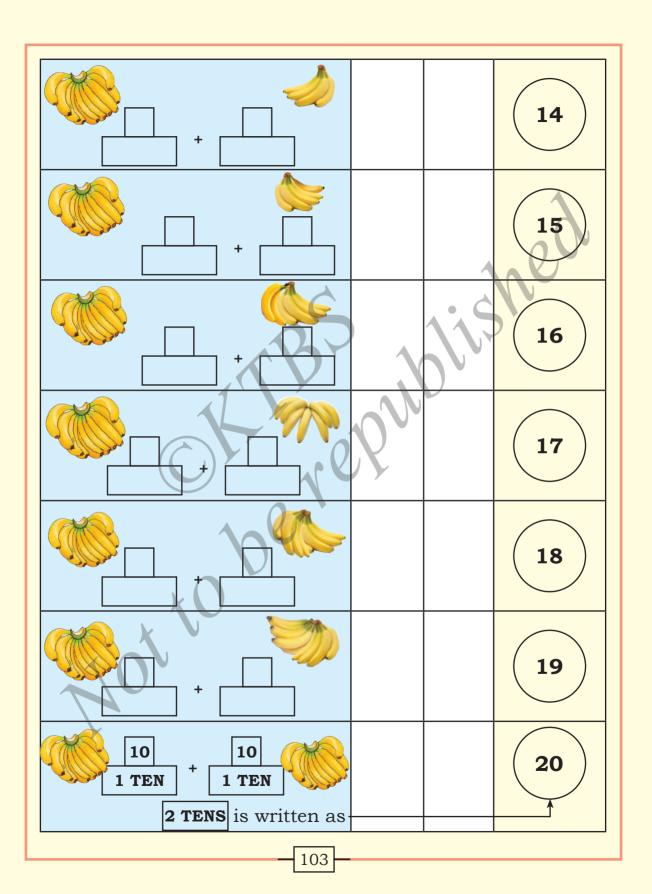
10 units make a group of 1 ten.

Count and circle TEN objects. Write the number of round up objects and the remaining objects as shown.

Objects	round up objects	remaining objects
Example:	10	2



Count the Banans	Write the number of Bananas.			
Count the Bahans	TENS	UNITS	NUMBER	
10 + O UNIT	O 1	0	10	
10 1 1 1 TEN + O UNIT	1	1	11	
+			12	
+			13	

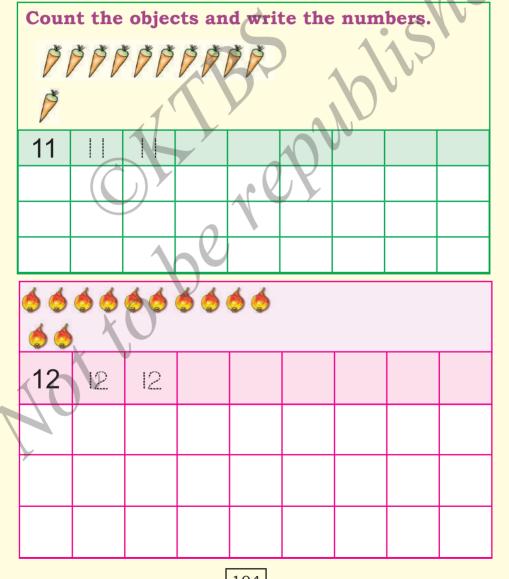


LESSON-9

Numbers - 11 to 20

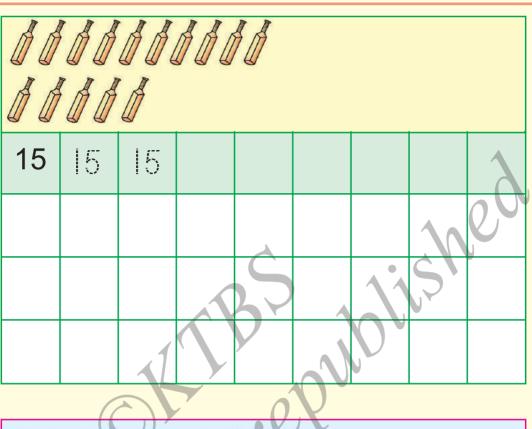
After studying this unit, you can

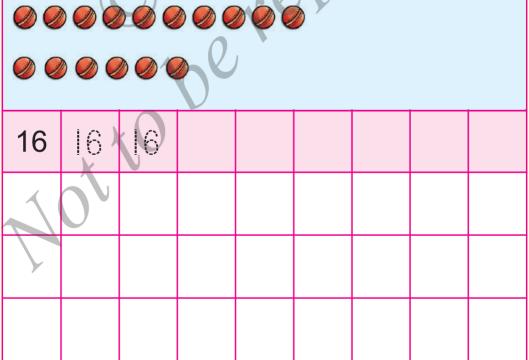
- write the numbers from 11 to 20.
- identify and write before, after and between numbers (upto 20).



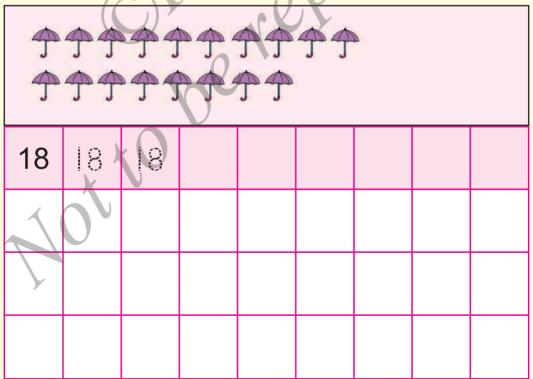


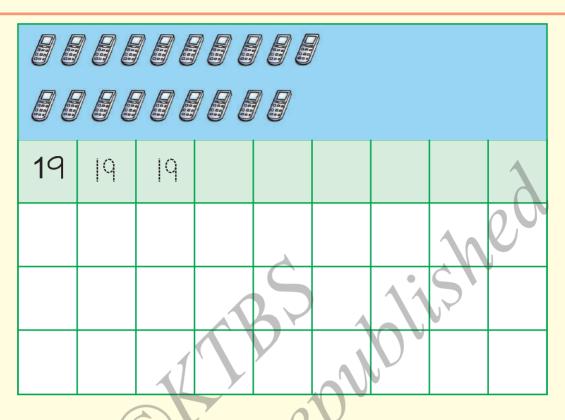
14	[4]	14						
1	0							
\ \								

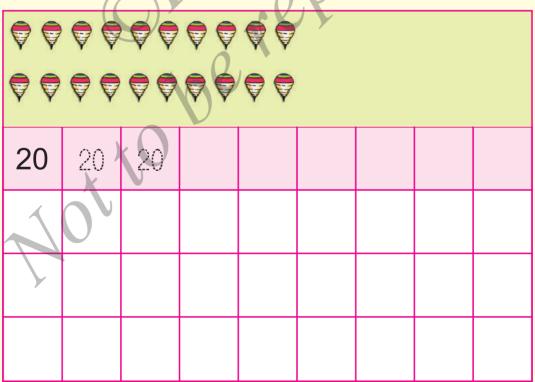












Read and write the numbers in the boxes.

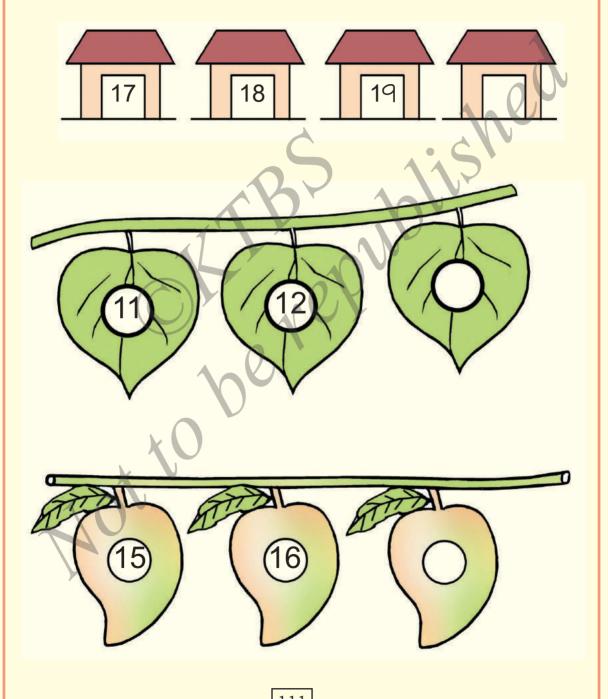
11						
12	12					3
13	<u></u>			4	•	
14	4			3		
15	15			.0		
16	<u></u>		0			
17	17	k ()				
18	<u> </u>					
19	<u> </u>					
20	20					

Look at the picture and write the missing numbers.



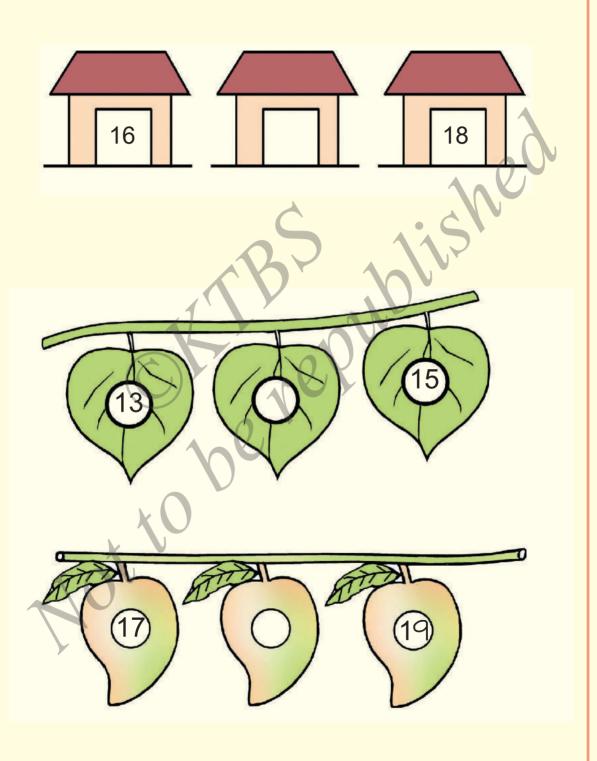
After, Before and In-between number.

