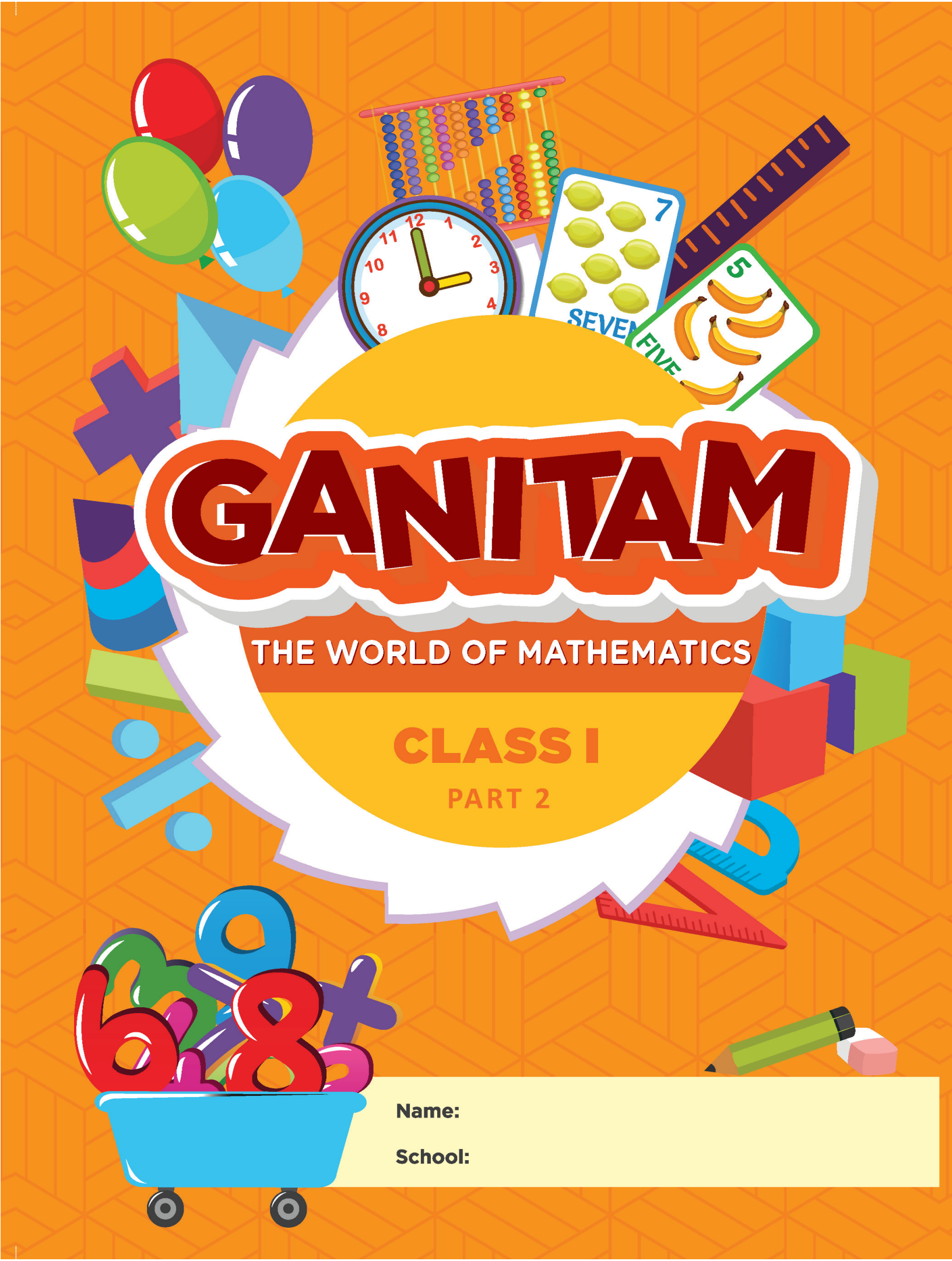
GANITAM
THE WORLD OF MATHEMATICS
CLASS I
PART 2
Name:
School:

Ganitam

The World of Mathematics

PART II

Ganitam

The World of Mathematics

Third Edition published in 2024

MRP ₹ 175/-

Preface

Ganitam – The World of Mathematics

Mathematics builds hope. It helps us believe that every problem has a solution.

Education imparted in classrooms should be linked to life outside school. Hence the knowledge and skills acquired in school should help children understand the world around them better, and thereby contribute towards its betterment. This series of books on Mathematics titled "Ganitam-The World of Mathematics", has been prepared with that thought on our minds. The book has been designed in such a way that it enhances inquisitiveness in children by encouraging them to ask questions and seek answers rather than just learn what is listed in the books.

The content has been carefully curated, so that it reflects the rich cultural diversity of our motherland Bharat, enabling the child to intuitively understand the unifying values that bond the citizens of this great country together. Thus, the book will help a child gain various skills required for the 21st century and be a universal citizen with a passion for following Indian values.

The core content of the book originates from the Vedas which provide the key concepts of Mathematics. For example, the sutra एकाधिकेन पूर्वेण(Ekaadhikena Purvena) indicates an interesting mathematical application. Great ancient Indian scholars like Acharya Aryabhatta, Brahmagupta, Bhaskaracharya, Pingala, Mahavira, and more contemporary ones like Srinivasa Ramanujan along with their counterparts from other parts of the world, have further developed this body of knowledge. Numerous teachers from the DAV Group of Schools, with their decades of rich experience, have compiled the existing knowledge in a child-friendly form.

Therefore, there is no copyright on the content of this book. One can seek permission and print all or only certain chapters of the book. However, no unauthorized modification is permitted in any chapter. Considering the social orientation of the organization, we have consciously ensured that cost of the textbook is affordable

without compromising on the quality of paper/print. Also, the e-copy of the entire book will always be downloadable for free from our website – davchennai.org/publications.

This is the second version of the book and could have not only omissions, but also areas of improvement. We request the reader to excuse us for the omissions, but please do bring to our notice any feedback for correction and improvement in subsequent versions. We will remain grateful to you for your support and feedback.

Lastly, before signing off, we would like to express our profound gratitude to God Almighty for the guidance and encouragement in this endeavour. As the great mathematician, Srinivasa Ramanujan, rightly said - **"An equation for me has no meaning unless it expresses a thought of God."**

Chennai | June 2024

Secretary
Tamil Nadu Arya Samaj Edu. Society

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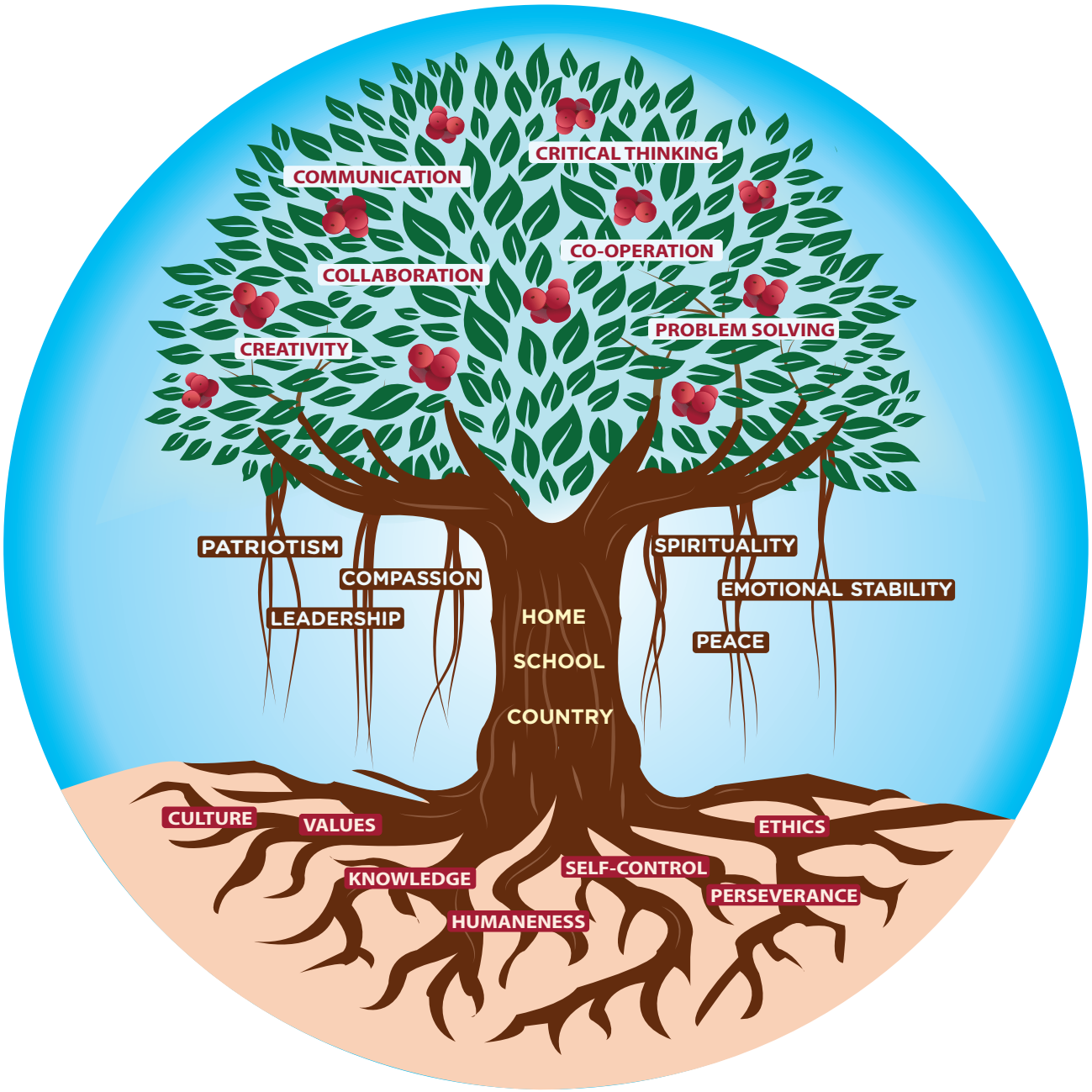
The Learning Tree



Contents

ADDITION
(NUMBERS UPTO 100)

LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Add using abacus, Add on the number line, Add two digit and one digit numbers by vertical and horizontal arrangement, Application in real life.

On the week of Independence Day, the art teacher of class 1 taught children to draw the national flag and asked them to make one flag each for the Independence Day celebration. There were 23 girls and 22 boys in the class. All the children in the class made the national flag.

During the Independence Day celebration, the children waved the national flag and greeted the chief guest.

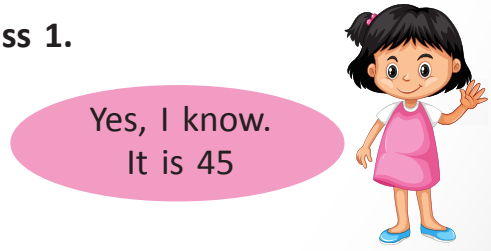
If all the children of class 1 attended the celebration, how many students were present for the celebration?

Let us find out the total number of children in class 1.

Girls=23

Boys=22

Do you know to find the total?



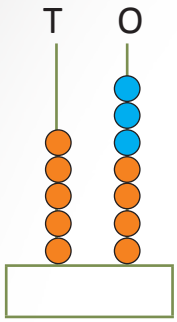
Do you know?