Write the number which comes after.

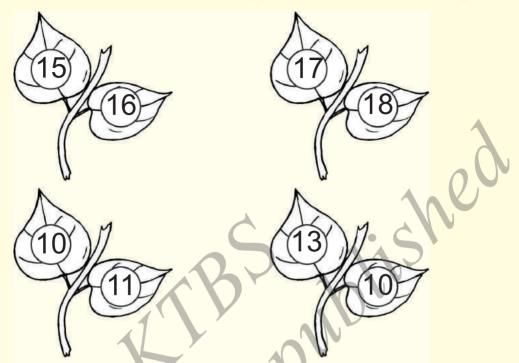


Write the number which comes before.

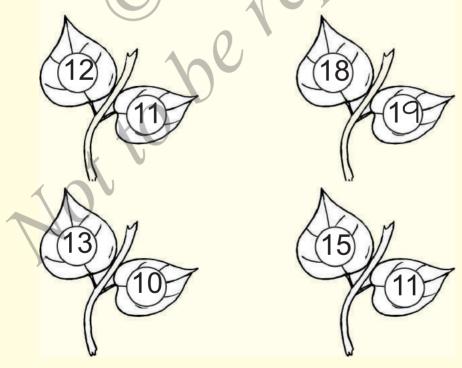
Write the number which comes in between.



Colour the leaf with the bigger number in each pair.

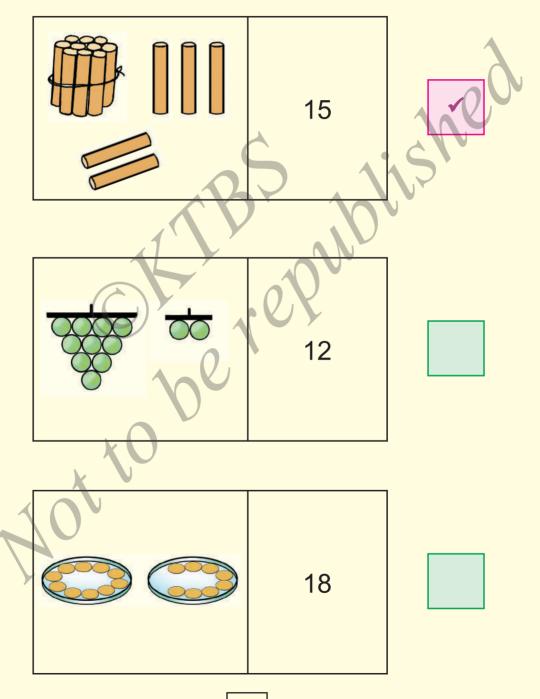


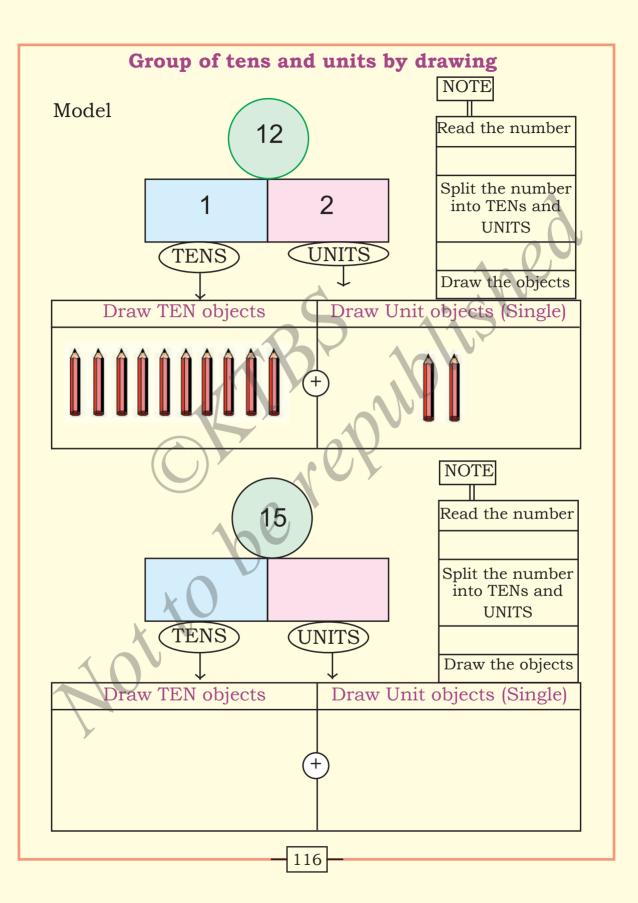
Colour the leaf with the smaller number in each pair.



Count the given objects. Compare the number of objects and the number given against the group. Put ' \checkmark ' if they are same, put 'x' if they are not same.

Example:





LESSON-10

Addition (sum not more than 20)

After studying this unit, you can

find the sum of two numbers (sum not more than 20).

Add:

Count and Add:

$$00000000 = 9 + 1 = 10$$

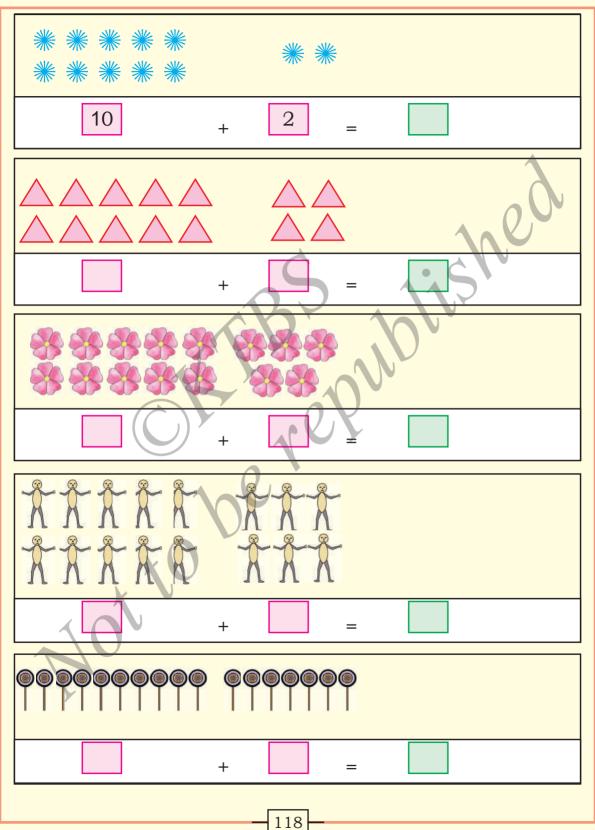
Count and Add:

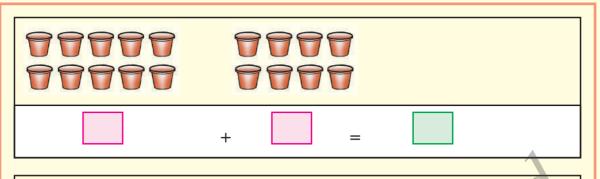


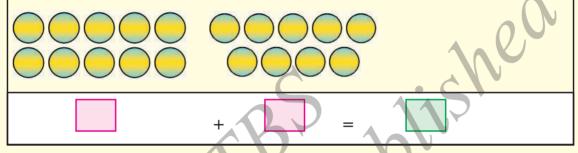


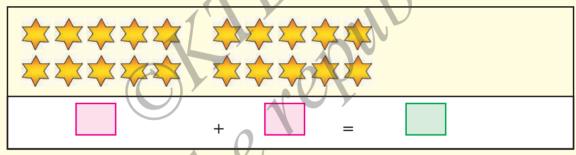






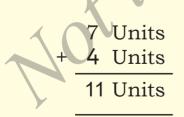


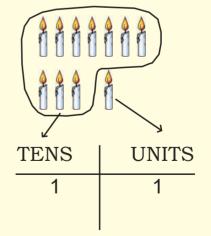




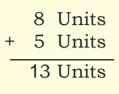
Add

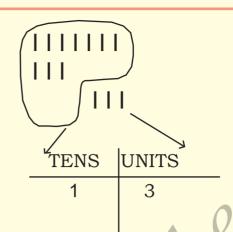
7 and 4





11 Units = 1 TEN 1 UNIT = 11 8 and 5





13 Units = 1 TEN 3 UNIT = 13

Group and Add

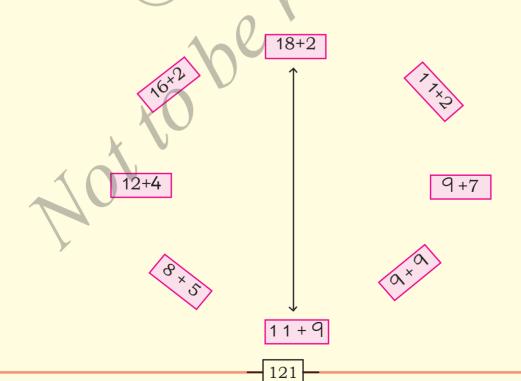
$$= \Box tens + \Box units$$

0 14

8

Add and Match.

Match the pairs which are equal as shown.



LESSON-11

Subtraction (difference not more than 20)

After studying this unit, you can

subtract numbers (difference not more than 20).

6 out of 10 eggs were used. How many left?



	10
-	6
	4

TENS	UNIT	S
0	4	

Take away 5 from 12.





TENS	UNITS
0	7

Take away 8 from 14.





TENS	UNITS
0	6

Subtract 5 from 15.



		11111
--	--	-------

TENS	UNITS
1	0

Subtract 7 from 11.

Subtract 6 from 17.





TENS	UNITS		
1	1		

Take away 9 from 19.

Take away 4 from 18.

Take away 11 from 17. Take away 12 from 12.

Take away 0 from 13.

Take away 6 from 16.

Solve.

Lesson - 12

Numbers 21 to 99

After studying this unit, you can

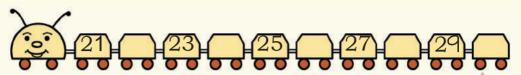
identify and write numbers from 21 to 99.

Read and write the numbers in the boxes.

21	21					1	C
22	22					B	
23	23	1					
24	24			AP (
25	25	4	0				
26	26						
27	27						
28	28						
29	29						
30	30						

Fill in the missing numbers.