Our country became Independent on 15th August 1947

Let us learn to do two digit addition

Addition on the abacus:

Add 54 and 3



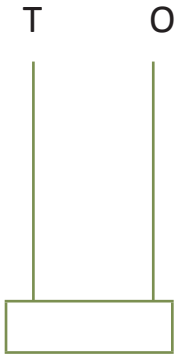
54= 5 tens+ 4 ones. We put 5 beads in the tens rod and 4 beads in the ones rod. Since we are adding 3 ones we put 3 beads in the ones rod.

Count the beads in the ones rod and the tens rod. There are 7 beads in the ones rod and 5 beads in the tens rod. So, 54+3=57.

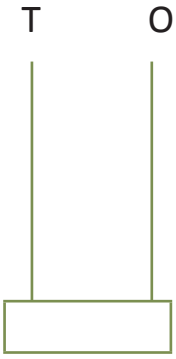
EXERCISE 7.1

Draw the beads on the abacus and add

a) 61+4= ☐



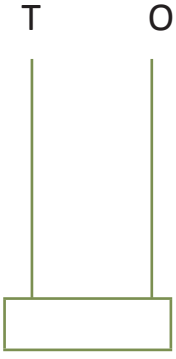
b) 23+6 = ☐



c) 45+4 = ☐

d) 7+32 = ☐

e) 70+5 = ☐



f) 3+44 = ☐

Teacher's sign & date_____

Adding tens and ones

Add 42 and 5

T	O
4	2
+	5
4	7

Write the number in the tens and ones place. First, add the numbers in the ones place Then, add the numbers in the tens place. The sum is 47

EXERCISE 7.2

a) 26+2 = ☐

T	O
2	6
+	2

b) 53+5 = ☐

c) 60+9 = ☐

d) 44+5 = ☐

e) 35+1 = ☐

f) 72+6 = ☐

g) 80+9= ☐

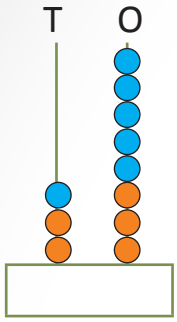
h) 11+8= ☐

i) 90+3 = ☐

Teacher's sign & date_____

Addition on abacus

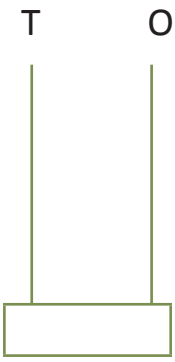
Example:- Add 23 and 15 on an abacus

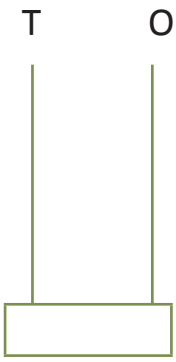


23=2 tens + 3 ones.
We put 2 beads in the tens rod and 3 beads in the ones rod.
Since 15 = 1 tens + 5 ones, we put 1 bead in the tens rod and 5 beads in the ones rod and count them. In tens rod there are 3 beads and in the ones rod there are 8 beads. The sum is 38

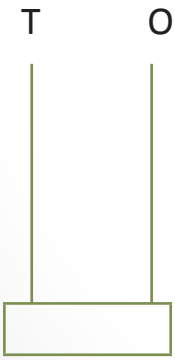
Add the following numbers using abacus:-

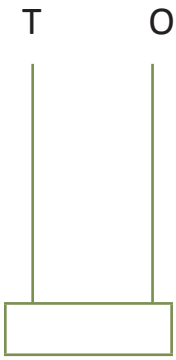
a) 42+ 23= ☐ b) 54+12= ☐ c) 60+34= ☐

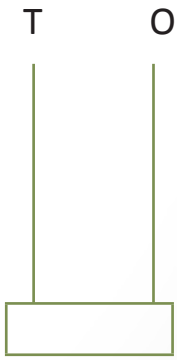




d) 38+40= ☐ e) 33+22= ☐ f) 25+41= ☐







Teacher's sign & date_____

Example:- Add 43 and 24

	T	O
	4	3
+	2	4
	6	7

43= 4 tens + 3 ones.
Write 4 in the tens place and 3 in the ones place. 24= 2 tens + 4 ones. Write 2 in the tens place and 4 in the ones place.

First, add numbers in the ones place. Then, add the numbers in the tens place.

The sum is 67

EXERCISE 7.3

a) 54+32 = ☐

	T	O
+		

b) 13+46 = ☐

	T	O
+		

c) 25+30 = ☐

	T	O
+		

d)78+11 = ☐

	T	O
+		

e) 83+ 15 = ☐

	T	O
+		

f) 40+59 = ☐

	T	O
+		

g) 92+ 6 = ☐

	T	O
+		

h) 4+ 74 = ☐

	T	O
+		

i) 3+55 = ☐

	T	O
+		

Applications in real life

Example

There are 14  and 25  in a basket. Find the total number of vegetables in the basket.

			T	O
Number of carrots	=		1	4
Number of brinjals	=	+	2	5
Total number of vegetables	=		3	9

Ans:- 39 Vegetables

EXERCISE 7.4

1. Vedika has 16  in one hand and 12  in the other hand. How many flowers does Vedika have in both the hands?

			T	O
Number of red flowers	=			
Number of yellow flowers	=	+		
Total number of flowers	=			

Ans : ☐ Flowers

2. Surabhi has 20  and Abinav has 8  , how many balloons do they have in all?

			T	O
Number of balloons Surabhi had	=			
Number of balloons Abinav had	=	+		
Total number of balloons they both have	=			

Ans : ☐ Balloons

3. Rishab bought 35  . Varun gave him 23 more. How many toffees does Rishab have now?

		T	O
Number of toffees Rishab had	=		
Number of toffees Varun gave	=	+	
Total numbers of toffees Rishab has	=		

Ans: ☐ Toffees

4. Kushi bought 18  and her friend Sonu bought 11  .How many fruits did Kushi and Sonu buy?

		T	O
Number of apples	=		
Number of oranges	=	+	
Total number of fruits bought	=		

Ans: ☐ Fruits

Teacher's sign & date_____

Higher Order Thinking Skills (HOTS)

1) Add 20 to the greatest one digit number

2) Compare using > or < or =

   a) 43 +2 ☐ 17+52

   b) 8 ones + 7 tens ☐ 8 tens+ 7 ones

3) 10 more than 56

4) Find the sum of 7 and 8

5) Find the sum of twelve and sixty six

6) What number should be added to 4 to get 10?

7) The numbers you add are called _____

8) When you add zero to a number, the sum is the _____

9) What happens to the sum when you change the order of the addends?

_____

10) Find the sum of the greatest and the smallest number from the given box._____

64		78	
	66		49
30		56	
	14		81

Value based question

1. Riya's Naana (father in Telugu) decided to donate clothes towards flood relief. He gave 6 frocks, 4 shirts and 3 pants. How many dresses did he donate?

Ans:- _____dresses.

2. Darshan went to his chikkamma's (mother's younger sister in Kannada) house during vacation. After lunch, he helped his chikkamma in washing the plates. He washed 2 plates and his chikkamma washed 10 plates. How many plates did they wash together? **Ans:- _____Plates**

WORKSHEET

1 Try These

a) Add 1 to the smallest one digit number _____.

b) The biggest one digit number is _____

c) The sum of 10 and 3 is _____

d) Three cars are parked in the portico of Vivek's house.

How many wheels do they have altogether? _____

e) What should be added to 6 to make it 10? _____

f) Add: 2 tens and 2 ones. _____

g) Circle the smallest 2 digit number

99 10 11 22

2. Fill in the boxes with the correct answer

a) 3+4 = ☐ b) 7+3 = ☐ c) 0+6 = ☐ d) 1+9 = ☐

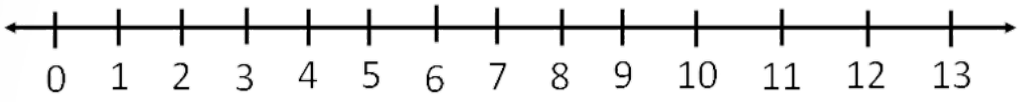
3. Fill in the blanks with the correct answer

a) 4 oranges + 5 oranges = _____ oranges.

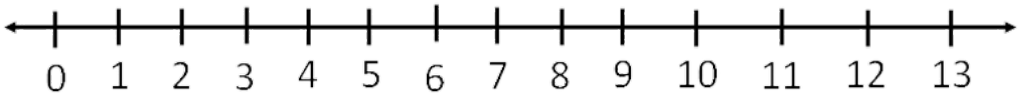
b) 3 vadas + 3 vadas =_____ vadas.

4. Add on the number line

a) 2+4 = _____



b) 9+3 = _____



5) As a part of children's day celebration, class 1 children decided to donote masks. 13 boys and 26 girls of the class made a mask each.

How many masks were made by them?

a) What is the strength of the class? ____

b) Who is more in number? (boys / girls)

c) The total number of students lie between _____

i) 30 and 40 ii) 20 and 30 iii) 40 and 50
iv) 60 and 70

6) Find the sum and colour the appropriate grid

a. 43 + 45 =

b. 15 + 4 =

c. 64 + 33 =

d. 61 + 21 =

e. 12 + 81 =

f. 0 + 16 =

g. 55 + 8 =

h. 27 + 3 =

i. 29 + 3 =

j. 90 + 5 =

k. 37 + 6 =

l. 87 + 4 =

If the sum is,

More than 10 but less than 40 colour light blue.

More than 40 but less than 70 colour pink.

More than 70 but less than 100 colour orange.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

7) Do as directed:

a) Add 14 and 3

T	O
1	4
+	3
1	7

b) Sum of 5 and 20

c) Total of 6 and 8

d) Add 1 and 9

e) 7 more than 3

f) Sum of 4, 1 and 5.

g) Total of 21 and 30

h) Add 36 and 63

i) Add 25 and 4

j) 76 plus 2

k) Sum of 9 and 8

l) Add 3, 4 and 2

Teacher's sign & date_____

8 SUBTRACTION
(NUMBERS UPTO 100)

LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Subtract by backward counting and forward counting, Subtract using number line and number strip , subtract using abacus, Perform subraction by vertical and horizontal arrangement of numbers and application in real life.

Introduction to subtraction of large numbers:

Teacher: Excellent Saanvi! How did you find out?

Saanvi: Ma'am, I counted backwards from the number 40.

Teacher: Yes. From the number 40, if you count 3 numbers backwards, 39, 38 and 37, the answer is 37.

We can also write this as 40 – 3=37.

We can also do backward counting with our fingers.

Let us see with an example:

45 – 2 =?

Step 1: Keep 45 (bigger number) in the mind.

Step 2: Keep 2 (smaller number) in the fingers.

Step 3: Start counting 2 numbers backward from 45 .

We stop at 43. So, 45 -2 = 43.

EXERCISE 8.1

1) Subtract using backward counting

a. 34 – 2 = _____ b. 40 – 3 = _____ c. 56 – 4 = _____

d. 67 – 5 = _____ e. 76 – 6 = _____ f. 81 – 7 = _____

g. 98 – 8 = _____ h. 100 – 9 = _____ i. 39 – 0 = _____

j. 52 – 1 = _____ k. 96 – 3 = _____ l. 78 – 4 = _____

m. Forty minus seven

_____ - _____ = _____

n. 8 less than 68

_____ - _____ = _____

o. Take away 7 from 77

_____ - _____ = _____

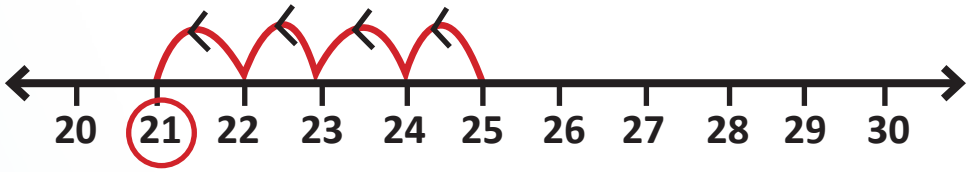
p. Decrease 100 by 4

_____ - _____ = _____

Teacher's sign & date_____

Subtraction using number line

Example: Subtract 4 from 25 on a number line.



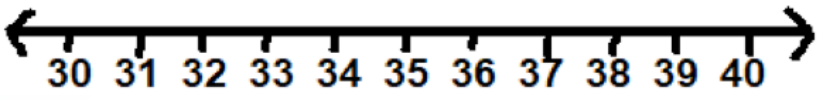
Steps: 1.) Start from **25**.

2.) Jump **4** steps backwards

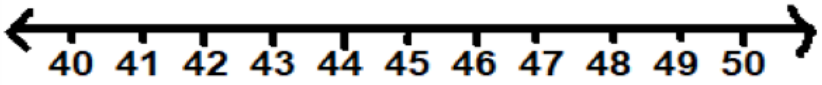
3.) We stop at 21. So, 25 – 4 =21.

EXERCISE 8.2

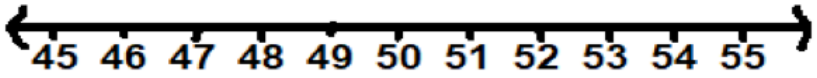
a.) 35 – 3 = ____



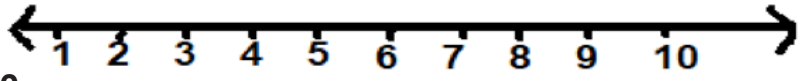
b) Subtract 8 from 50. _____



c) One less than 55. _____

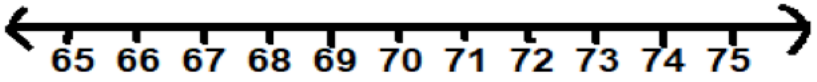


d) By how much is 10 greater than 7? _____

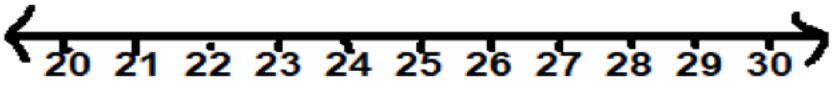


0

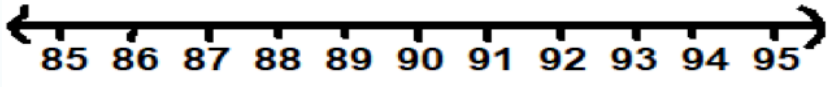
e) Find the difference between 68 and 70.



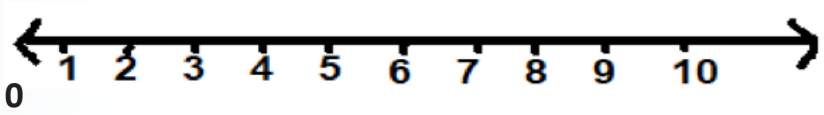
f) 26 – ____= 23



g) 90 – 0 = ____



h) 5 – 5 = _____



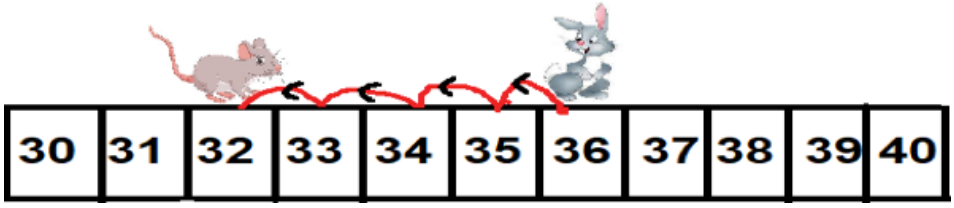
Teacher's sign & date_____

Subtraction on the number strip

Mr. Rabbit moved to the number 36 on the number strip. His friend Mr. Rat is on 32.

Mr. Rabbit wants to come to Mr. Rat.

Now let us see how many steps backward has Mr. Rabbit to jump.

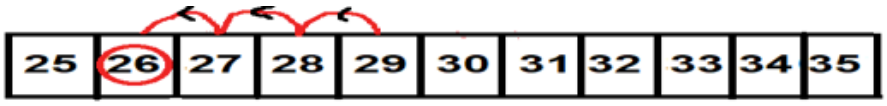


It jumped 4 steps back to reach Mr.Rat.

It is written as **36 – 4 = 32.**

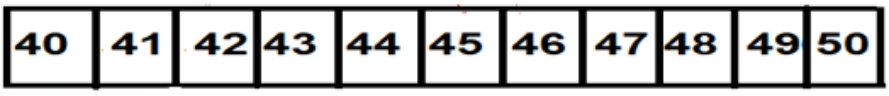
Example: Subtract and find the answer using the number strip.

29 – 3 = <u>26</u>

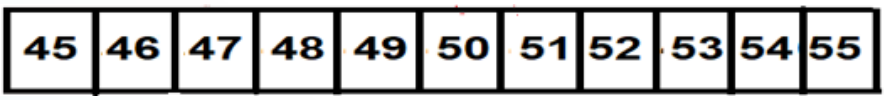


EXERCISE 8.3

a) 49 – 5 = _____



b) 51 – 4 = _____



c) 67 – 7 = _____

60	61	62	63	64	65	66	67	68	69	70

d) 2 less than 70 = _____

65	66	67	68	69	70	71	72	73	74	75

e) 88 – 3 = _____

80	81	82	83	84	85	86	87	88	89	90

f) 40 – 0 = _____

35	36	37	38	39	40	41	42	43	44	45

g) Subtract 1 from 63 = _____

55	56	57	58	59	60	61	62	63	64	65

h) Take away 5 from 89 = _____

80	81	82	83	84	85	86	87	88	89	90

i) 99 – 4 = _____

90	91	92	93	94	95	96	97	98	99	100

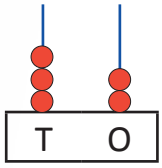
j) 3tens – 7ones = _____ - _____ = _____

20	21	22	23	24	25	26	27	28	29	30

Teacher's sign & date_____

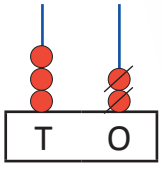
Subtract using the abacus:

Here is the abacus:



Adiya: Now, I am removing 2 beads from the ones place. Tell me the new number on the abacus.

Andaal: Yeah! I got the answer. It is **30.**

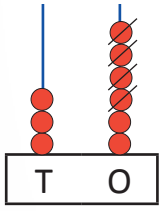


Adiya: How did you get the answer?

Andaal: You removed 2 beads from the ones place and 3 beads are remaining in the tens place. So, **32 – 2 = 30**

Example:1

Subtract 4 from 36.



Step 1: Cut off 4 beads from the ones place.

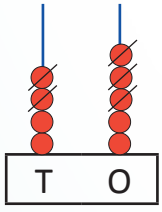
Step 2: Now, the remaining beads will show the answer. 3 beads in the tens place and 2 beads in the ones place

36 – 4 = 32

Example:2

Subtract 23 from 45.

Step 1: We need to remove 23 from 45.



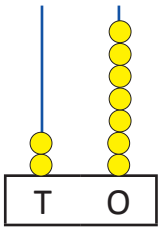
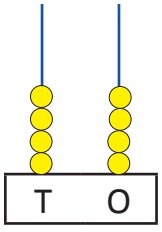
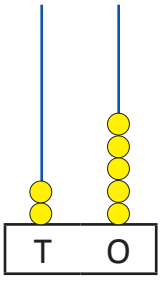
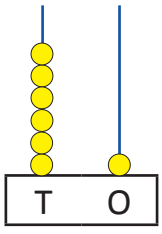
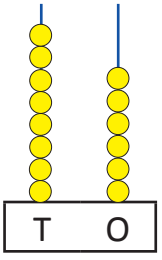
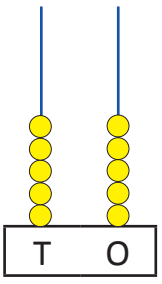
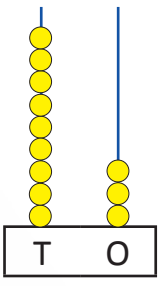
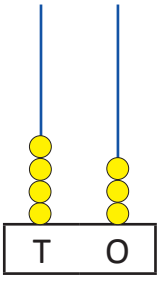
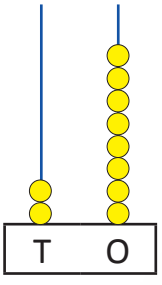
so remove
2 beads from the tens place

3 beads from the ones place

Step 2: We have 2 beads in the tens place and 2 in the ones place the answer. **45 – 23 = 22**

EXERCISE 8.4

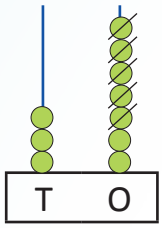
Subtract using the abacus

a) 27 – 3 =  _____	b) 44 – 2 =  _____	c) Subtract 5 from 25 =  _____
d) 61 – 1 =  _____	e) 86 – 64 =  _____	f) Remove 41 from 55=  _____
g) 93 – 30 =  _____	h) 4 tens and 3 ones – 2 ones =  _____	i) 1 less than 28 =  _____

Teacher's sign & date_____

Draw the beads for the given subtraction fact and find the difference using the abacus:

Example1: 37 – 5= 32

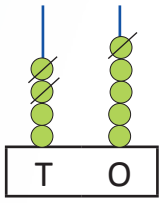


Steps: 1) Draw the beads to show the number **37.**

2) Cut **5** beads from the ones place

3) The remaining beads shows the answer **37 – 5 = 32**

Example 2: 45 – 21 = 24



Steps: 1) Draw beads to show the number **45.**

2) Cut off 21 beads, that is

1 bead from the ones place

2 beads from the tens place

3) The remaining beads shows the answer **45 – 21 = 24**

EXERCISE 8.5

a) 29 – 4 = _____ T O	b) 17 – 12 = ____ T O	c) 50 - 0 = ____ T O
d) 35 – 5 = _____ T O	e) 56 – 10 = _____ T O	f) Find 63 less than 77 = _____ T O

g) 7 less than 79 = _____ T O	h) 6 tens and 7 ones – 4 = _____ T O	i) Remove 8 from 48 = ___ T O
j) Subtract 1 from 35 = _____ T O	k) 12 less than 5 tens and 4 ones =_____ T O	l) 7 less than 8 tens 9 ones = _____ T O

Teacher's sign & date_____

Subtract

Example 45 – 21=?

Step 1: Arrange the numbers according to their place value.

T	O
4	5
-2	1

Remember that the larger number must always be written on top for subtraction

Step 2: Start the subtraction from the ones place.

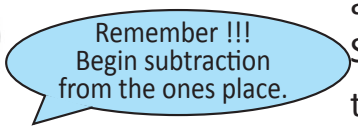
Step 3: Open 5 fingers. 

Step 4: Now close (take away) 1 finger. 