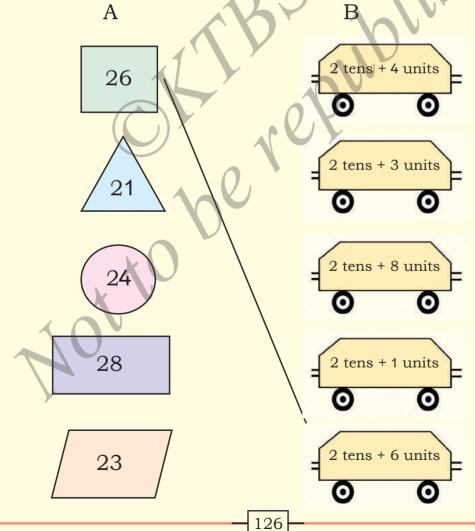
(a) by forward counting:-



(b) by backward counting:-



Match the following as shown.



Number 31 to 50

Count and write.

Count the objects	Tens	Units	Read the number
	3	1	31
	B		32
	21		33
			34
			35

Count the objects	Tens	Units	Read the number
			36
	8		37
		e?	38
			39
			40

Read and write the numbers in the boxes.

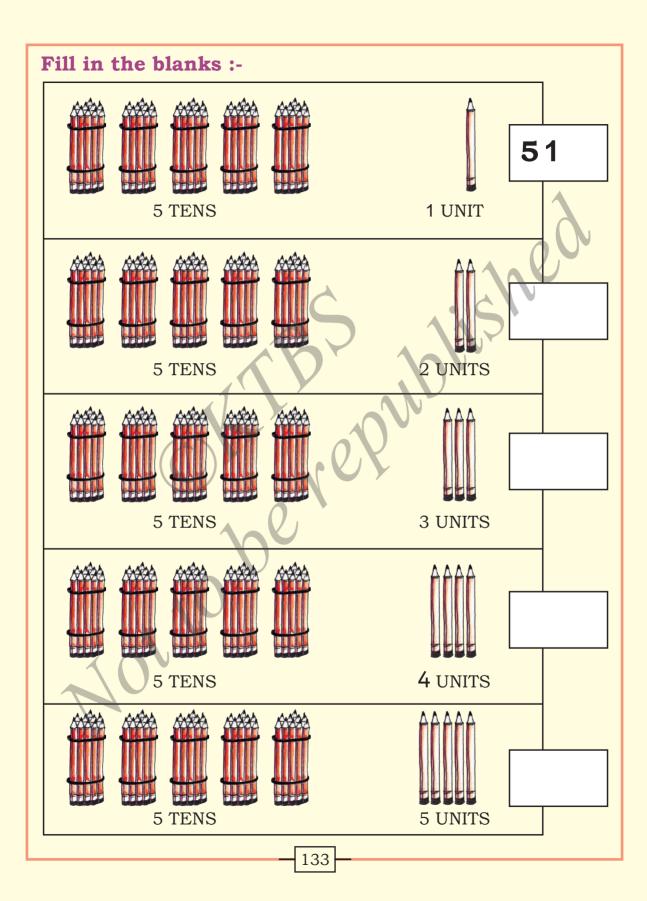
31	31					
32	32					
33	33					
34	34			8	10	
35	35					
36	36		10	2		
37	37	x C				
38	38	7				
39	39					
40	40					

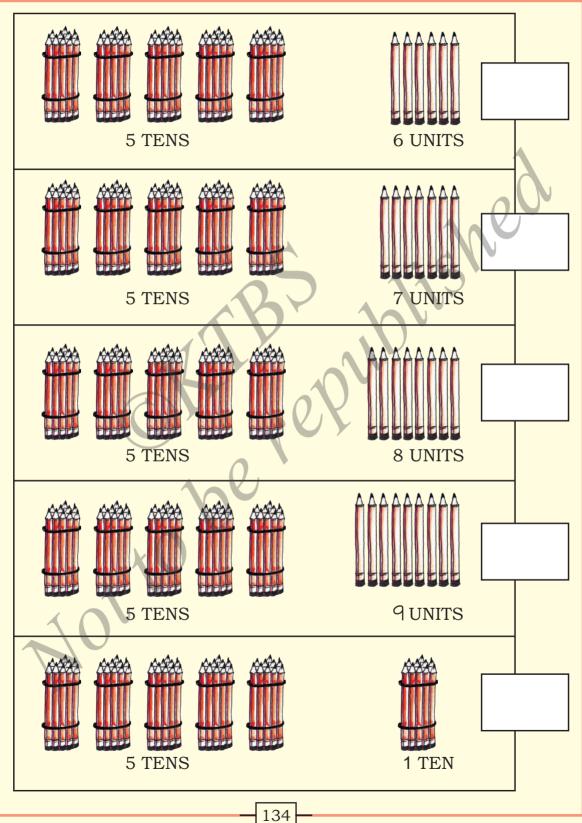
Count the objects	Tens	Units	Read the number
	4	1	41
	B		42
	21	e?	43
			44
			4 5
	130		

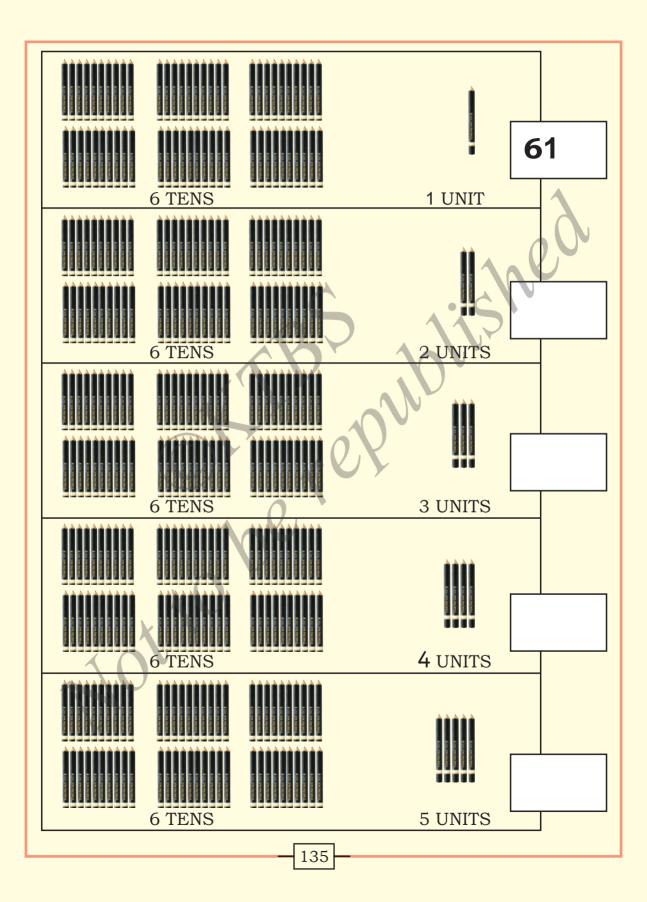
Count the objects	Tens	Units	Read the number
			46
	B	D	475
	2	e?	48
			49
			50
	13	1	

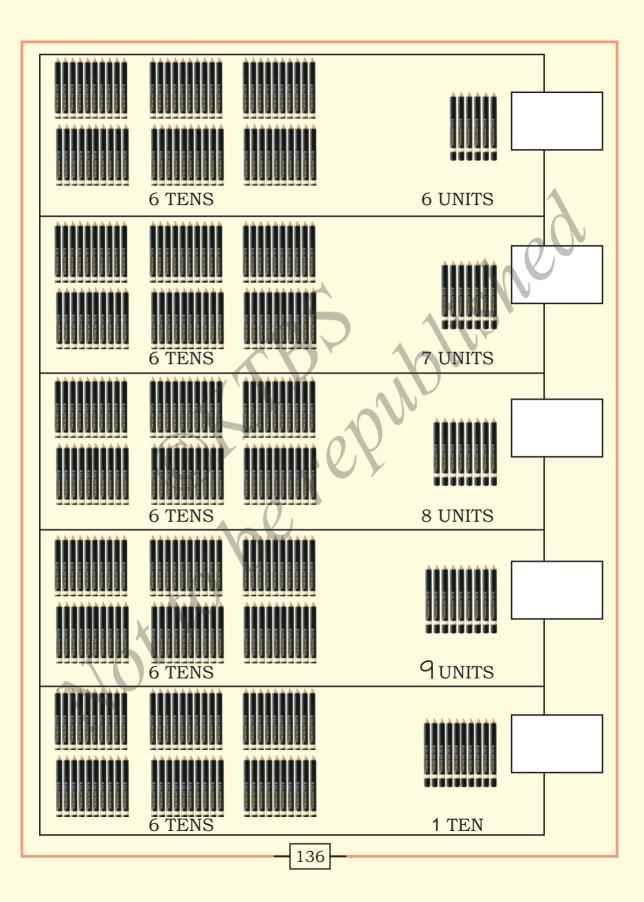
Read and write the numbers in the boxes.

41	41				
42	42				
43	43		~	•	
44	44		S		
45	45				
46	46				
47	47	× (
48	48				
49	49				
50	50				









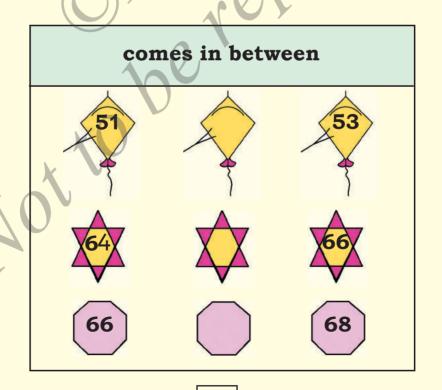
Numbers from 51 to 70.