4 fingers remain open. So, 5 – 1 = 4. Write 4 in the ones place in the answer.

Step 5: Do the subtraction in the tens place.

T	O
4	5
-2	1
2	4



Step 6: Open 4 fingers. Now close (take away) 2 fingers. 2 fingers remain open. So, 4 – 2 = 2. Write 2 in the tens place in the answer.

Subtract

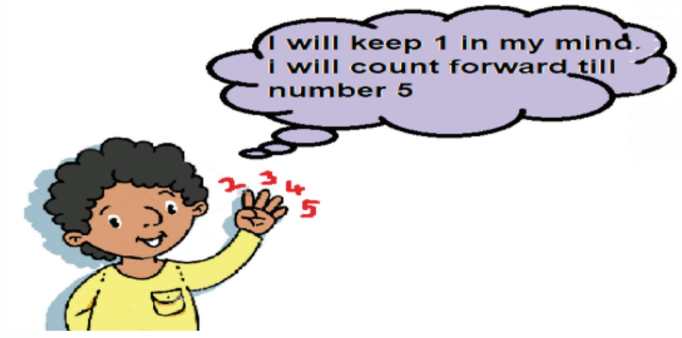
Example: Subtract 75 – 21

Step 1: Arrange the numbers according to their place value.

	T	O
	7	5
-	2	1

Step 2: Start the subtraction from the ones place.

Step 3: Keep 1 in the mind and open a finger for every number counted, till you reach 5.



4 fingers are opened. So, 5 – 1 = **4**.

Write **4** in the ones place in the answer.

Step 4: Do the subtraction in the tens place.

Step 5: Keep 2 in the mind and open a finger for every number counted, till you reach 7.

5 fingers are opened. So, 7 – 2 = 5.

Write **5** in the tens place in the answer.

	T	O
	7	5
-	2	1
	5	4

Answer is 54.

EXERCISE 8.6

1) Subtract the following

	T	O
a)	6	4
–	1	3

	T	O
b)	9	6
–	2	5

	T	O
c)	6	7
_	5	4

	T	O
d)	8	6
–	7	5

	T	O
e)	6	5
–	6	2

	T	O
f)	8	9
	1	3

	T	O
g)	7	4
–	3	1

	T	O
h)	5	5
–	1	1

	T	O
i)	9	7
	2	6

2) Find the difference between

	T	O
a)	4	6
–	3	2

	T	O
b)	1	6
–	1	5

	T	O
c)	7	3
_	4	2

	T	O
d)	6	5
–	2	0

	T	O
e)	8	3
–		2

	T	O
f)	9	7
_	9	7

	T	O
e)	7	1
–		1

	T	O
f)	3	5
–		4

	T	O
g)	9	9
_	2	8

	T	O
h)	2	7
–		4

	T	O
i)	9	9
–	2	8

	T	o
j)	8	8
_		6

3) Arrange the numbers in the given boxes below and subtract.

a) 36 – 23 =

	T	O

b) 69 – 42 =

	T	O

c) 57 – 25 =

	T	O

d) 75 – 44 =

	T	O

e) 22 – 10 =

	T	O

f) 95 – 93 =

	T	O

g) 62 – 1 =

	T	O

h) 89 – 2

	T	O

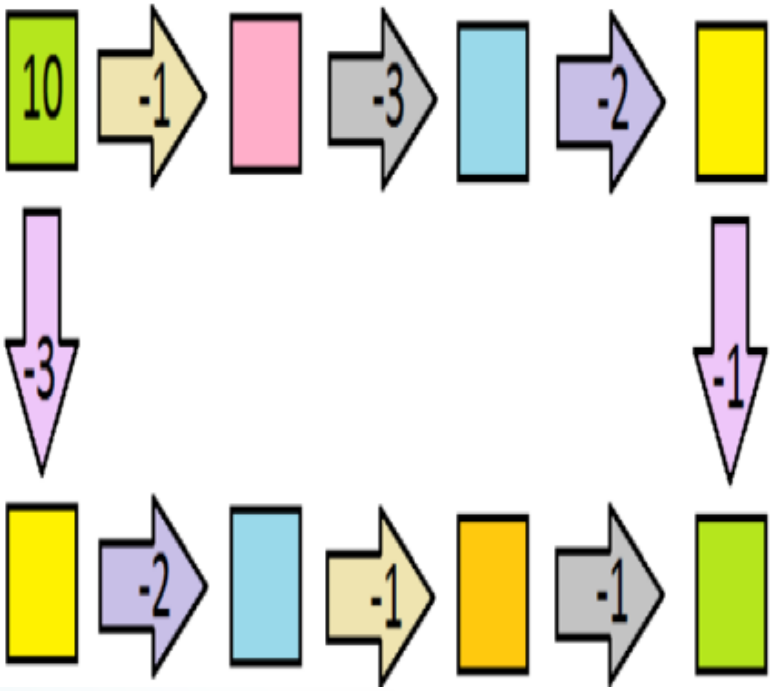
i) 75 – 5 =

	T	O

j) 59 – 8 =

	T	O

4) Fun Activity



5) Dharam went on a trip with his amma(mom) and naana(dad) from Dindukal to Palani. On the way he saw a huge green board with names of places and numbers on it. He wondered what they meant!

Dharam: Amma, why does this green board say 'Palani 22'?

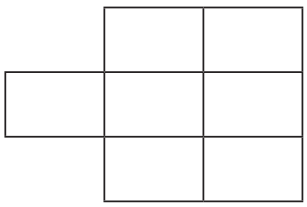
Mom: It says so because we have to travel 22 kilometres more to reach Palani. Long distances are always measured in kilometres.

Dharam: What is the distance between Dindukal and Palani?

Dad: It is 59 kilometres. The sign board says we have to travel 22 kilometres more to reach Palani. Can you say how many kilometres we have travelled so far?

Dharam: Sure Naana! We have travelled _____ kilometres from Dindukal.

(Use the boxes below to help Dharam find the answer.)



Do you know?

A milestone is used to show the distance between two places.

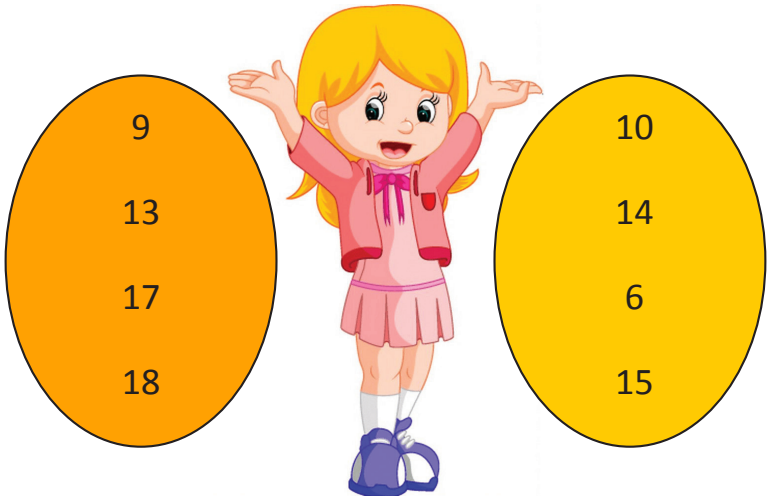
Do you know?

Our former president Dr. A.P.J.Abdul Kalam is known as the "Missile man of India".

Teacher's sign & date_____

6) Higher Order Thinking skills (HOTS):

Read the numbers inside the 2 circles. Match the numbers in circle A with the number in circle B, such that the difference between them is 3.



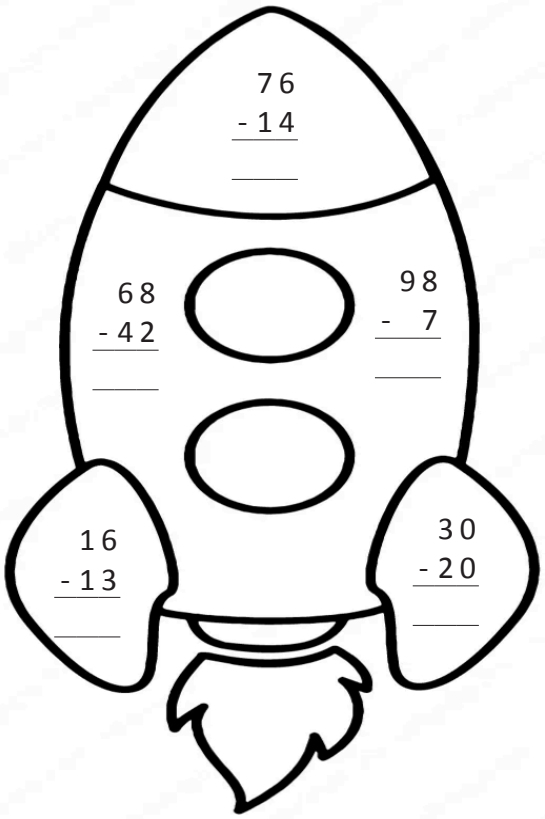
A B

1) _____ 3) _____

2) _____ 4) _____

WORKSHEET A

1) Subtract and colour the picture. Use colours of your choice



2) Find the difference between

a) 3 tens 5 ones and 13	b) 32 and 44
c) 81 and four tens	d) 9 tens 4 ones and one tens four ones
e) five tens 6 ones and 7 tens eight ones	f) 1 tens 3 ones and seven tens five ones
g) 90 and six tens	h) six tens 4 ones and 2 tens four ones
i) 18 and four tens eight ones	j) 4 ones and 4 tens four ones

Teacher's sign & date_____

1) Applications in real life

a) There are 72 pages in a story book. Aditi read 21 pages.

How many more pages has she to read to complete the story book?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

b) Meera has 25 colour pencils. Arsh has 15 colour pencils.

How many less colour pencils Arsh has than Meera?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

c) In a class there are 86 students. 34 are them are 

How many  are there in the class?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

Teacher's sign & date_____

d) In a fair, ninety five icecreams were sold, of them 63 were strawberry flavoured and the rest were chocolate flavoured.

How many chocolate icecreams were sold?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

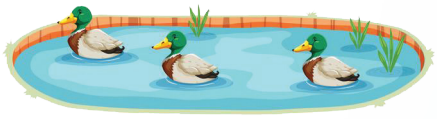
e) Tanya is 9 years old. Her grandfather is 69 years old.

How many years older is Tanya's grandfather than Tanya?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

f) There are 34 ducks in a pond. 13 ducks flew away.

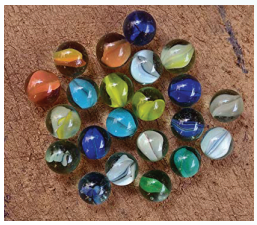
How many ducks are still in the pond?



	T	O
	☐	☐
☐	☐	☐
=	☐	☐

g) Prisha had 66 marbles. Anisha had 99 marbles.

Who had more marbles and by how much?



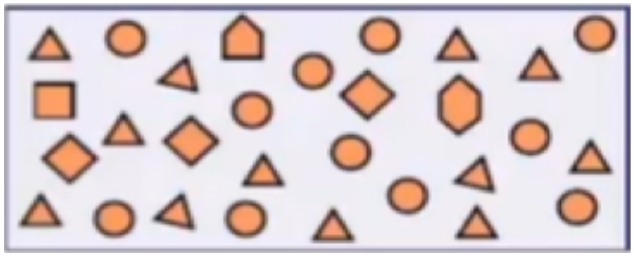
	T	O
	☐	☐
☐	☐	☐
=	☐	☐

h) Arun wanted to run 15 kilometre. He ran 10 kilometre and rested for 10 minutes.

How much distance does he have to run further to cover the total distance?

	T	O
	☐	☐
☐	☐	☐
=	☐	☐

i) How many more triangles than squares are there in the given figure?



	T	O
	☐	☐
☐	☐	☐
=	☐	☐

j) Find the difference between the largest two digit number and the largest one digit number.

	T	O
	□	□
	□	□	□
	=	□	□

k) Meenakshi wants to buy  for ₹ 50.

She has 

with her.

How much more money does she need to buy the bag?

	T	O
	□	□
	□	□	□
	=	□	□

l) The sum of two numbers is 36. If one number is 20, find the other number.

	T	O
	□	□
	□	□	□
	=	□	□

m) There are 78 chairs in a hall. 24 chairs are empty.

How many chairs are occupied?

_____

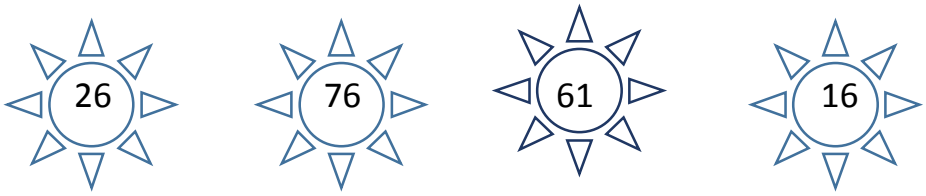
_____

_____

_____

	T	O
	□	□
□	□	□
=	□	□

n) Find the difference between the largest and smallest number from the numbers given below



_____

_____

_____

_____

	T	O
	□	□
□	□	□
=	□	□

o) Sudha wanted 50 stamps for her album. She has collected only 30 stamps. How many more stamps does she need to collect? _____

Do you know?

The hobby of collecting stamps is called “Philately”.

The first Indian stamp that was

issued on 24th November 1947

Higher Order Thinking Skills (HOTS):

Prithvi took 65 ladoos to school on his birthday to share with everyone. He gave one each to 40 of his classmates. Then, he shared one ladoo each with 13 of his teachers. He took the remaining ladoos home.

How many ladoos did Prithvi take home?

Experiential Learning (Culinary Skills):

My mother bought dates and nuts to make 25 ladoos for the diwali. I love dates and nuts. So I ate a part of it on and off. My mother could make only a dozen ladoos. My sister was very angry with me and started calculating the number of ladoos, that she missed, because I ate the dates and nuts. Help her do it.	

Teacher's sign & date_____

WORKSHEET B

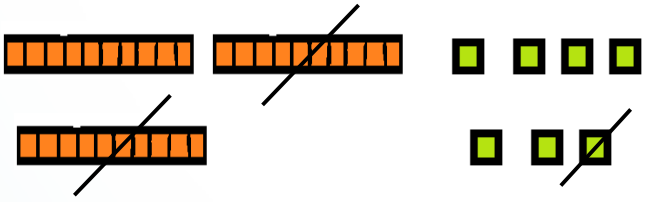
Write the subtraction fact :

a)  _____

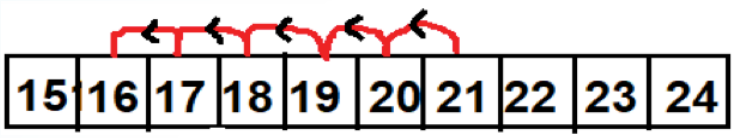
b)  _____

c)  _____

d) 20 apples – 3 apples = _____

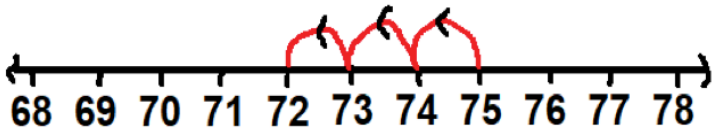
e)  _____

f)



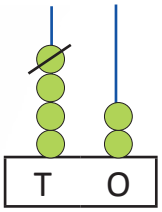
_____

g)



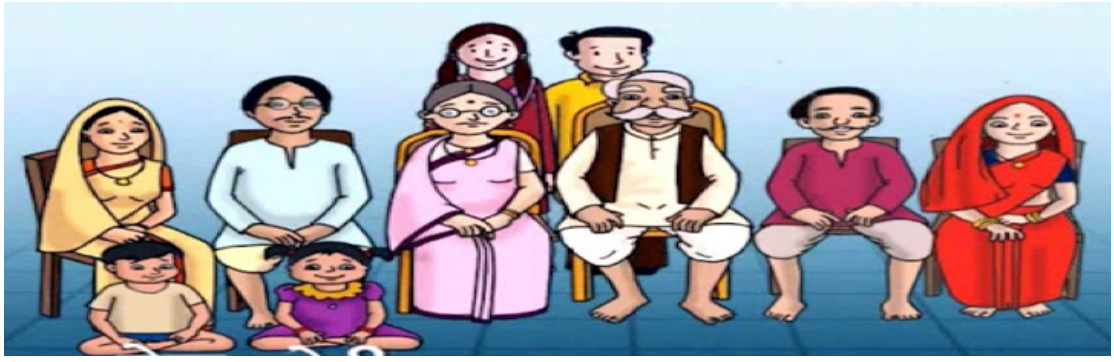
_____

h)



_____

Experiential Learning (My family)



a) My grandfather is _____ years old.	b) My grandmother is _____ years old.
c) The difference between their ages is _____ years.	d) My father is _____ years old.
e) My mother is _____ years old.	f) Who is older? Father / Mother.
g) My uncle is _____ years old.	h) I am _____ years old.
i) My sibling is _____ years old.	j) My aunt is _____ years old.
k) My aunt is younger than my _____ by _____ years.	l) I love my family because _____ _____

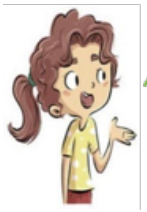
Teacher's sign & date_____

MONEY

LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Recognise the coins and notes used in our country, Use money for simple shopping activities and arrange the value of money in order.

Get started



We need money to buy things. Money is in the form of coins and notes.

Teacher : Have you ever accompanied your mother for shopping? What does she carry for shopping?

Student : A bag and a purse.

Teacher : What does she do after buying vegetables in the market?

Student : She opens her purse and gives some notes and coins to the vegetable seller.

Teacher : The notes and coins which your mother gives to the shopkeeper is MONEY. It is an important mode of transaction of business.

- Let us learn about Indian money which is in use at present.
- Indian money is always represented by rupees and paise.

One Rupee=100Paise

Coins in use

₹1

₹2

₹5

₹10

Notes in use

₹5

₹10

₹20

₹50

₹100

₹200

₹500

₹100

EXERCISE 9.1

I. Write the value of the coins and notes given

₹ 1

₹

₹

₹

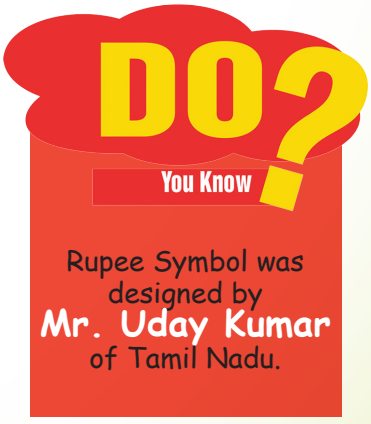
₹

₹

₹

₹

₹



EXERCISE 9.2

I. Tick the exact amount that you would give the shopkeeper to buy the following things.

a)

b)

c)

d)

e)

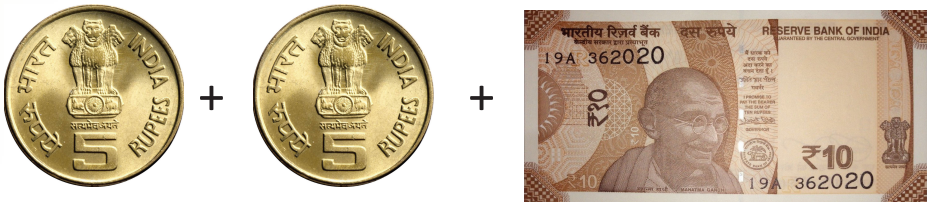
f)

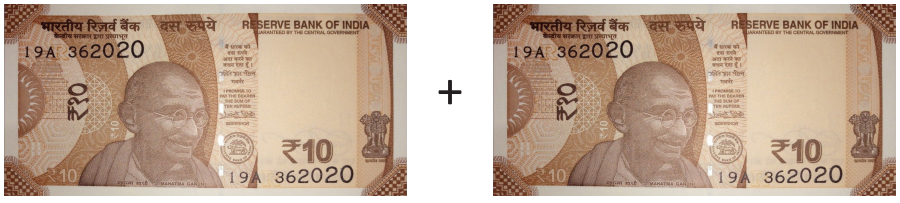
Teacher's sign & date_____

EXERCISE 9.3

I. Add and write the total value of the money given below

a)  = ₹ 8

b)  = ₹

c)  = ₹

d)  = ₹

e)  = ₹

f)  = ₹

g)  +  +  = ₹

h)  +  = ₹

EXERCISE 9.4

I. Match the objects with the correct value for money

a)  ₹ 8

b)  ₹ 5

c)  ₹ 14

d)  ₹ 3

Teacher's sign & date_____

EXERCISE 9.5

I. The prices of some objects are given below.

Find out the cost of each set.

	Items	₹
a)	+	
b)	+	
c)	+	
d)	+	

Teacher's sign & date_____

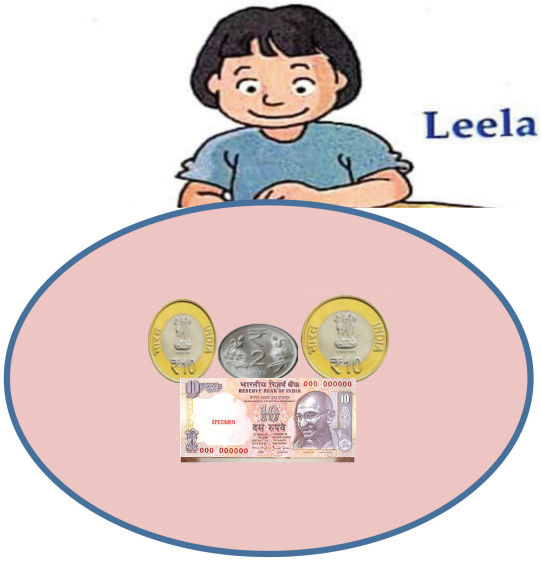
Experiential Learning:

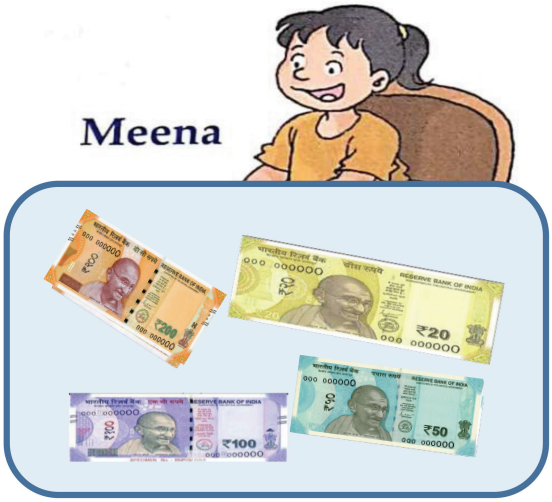
Find out who has more money

1)