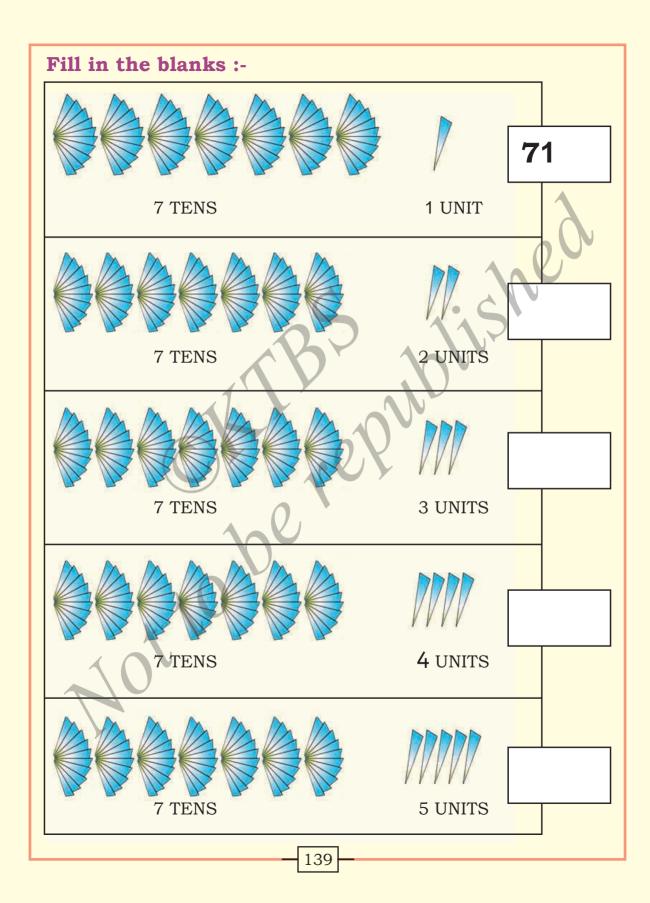
Read and write the numbers in the boxes.

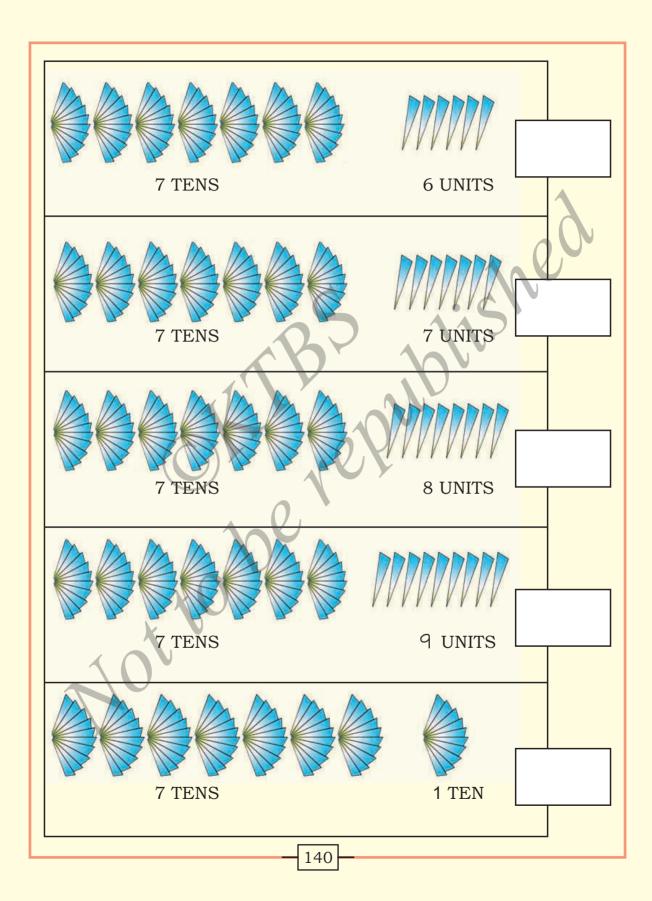
51	51				61	61	
52	52				62	62	3
53	53			4	63	63	
54	54	1		5	64	64	
55	55		7	.0	65	65	
56	56	9/	20		66	66	
57	57	k O	V		67	67	
58	58				68	68	
59	59				69	69	
60	60				70	70	

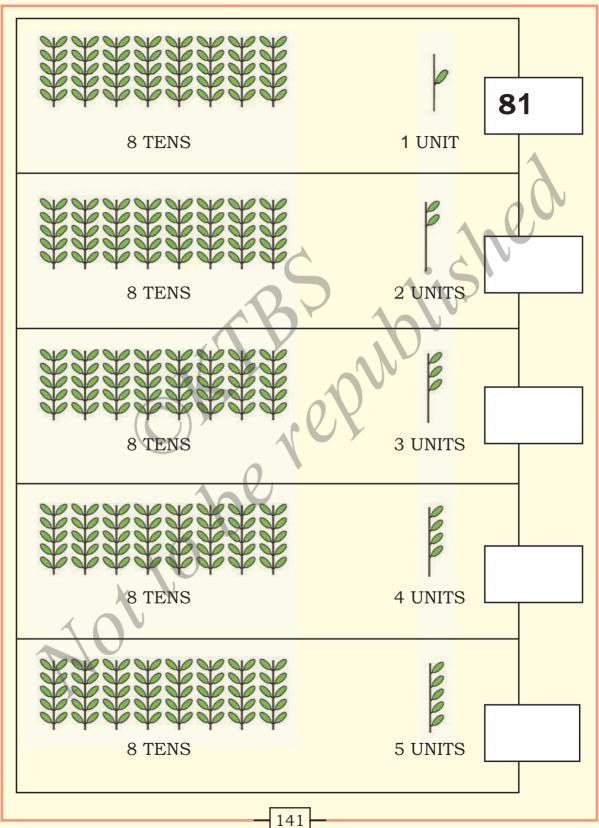
Write the number that,

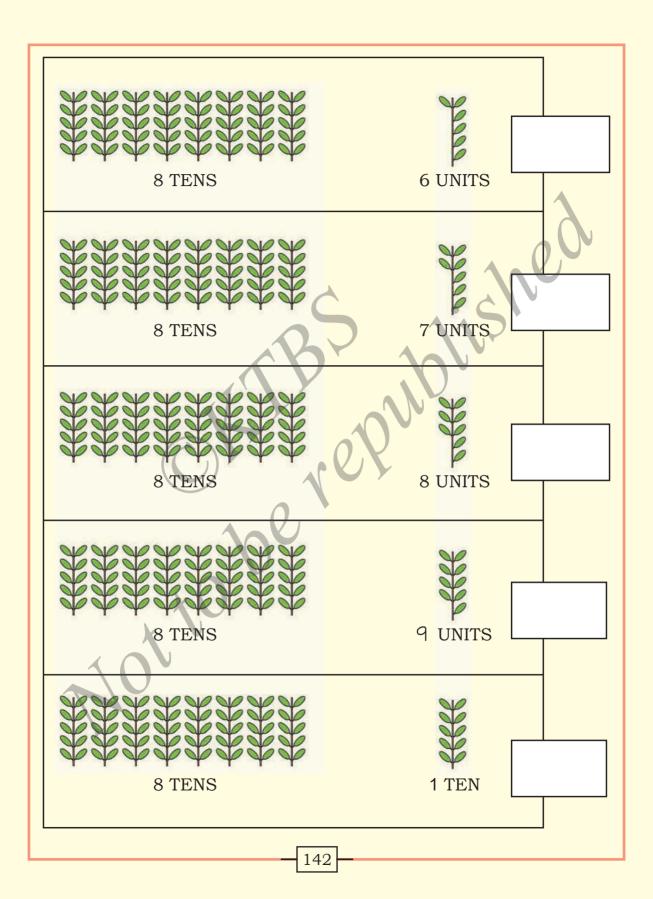
comes before	comes after
52	63
55	65
5 9	69











Read and write the numbers in the boxes.

71	71			81	81	
72	72			82	82	
73	73			83	83	1
74	74			84	84)
75	75			85	85	
76	76		0	86	86	
77	77	x ()		87	87	
78	78			88	88	
79	79			89	89	
80	80			90	90	

Tick (✓) the card which has smallest number:

1) / 71 /

2)

Tick (✓) the card which has biggest number:

1) / 80

Read and write the numbers in the boxes.

91	91				
92	92				
93	93				
94	94		B		
95	95			2?	
96	96				
97	97	0			
98	98				
99	99				

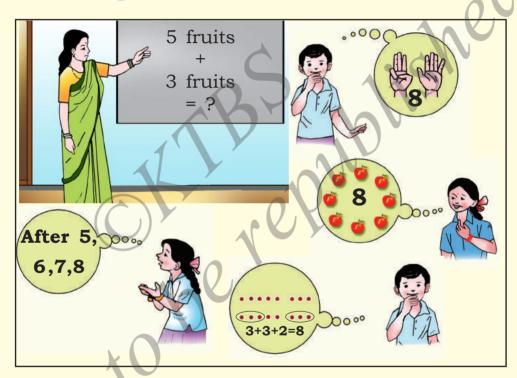
Lesson -13

Mental Arithmetic

After studying this unit, you can

add two single digit numbers mentally.

Observe this picture:



Problems can be solved mentally like this. Now you try.

- 4 chocolates + 2 chocolates = chocolates.
- 5 parrots + 4 parrots = parrots.
- 3 rabbits + 6 rabbits = rabbits.
- 2 balls + 7 balls = balls.
- 8 butterflies + 6 butterflies = butterflies.

2. To find the next number in a number pattern.



2, 4, 6what is the next number?

Numbers have increased by 2 6 + 2 = 8



12, 9, 6what is the next number?

Numbers have 4 decreased by 3. 3 less than 6 is 3

Solve mentally.

- 1) 3, 6, 9,
- 2) 4, 8, 12,
- 3) 8, 7, 6,
- 4) 10, 8, 6,

I. Answer orally.

II. Fill the blanks to make both sides equal.

III. Answer Orally.

1) One shelf has 5 books and another has 4 books.

There are _____ books in both shelves.

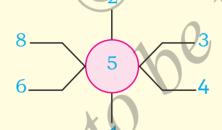
2) Suma collects ₹ 5 from her father and 10 from her mother. How much money did Suma collect from her parents ?

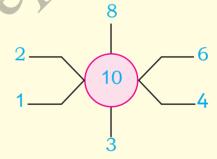
IV. Answer quickly.

$$3 + 2 =$$

$$6 + 5 =$$

2) Add the centre number to each of the numbers outside the circle (oral).





- 3) Write the next number.
 - 1) 2, 4, 6,
 - 2) 3, 5, 7,
 - 3) 5, 7, 9, ____
 - 4) 10, 12, 14,
 - 5) 9, 11, 13,

4) Count backward and give the next number.