_____ has more money than_____

2)



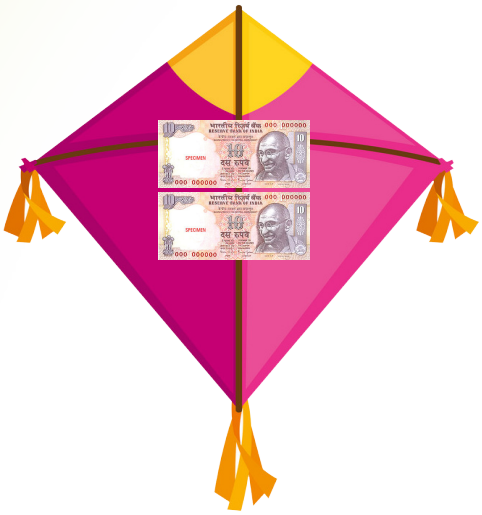


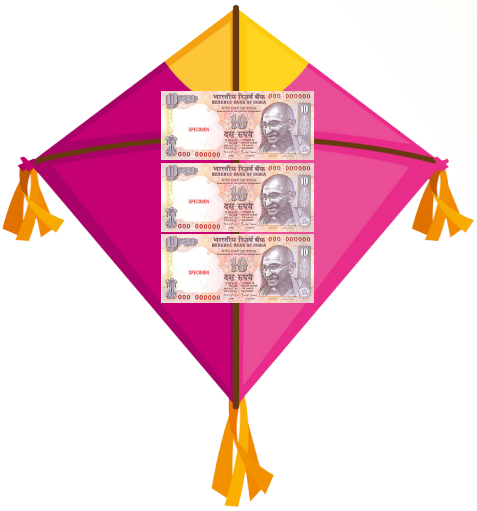
_____ has more money than_____

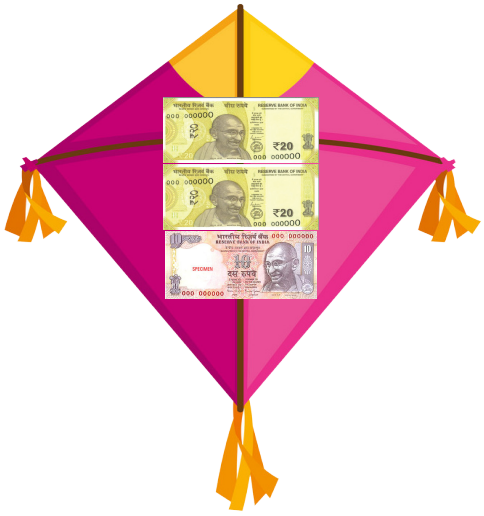
Teacher's sign & date_____

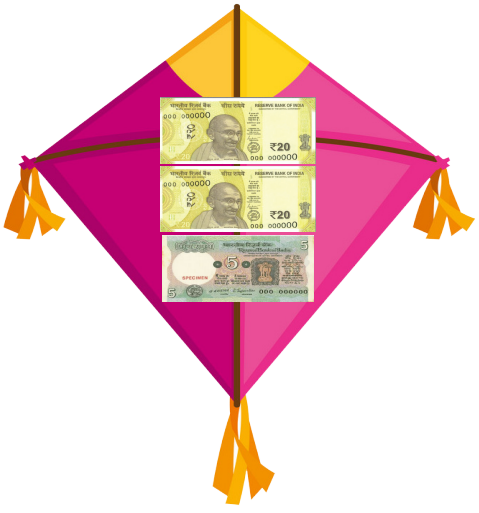
Activity:

Match the kites with the correct amount given below.









Rs. 20

Rs. 30

Rs. 45

Rs. 50

Which festival in India is famous for kite flying?

Teacher's sign & date_____

Higher Order Thinking Skills (HOTS):

1. Arrange the currency notes from smaller value to bigger value by numbering them from 1 to 6.

2. Abhi goes to a shop to buy a book. He has some money in his wallet.

a. Does he have enough money to buy the book?

b. If yes, what notes and coins will he choose from the wallet, to give the exact amount to the shopkeeper?

book

₹ 55

3. Maya and Mahesh have saved money in their piggy bank. They volunteered to donate this money to a home for poor children. Tick(✓) the piggy bank which has more money.

Maya's piggy bank

Mahesh's piggy bank

Arts Integration Activity:

Collect these coins - ₹ 1, ₹ 2, ₹ 5 and ₹ 10

Keep them under a paper one by one and shade the paper with a pencil.

Experiential Learning:

You receive ₹ 10 as pocket money every month. You spend ₹ 5 on snack and save the rest of the money. Find out the amount that you save in 2 months. What do you do with the money that you have saved.

We need money for survival.

We must save money for our future.

We must be ready to donate money to the poor and needy.

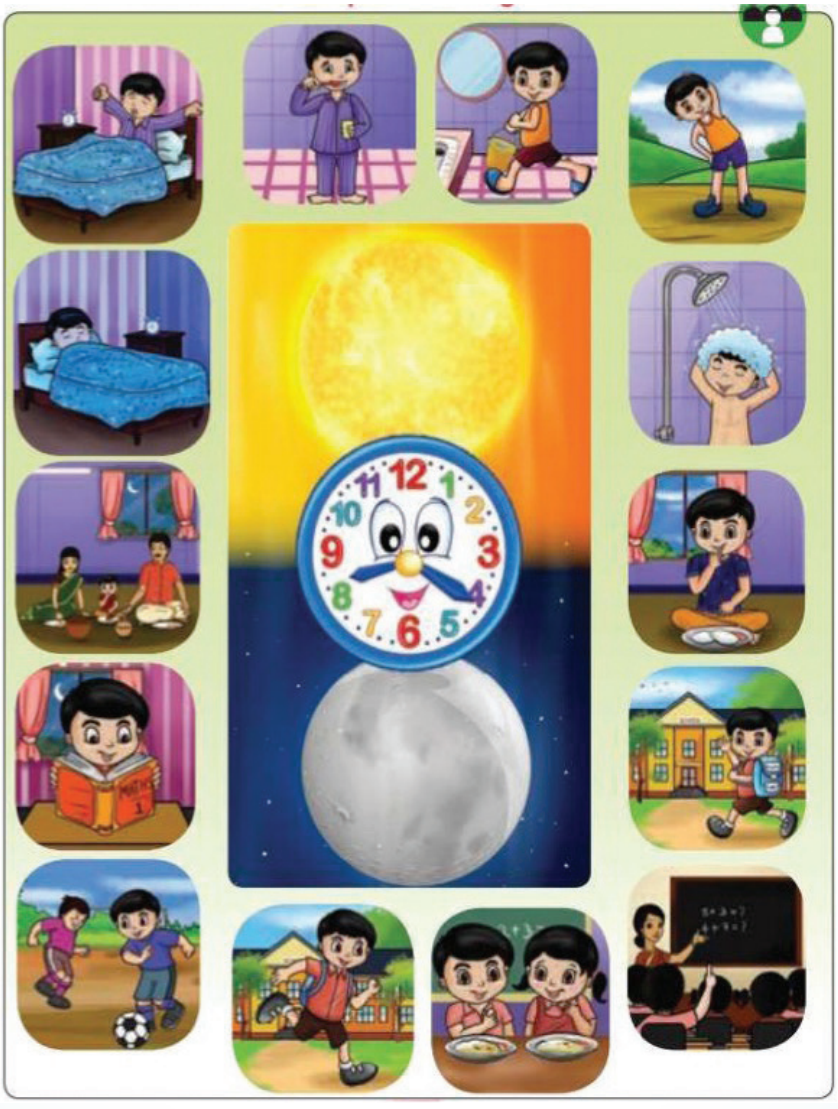
Teacher's sign & date_____

TIME

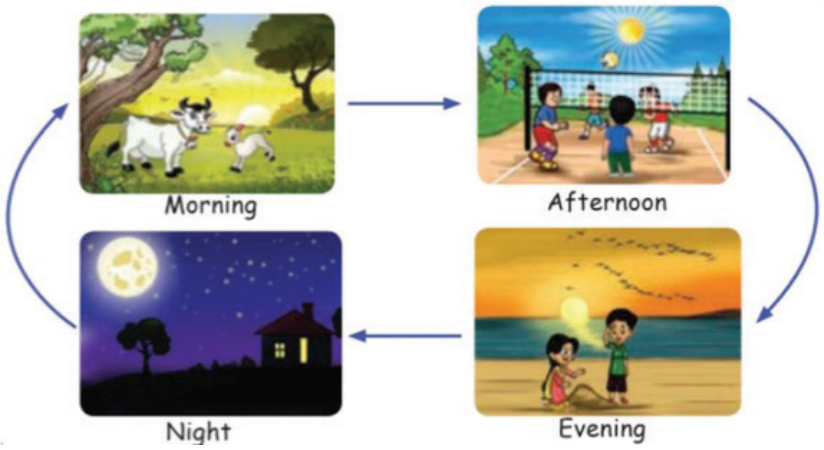
LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Arrange the events in a time sequence , Read the time on the clock to the nearest hour, Name the days of the week and months of the year in a proper order

A day with Raju

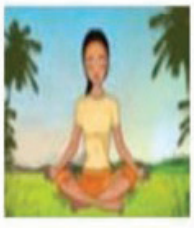


Time Travel



Observe the picture of the daily activities and draw as follows.

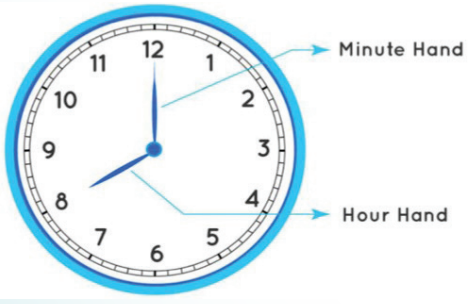
Morning Afternoon Evening Night



Telling the time

A clock tells us the time. It has 12 numbers on its face. It has 2 hands. The short hand is called the hour hand. The long hand is called the minute hand.



The hour hand takes one hour to go from one number to the next.

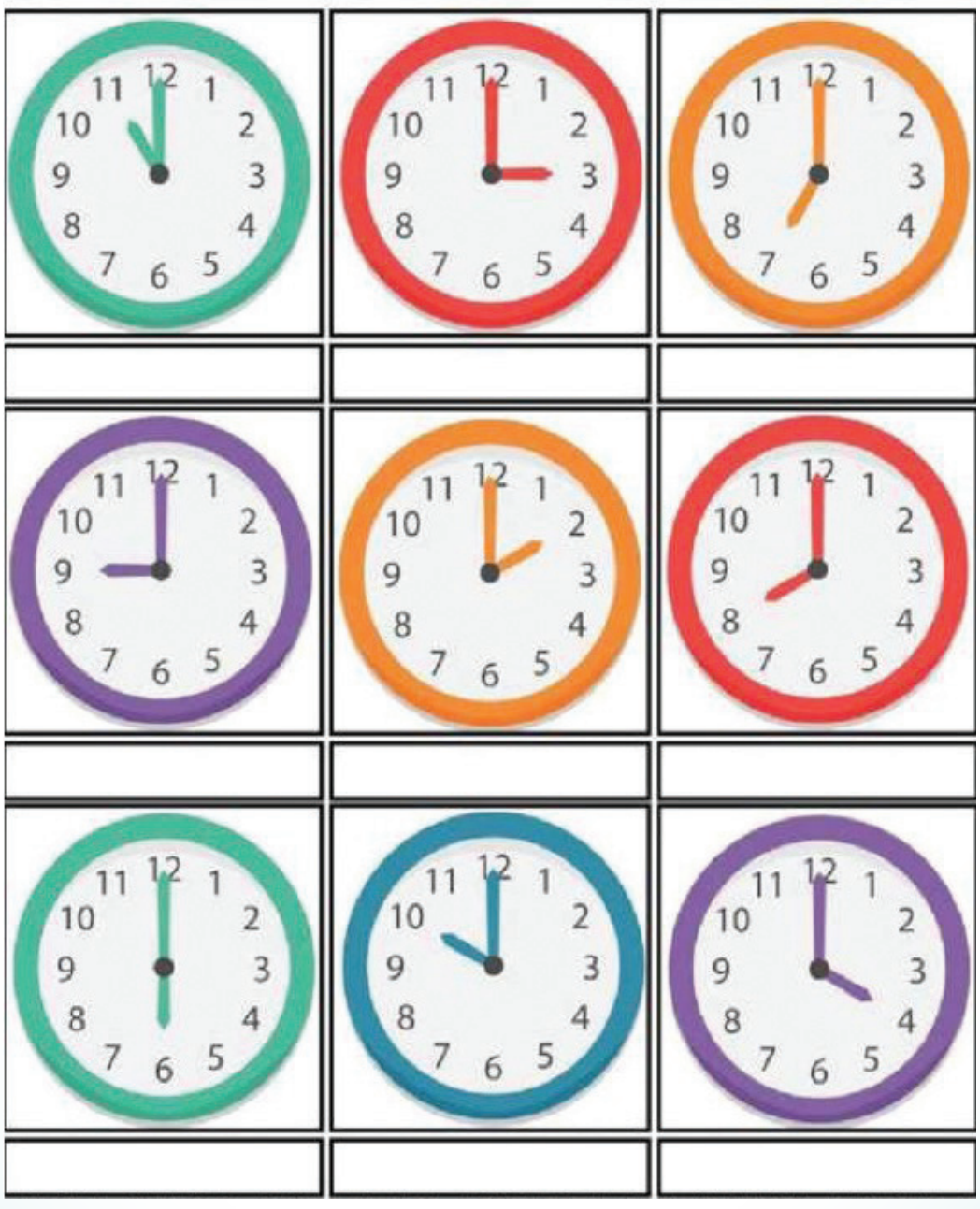
The minute hand takes one hour to go around the face of the clock once.

- **1 hour = 60 minutes**
- **Half an hour = 30 minutes**

In this clock, the hour hand is at 8 and the minute hand is at 12. The time is 8 O'clock or 8:00.

EXERCISE 10.1

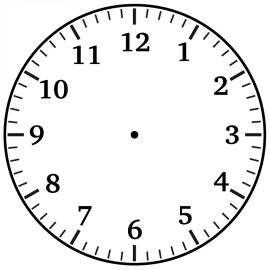
1. Write the time



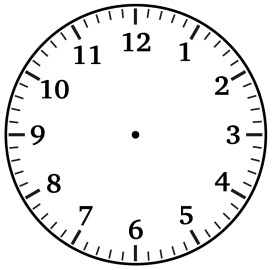
Teacher's sign & date_____

EXERCISE 10.2

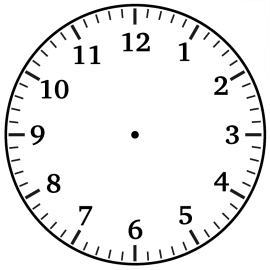
1) Draw the hands on the face of the clock to show the time



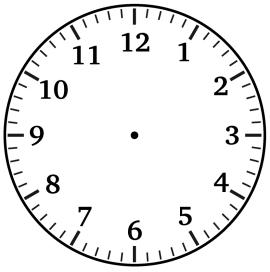
6:00



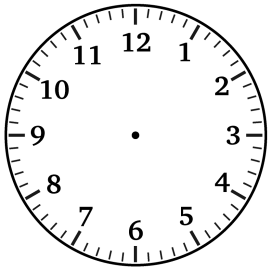
2:00



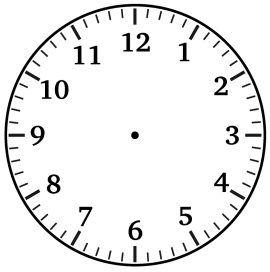
7:00



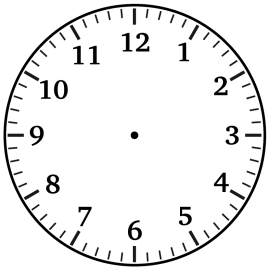
1:00



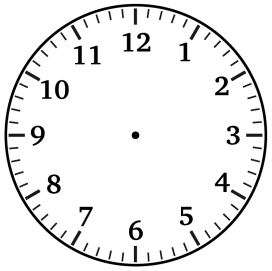
8:00



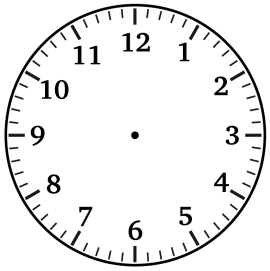
10:00



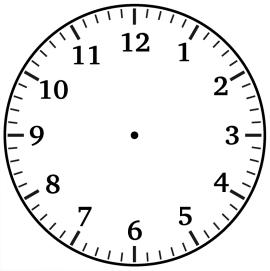
3:00



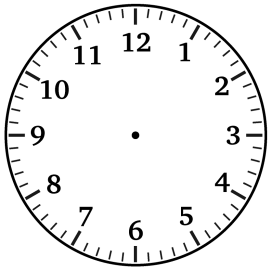
5:00



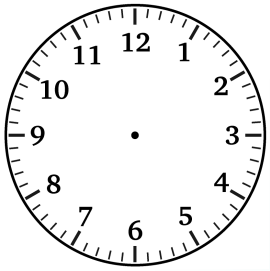
4:00



11:00



12:00



9:00

Teacher's sign & date_____

2) Fill in the blanks

a) At 6 O' clock the minute hand would be at _____

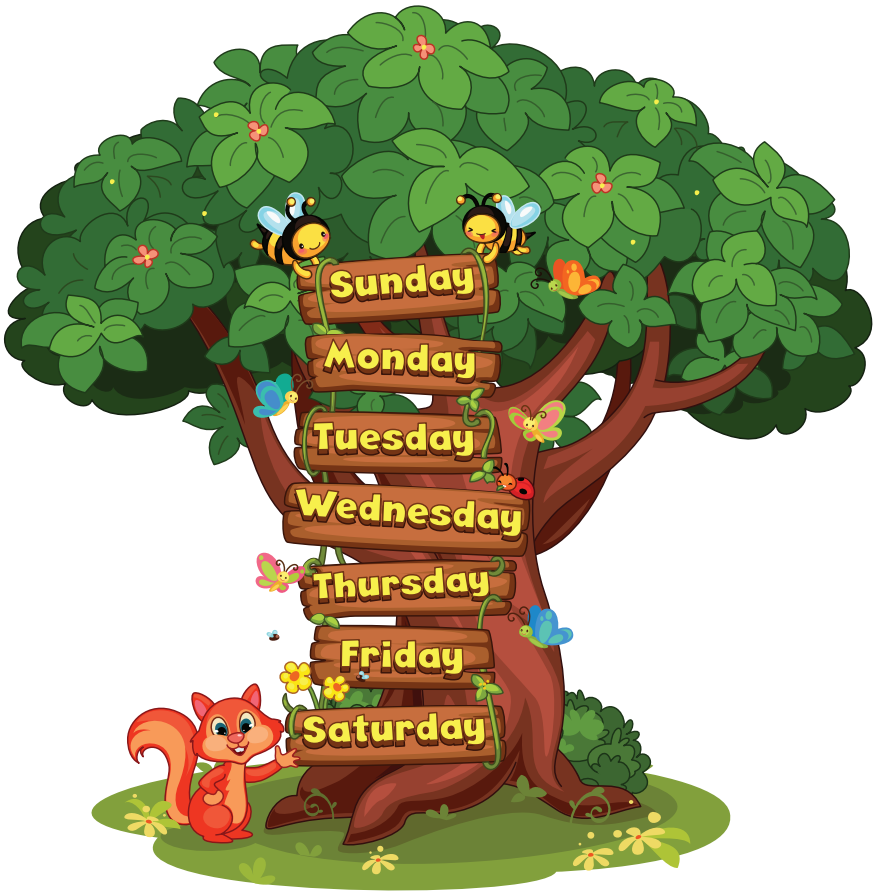
b) If the minute hand is at 12 and hour hand is at 4, then the time will be_____.

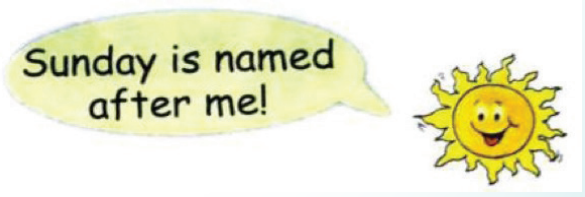
c) Juhi goes out for a morning walk at 5 O'clock and comes back after an hour. She will be back at_____.

d) When the clock shows the time '7:00', the hour hand is at_____.

- CALENDAR
- DAYS OF THE WEEK

A Week has 7 days.





3) Fill in the blanks:

a) There are_____days in a week.

b) Today is_____, tomorrow will be_____.

c) Wednesday comes just after_____

d) I was born on_____.

e) _____is the first working day of the week.

f) _____is between Tuesday and Thursday.

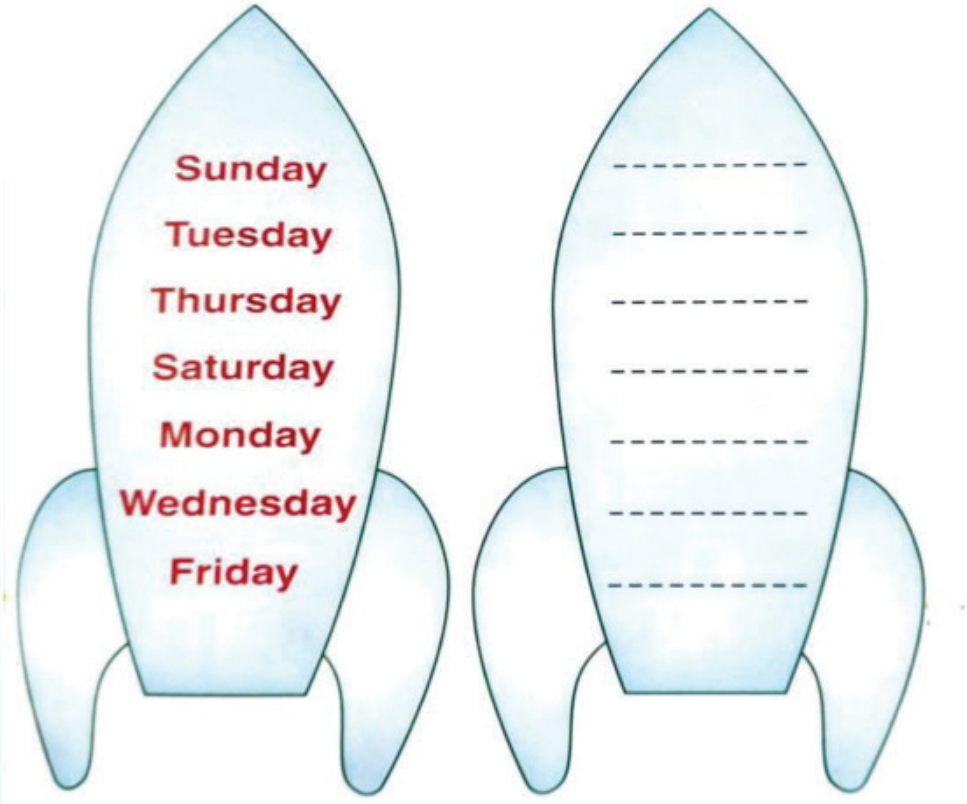
g) If yesterday was Thursday, then tomorrow will be_____.

h) If today is Monday, then day before yesterday was_____.

i) Friday comes just after_____.

j) _____comes before Wednesday.