- 1) 8, 6, 4,
- 2) 10, 8, 6,
- 3) 12, 10, 8,
- 4) 20, 15, 10,
- 5) 9, 6, 3,

5) Say whether the following statements are true/false.

- 1) 3 + 2 = 5
- 2) 6 + 6 = 4
- 3) One day Sita ate 3 bananas in the morning and 2 bananas in the evening. Then, Sita ate 6 bananas in a day.
- 4) Raju practices a song 3 times in the morning and 5 times in the evening. So, Raju practiced 8 times on that day.
- 5) Rama has 5 marbles and Raheem has 4 marbles in their pockets. Rama and Raheem together have 10 marbles.
- 6) Charan has 5 pens. Chandana has 7 pens. They have 15 pens altogether.

7) Add

8) Add:

$$9 + 0 = _{---}$$

Say the answer orally:

1) A fruit vendor has 9 Mangoes and 8 apples in his basket. How many fruits are there in the basket?

2) Raju has kept 7 books in the school bag and 6 books in the shelf. How many books are there altogether?

3) A balloon seller is holding 3 balloons in his right hand and 6 balloons in his left hand. How many balloons are there in all?

4) A girl is wearing 8 bangles on one hand and 6 bangles on the other hand. How many bangles are there together?

Lesson -14

MONEY

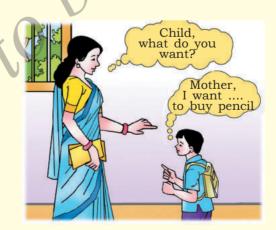
After studying this unit, you can

- identify the currency notes and coins in use in our country.
- get familiar with these coins and notes, make the given amount using different combinations of coins and notes.
- relate the cost of material with currency.

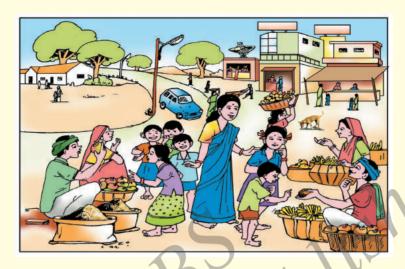
"Money"

Money Money Money
Coins are many
Drop them all
One by one
Hear the sound
Tun Tun Tun

Situation 1



Situation 2



Mother, I want banana? I need to give the vendor.

Situation 3



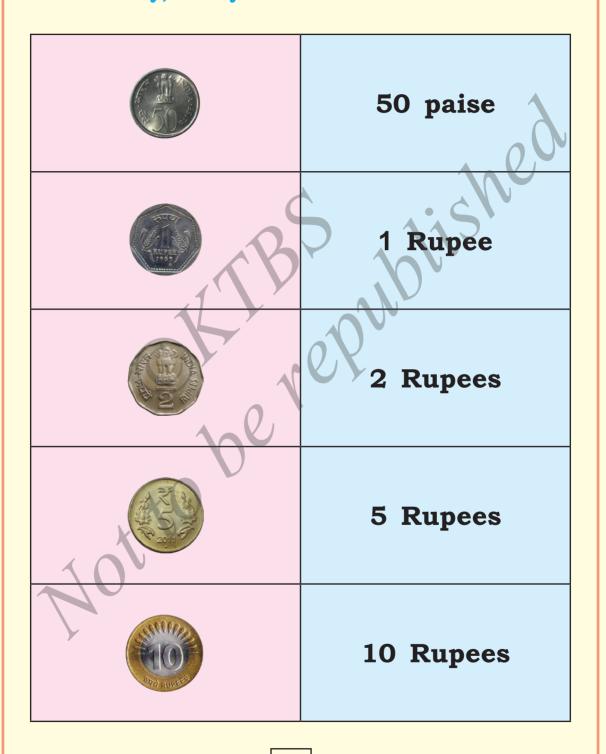
Situation 4



What is required to buy the articles in the above situations?

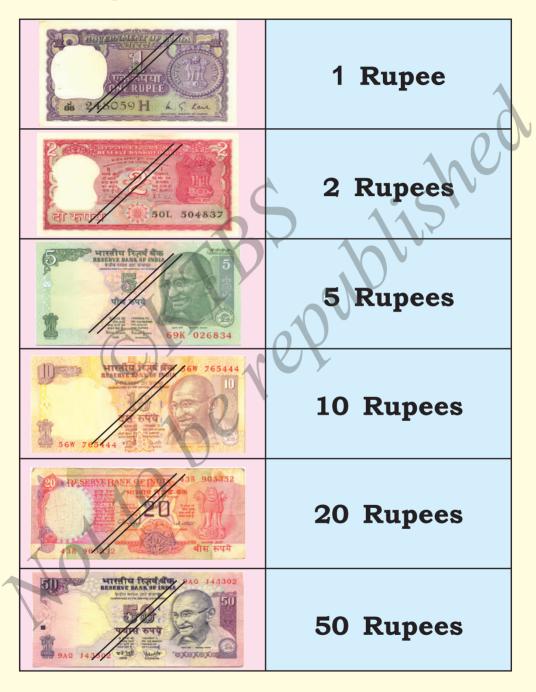
Write your answer or response in this box.

You know that MONEY is required to buy things. In our country, money is in the form of coins and notes.



These are commonly used notes

Look at the given notes and tell their values.



Additional Information

Indian Currency



1 Rupee = 100 paise

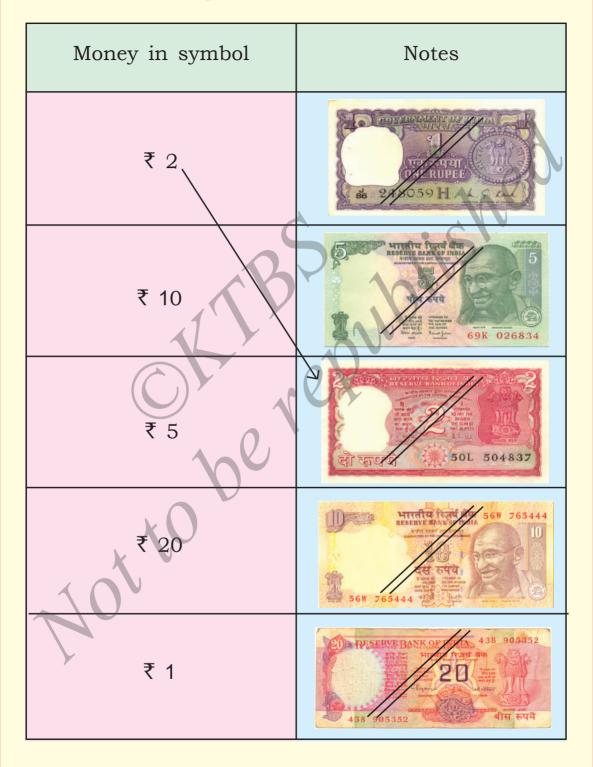
Symbol of Rupee



Match the following as shown.

Money in symbol	Coins
₹1	
₹ 5	
₹ 2	
₹ 10	35 g
50 paise	De la constant de la

Match the following as shown.



Activity:

Take a sheet of paper. Place a ₹ 1 coin below the paper. Scratch on the paper using a pencil on the coin. What do you get?

You get a picture like Trace the other face of this.

₹ 1 coin.



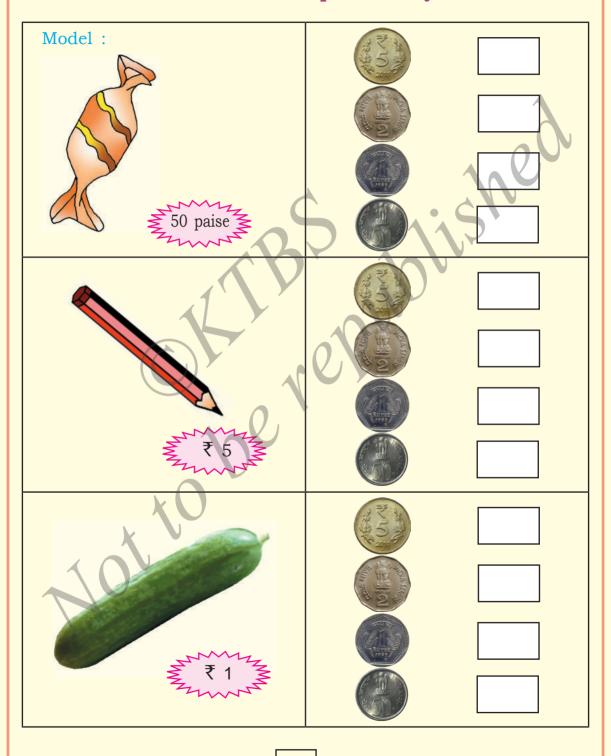
Repeat the above activity using 50 paise, ₹ 2, ₹ 5 coins.

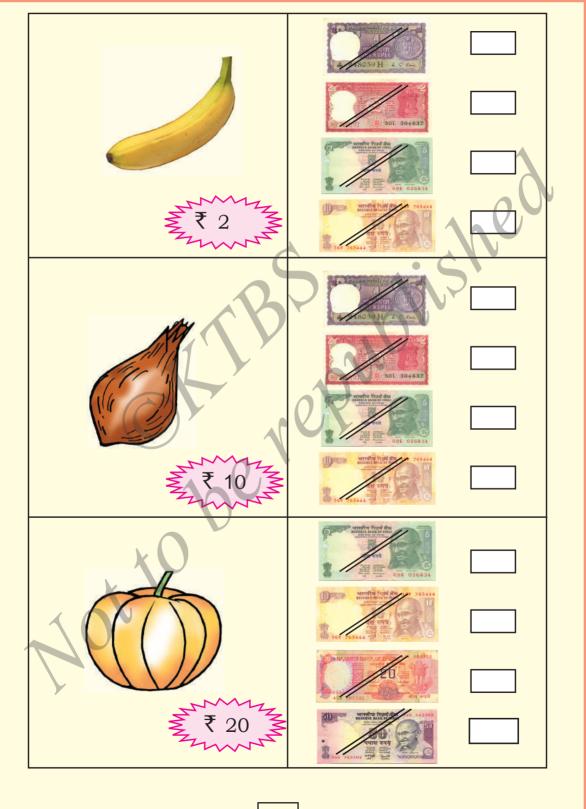
₹ 2

₹ 5



Observe the given articles and their prices. Put \checkmark for the coin OR note that has to be paid to buy them.





Money - Addition

Observe the articles and the notes representing their prices. Write the price of each article.



Activity





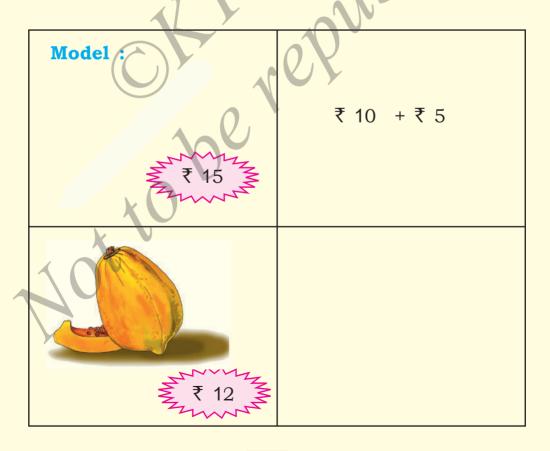


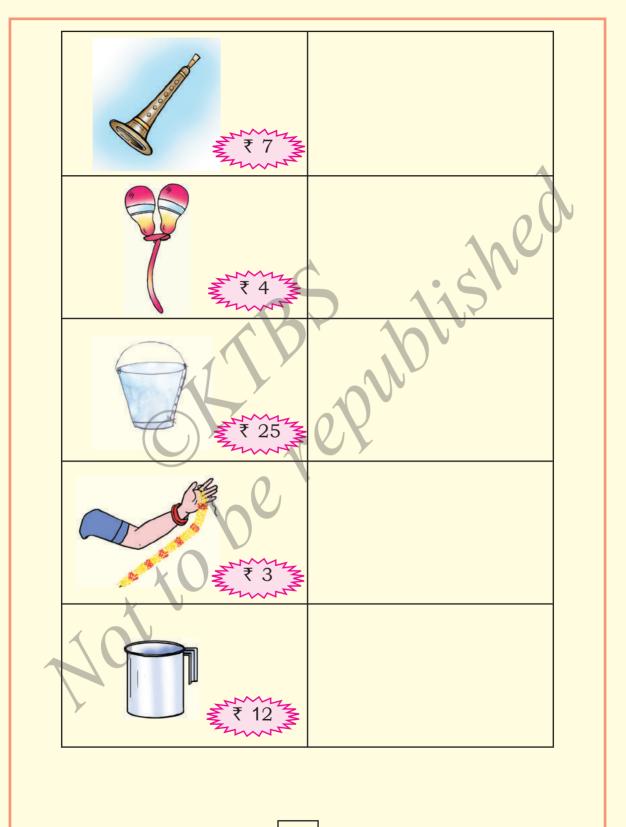




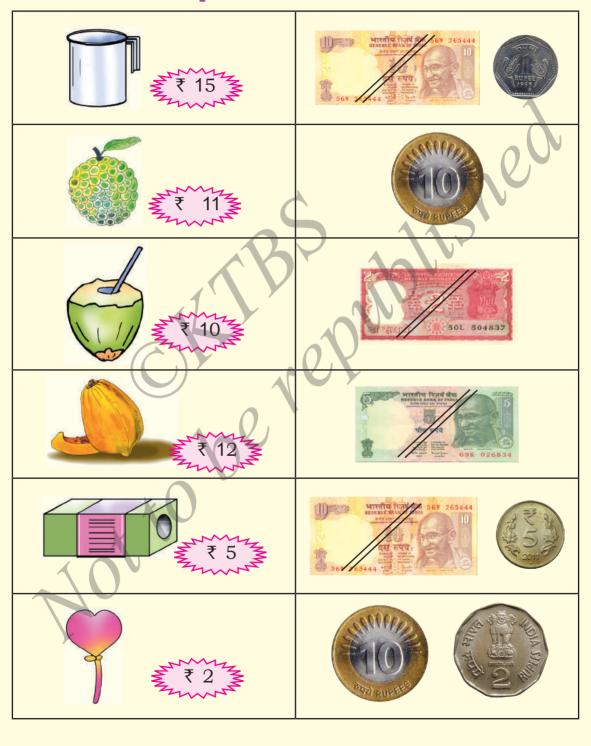


Look at the price tag on the articles. Which two notes/ coins given above can you use to buy these things?





Look at the price of the articles. Match the articles and the amount to be paid.



KIDS CORNER

Look at the price of the toys and answer the following questions.



	Questions	Write the serial number of the toy/s.
1)	Which two toys can you buy for ₹ 10 ?	2 , 4
2)	Which one toy can you buy for ₹ 10 ?	
3)	Which one toy can you buy for ₹ 5 ?	
4)	Which two toys can you buy for ₹ 5 ?	

Lesson - 15

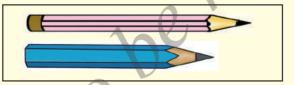
Length

After studying this unit, you can

- distinguish between, long and short, tall and short, high and low.
- * seriate the objects by comparing their length.
- measure length using non-standard units such as hand span, foot span, cubits.
- estimate distance and length and verify using non-standard units.

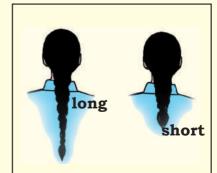
Long and Short

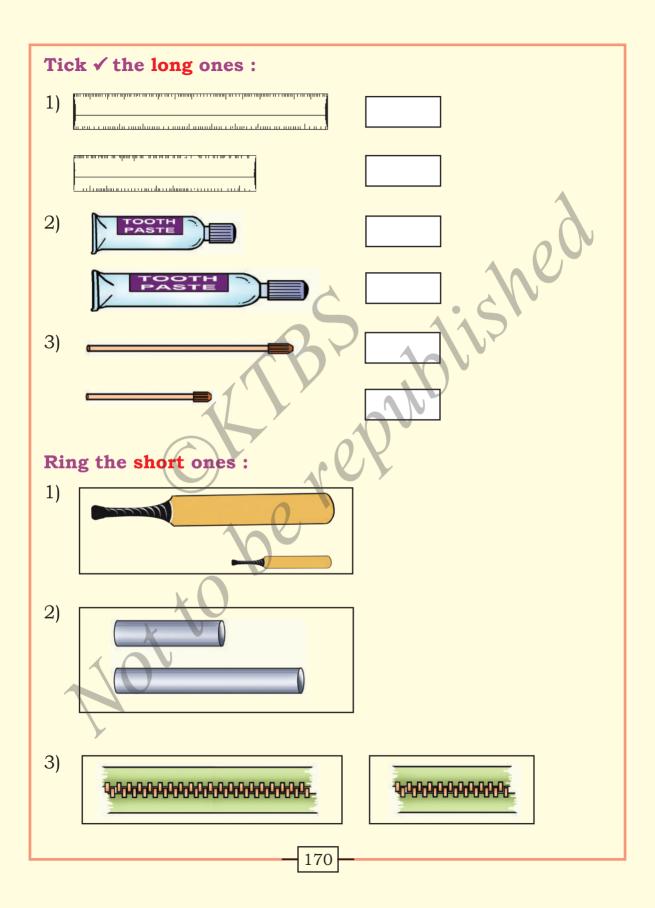
Observe these pencils.

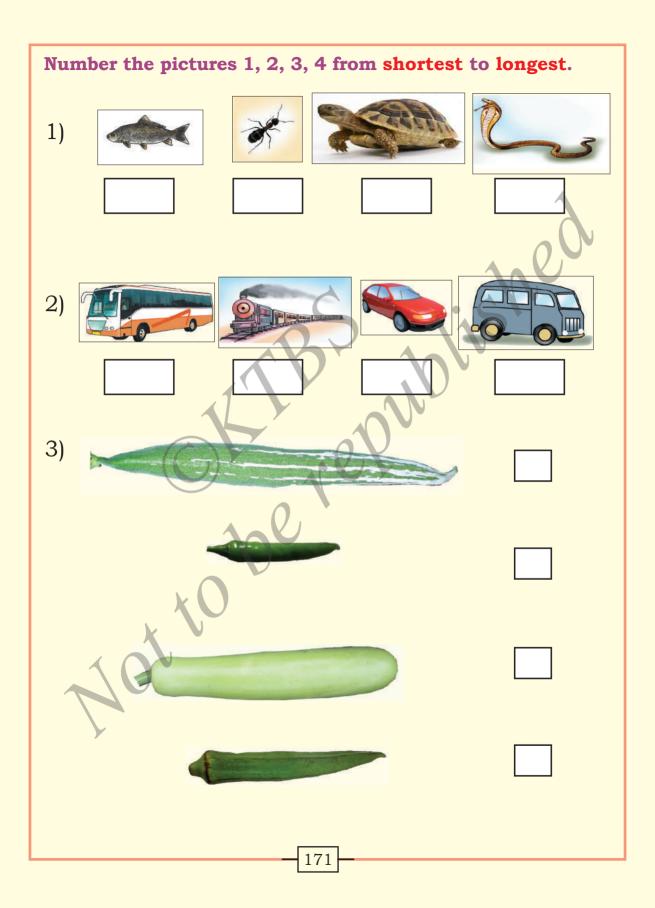


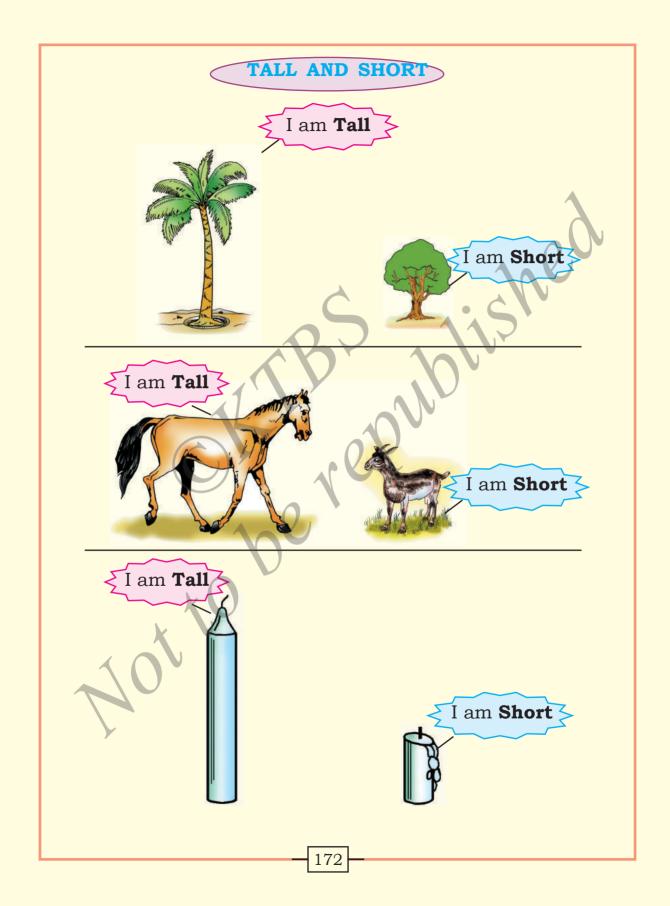
The pink pencil is **long**. The blue pencil is **short**.



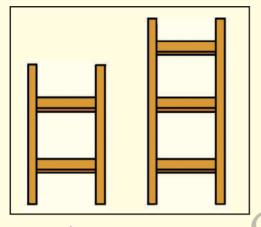


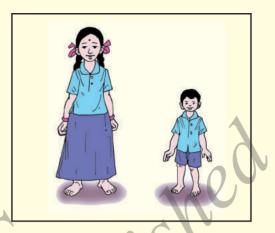






Tick (\checkmark) the tall one.





Tick (\checkmark) the short one.





In the given figures, colour the tall one green and colour the short one red.





HIGH and LOW



Eagle is flying **HIGH**.
Butterfly is flying **LOW**.

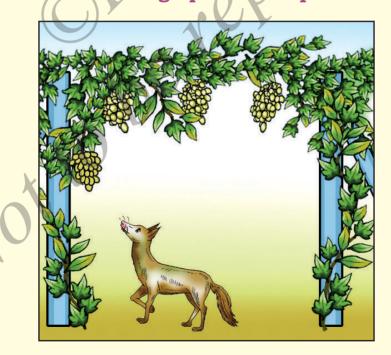


The green kite is flying **HIGH.**The red kite is flying **LOW.**

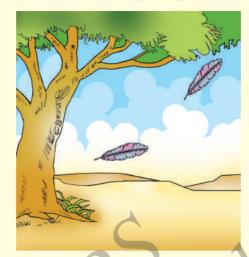
1) Circle the picture which is at higher level on the wall.



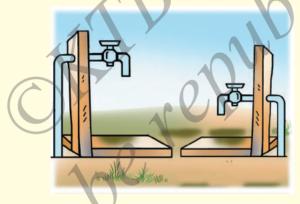
2) The fox wants to eat a bunch of grapes. Circle the lowest bunch of grapes and help the fox.



3) Circle the feather floating high.



4) Ring the tap at higher level.

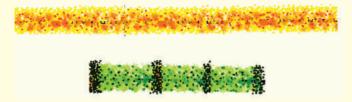


5) Colour the bubble at high level pink and the bubble at the low level yellow.



MEASUREMENT

We can compare the length of two things by keeping one beside the other.

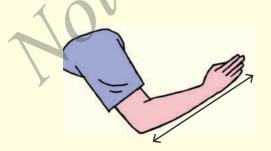


The red garland is long. The green garland is short.

To know how long the garland is, we measure it.

Lakshmi measures like this,





This measure is a 'Cubit'.

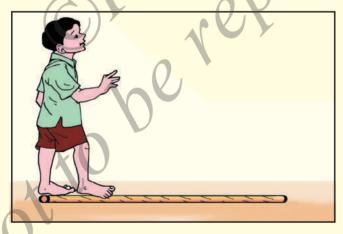
Gowri measures like this.

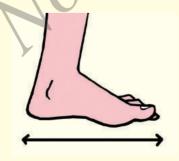




This measure is a 'hand span'.

Ramu measures a stick like this.





This measure is a 'foot span'.

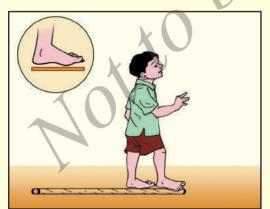
We can use **hand span**, **foot span** and **cubit** to measure lengths.



Lakshmi found that the garland is 1 **cubit** long.



Gowri found that the garland is 2 hand spans long.



Ramu found that the stick is 5 **foot spans** long.

John measured the length of the television set using handspan.



Length of the television is 5 **handspans**. Salma measured the length of the cot using **cubits**.



Length of the cot is 6 cubits.

Asha measured the length of the classroom using footspan.



The length of the classroom is 18 footspans.

1) The length of the table in this picture is handspans.



2) The length of the pencil is equal to erasers.



3) The length of the mat in this picture is foot.



4) This garland iscubits long.



Find these by yourself

- 1. The length of the table in your class is hand spans.
- 2. The length of the black board in your class is cubits.
- 3. The length of your classroom is foot spans.
- 4. The length of your school bag is hand spans.

Activity:

Estimate the distance from the door of your classroom to the blackboard. Verify it using hand span, footspan and cubit. Ask your friend to do the same. What do you observe?

Repeat the above activity, find the distance

- 1. from the school gate to your classroom.
- 2. between any two trees in a park.
- 3. from the blackboard to the first bench in your classroom.

Lesson -16

Weight

After studying this unit, you can

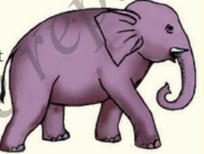
- To Distinguish between thin and thick.
- © Compare between heavy and light objects.

THICK AND THIN

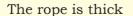


Tail of an elephant is **thin**.

Leg of an elephant is **thick**.



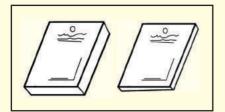


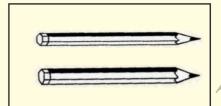


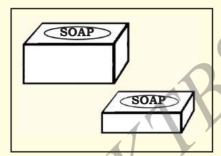


The thread is thin

1) Colour the thick ones.



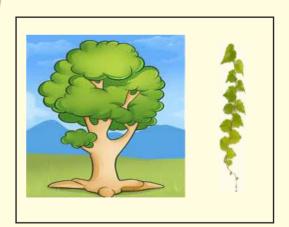


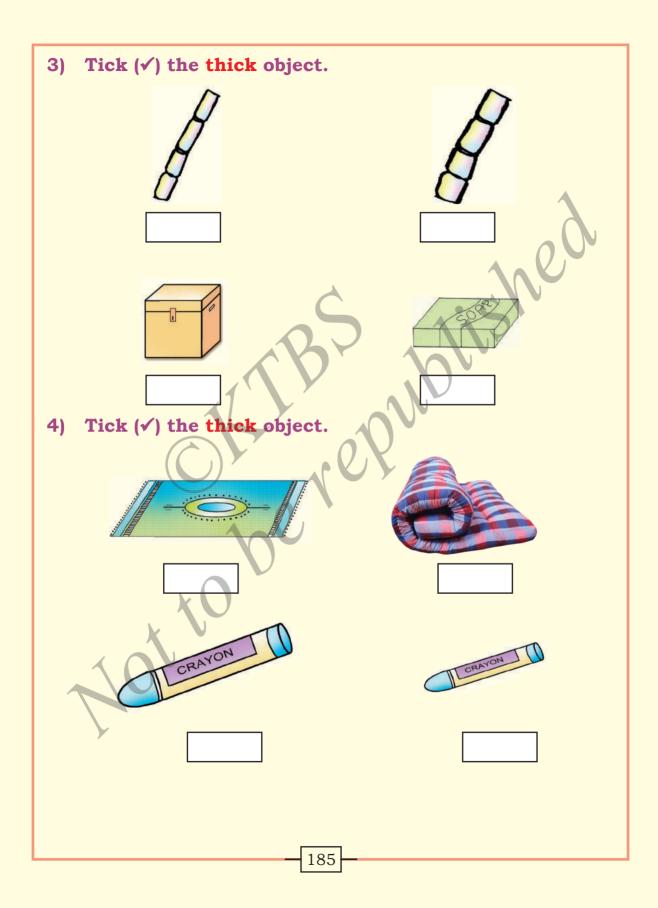




2) Circle the thin ones.







Heavy and Light

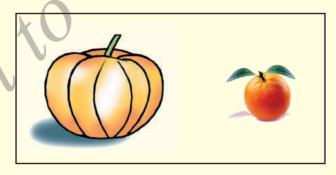


This rock is **heavy**.

This piece of wood is **light**.



Feather is **light**. Doll is **heavy**.



Pumpkin is **heavy.**Orange is **light.**

Tick (\checkmark) the heavy ones.





LESSON -17

TIME

After studying this unit, you can

- distinguish between events occuring in time using terms earlier and later.
- rarrate the sequence of events in a day.
- get familiar with the days of the week.
- get familiar with the months of the year.

These pictures show what Raju does in a day.



Look at Raju's activities of a day. Tick (✓) the picture to show what Raju does.

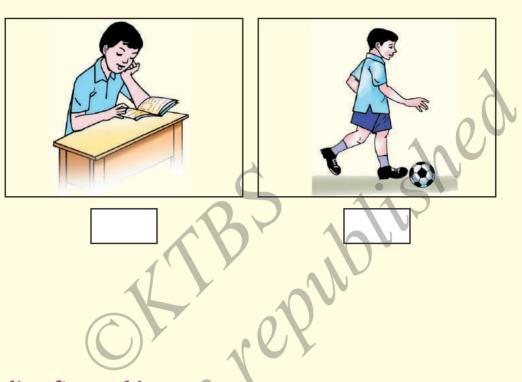
1) before going to school.



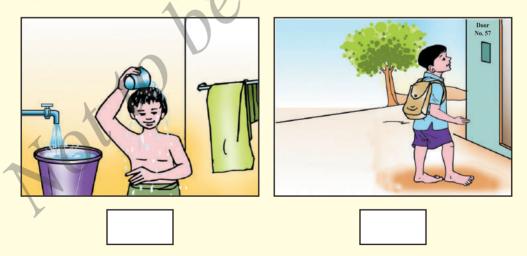
2) before going to sleep.



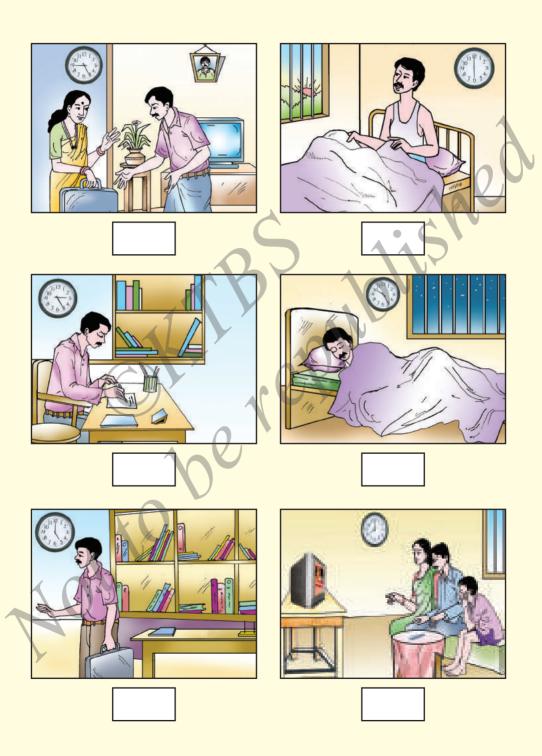
3) after coming home.



4) after waking up.

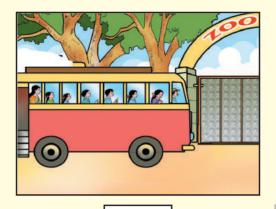


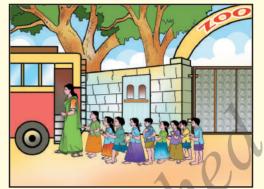
Number the pictures to know the activities of a day in order



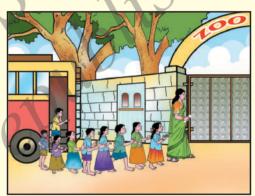
Match the pictures to what time it is. day night

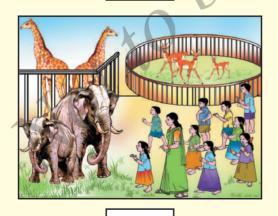
Number the pictures in proper sequence.

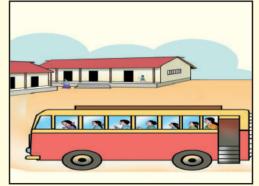






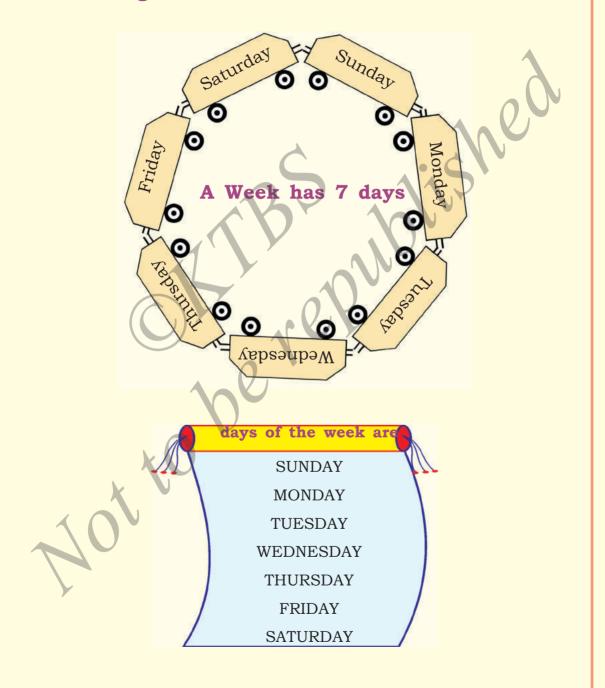






DAYS OF THE WEEK

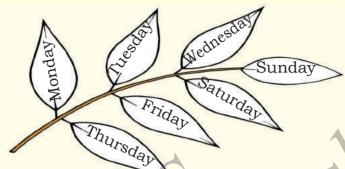
The week begins on SUNDAY and ends on SATURDAY.



1)	Tick the day that comes after SUNDAY.
	MONDAY SATURDAY FRIDAY
2)	Tick the last day of the week.
	SUNDAY SATURDAY MONDAY
3)	Ring the day that comes after WEDNESDAY.
	FRIDAY TUESDAY THURSDAY
4)	Ring the day that comes before MONDAY.
	WEDNESDAY SUNDAY TUESDAY
5)	
	and THURSDAY.
	FRIDAY MONDAY WEDNESDAY
6)	Colour the first day of the week.
	SUNDAY

FRIDAY

7) Colour the leaf representing the first day of the week green and the leaf representing the last day of the week blue.



8) Match the days of the week with the next day as shown.

MONDAY
WEDNESDAY
FRIDAY
SUNDAY
THURSDAY

9) Number the days of the week in order.

SATURDAY
MONDAY
WEDNESDAY
SUNDAY
FRIDAY
TUESDAY

THURSDAY

MONTHS OF A YEAR

A '	Year has 12 mo	nths. They a	are,								
	1) JANUARY	5) MAY	9) SEPTEMBER								
	•	•	10) OCTOBER								
	•	•	11) NOVEMBER								
	4) APRIL	8) AUGUST	12) DECEMBER								
	JANUAR	Y is the first	month of a year.								
DECEMBER is the last month of a year.											
		Exerci	se 115								
1)	Tick the month										
-,	JANUARY	APRIL									
	JANOARI	ATRIL	AUGUSI								
2)	Tick the month	h that abma	hofers HHV								
4)	JUNE		DECEMBER								
	JONE	IVIZI									
31	Tick the mont	h that come	es inbetween SEPTEMBER								
0,	and NOVEMBER		S INDECWCCII SEI IEMBEN								
	OCTOBER D	DECEMBER	AUGUST								
	407										
4)	Ring the first	month of a	year.								
·	JANUARY		AUGUST								
5)	Ring the last 1	month of a v	zear.								
٠,	SEPTEMBER D	•									

6) Match the months with their next month.

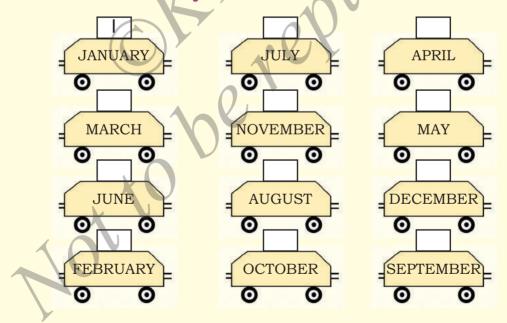
SEPTEMBER FEBRUARY
NOVEMBER OCTOBER
MARCH DECEMBER

JANUARY APRIL

7) Match the months with their previous month.

APRIL JULY
AUGUST MAY
NOVEMBER MARCH
JUNE OCTOBER

8) Raju wants to complete this year train. Help him by numbering the month of the year in order. The first one is done for you.



LESSON - 18

DATA HANDLING

After studying this unit, you can

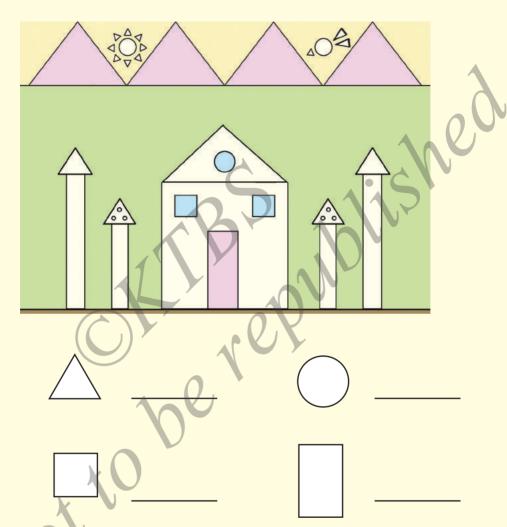
- collect simple data.
- represent and interpret simple data.
- 1) Anita has collected some flowers from the garden.



Draw the shape that occurs most.

	P		8 [Ŷ		
	Draw t	he s	shape	In	this	garland,	
10	P			Nui	P		
1	***]		***		
Y	Ŷ]		Ŷ		

2) Count the shapes in the picture given below and write in the space provided.



Draw the shape that occurs most.

Draw the shape that occurs least.

3) In this garland,



Number of beads of the shape

Number of beads of th

Number of beads of the shape

Number of beads of the shape

🕸

The shape which occurs the most is

The shape which occurs the least is _____

4) This picture shows children playing in a park. Count and write the following.



Number of swings _____.

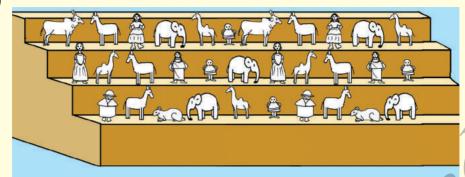
Number of seesaw _____.

Number of children playing swing _____.

Number of children playing slide _____.

Number of children playing seesaw _____.

5)



This is the arrangement of dolls, during Dasara festival. Count and write the number of

dolls of animals others

6) Help Gopal to count the number of coins.



Number of

- ₹1 coins _____.
- ₹ 2 coins _____.
- ₹ 5 coins _____.
- ₹ 10 coins _____.

LESSON - 19

PATTERNS

After studying this unit, you can

- get familiar with sequences of simple patterns found in shapes in the surroundings. Ex.: stamping activity using fingers/thumbs, using familiar objects etc.
- complete a given sequence of simple patterns found in shapes in the surroundings.

Look at the patterns formed using cut slices of vegetables.



Use cut vegetables and make your own patterns.

Observe the patterns formed by leaves.



Create your own patterns using leaves of different shapes.

Observe the patterns formed by stamping of thumb.



Observe the patterns formed by stamping of fingers and hand.



Create different patterns using the impressions of thumb and fingers.

I. See the following patterns and colour as directed.

2) Colour with Green

3) Colour O with blue

II. Observe the patterns. Draw two more.

III. Fill in the missing patterns.

3)
$$\bigcirc$$
 ____ \otimes