4) Rearrange the days of the week in order



Teacher's sign & date_____

Months of the year

A year has 12 months

Word Search

Help Akash find the days of the week

S	A	T	U	R	D	A	Y	M	O
U	T	H	U	R	S	D	A	Y	P
N	H	I	M	O	N	D	A	Y	O
D	O	T	U	X	T	R	M	K	I
A	Z	U	S	F	R	I	D	A	Y
Y	A	E	F	H	O	Q	R	X	Z
C	B	S	I	G	V	R	S	V	P
W	E	D	N	E	S	D	A	Y	I
O	I	A	Q	O	S	R	E	T	K
H	N	Y	J	G	N	E	Y	C	U

TIME TO THINK

EXERCISE 10.3

Reading a calendar

Use the calendar to answer the questions given below.

January

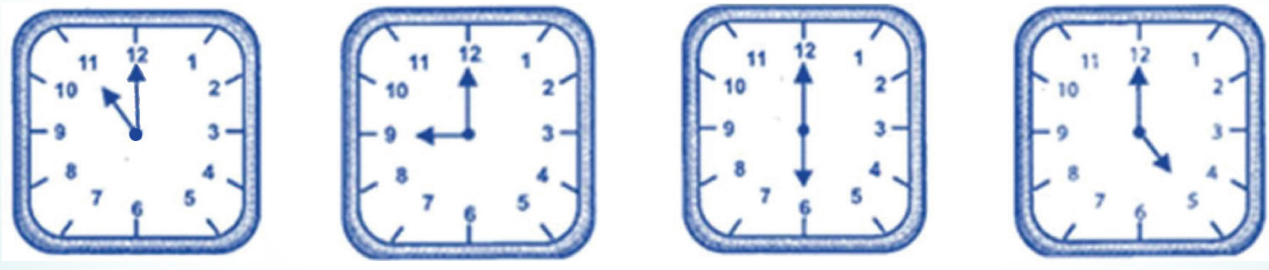
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

1. January has _____ days.
2. What day of the week is January 17th?_____.
3. What day of the week is January 29th?_____.
4. How many Mondays are there in this month?_____.
5. How many Wednesdays are there in this month?_____.
6. Pongal falls on a _____this year.

Colour the weekend blue and weekdays yellow.

Higher Order Thinking skills(HOTS)

1. Which of the following clock shows the time 6 O' clock?



2. What day comes before Sunday but after Friday?_____.

3. _____month comes just after the sixth month of a year.

4. If the minute hand is at 12 and the hour hand is at 12, then the time is_____.

5. Which activity will take less than 1 minute to finish?

   a. eating lunch b. fixing chair c. writing your name d. planting a tree

6. The clock is showing the current time. What was the time 1 hour before?

   a. 9:00 b. 8:00 c. 10:00 d. 7:00

7. A movie started at 3 O' clock and finished at 4 O'clock. How long was the movie?

   a. 2 hours b. 3 hours c. 1 hour d. half an hour

August

Su	Mo	Tu	We	Th	Fr	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

We have a very special day in the month of August which all Indians love to celebrate.

Do you know which day it is?

Yes, It's the **Independence day** which is on **August 15th**.

(i) What date is the second Friday of August?

   a. 2nd b. 16th c. 9th d. 10th

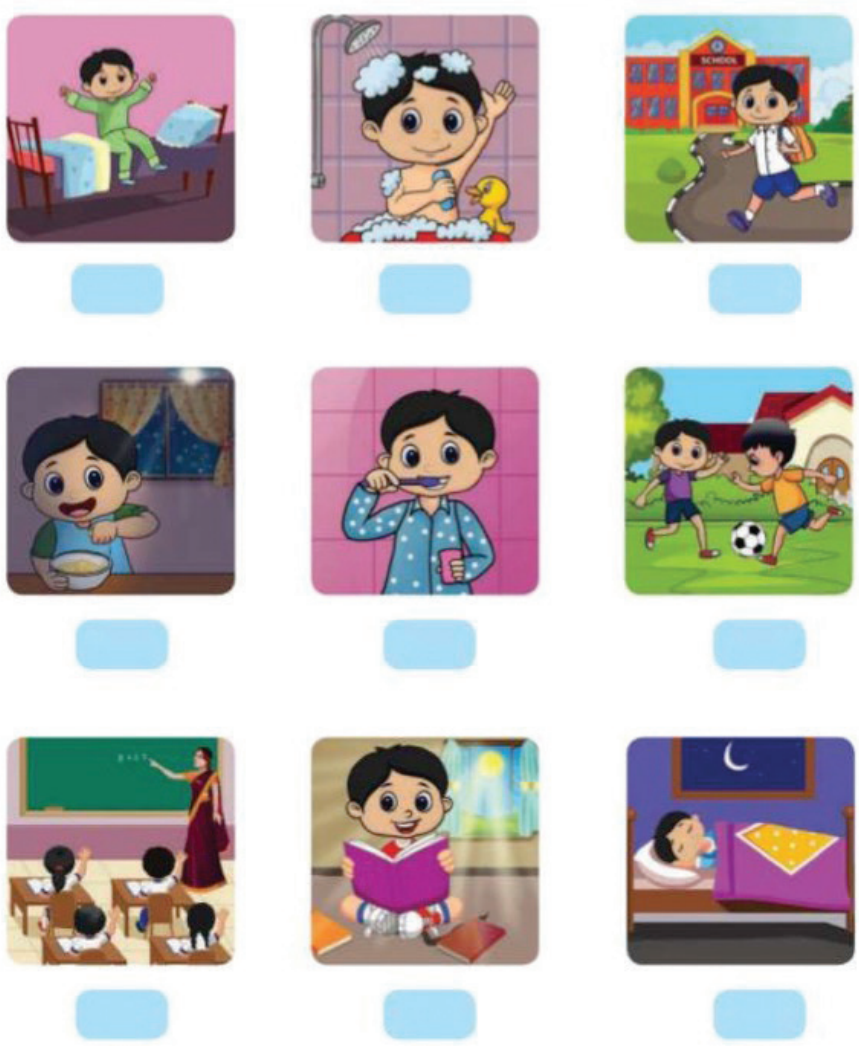
(ii) How many Saturdays are there in this month?

   a. 4 b. 5 c. 2 d. 3

Teacher's sign & date_____

WORKSHEET

1) Arrange the activities done by Adithya from morning to evening in proper sequence from 1 to 9.



2) Colour the first month in blue, 6th month in red and the last month in yellow.

3) Write the months in which your family members were born.

Father	
Mother	
Grandfather	
Grandmother	
Elder brother	
Elder sister	
Younger sister	
Younger brother	

Myself:.....

Value based Learning

Our ancestors used to chant a verse from chapter 36 of the Yajur Veda to bless the person celebrating his or her birthday

ओ३म् तच्चक्षुर्देवहितं पुरस्ताच्छुक्रमुच्चरत्। पश्येम शरदः शतं जीवेम शरदः शतं
श्रृणुयाम शरदः शतं प्रब्रवाम शरदः शतमदीनाः स्याम शरदः शतं भूयश्च शरद : शतात्॥

Om Tach-chakshur-devahitam purastaa-chhukramuch-charat |
Pashyema sharadah shatam jeevema sharadah shatam shrunu-
yaama sharadah shatam prabravaama sharadah shatam-adinaah
syaama sharadah shatam bhuyash-cha sharadha shataat||

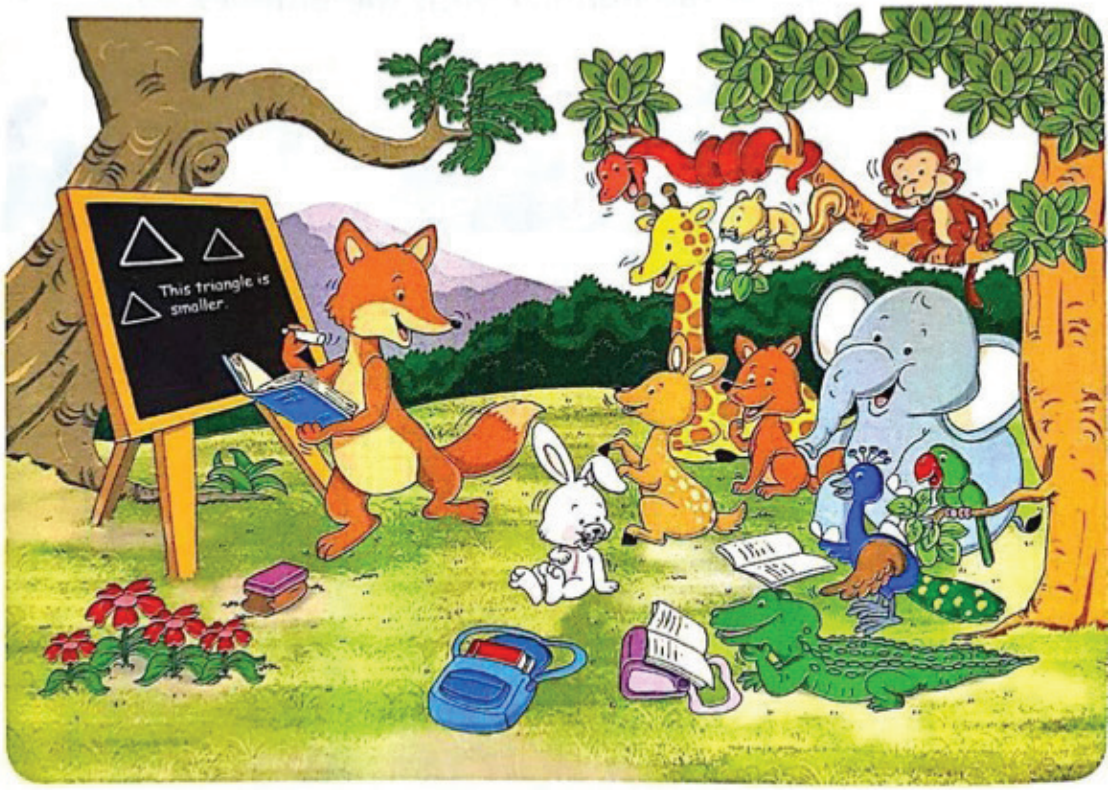
Meaning: Oh God – Our well-wisher and the Giver of knowledge. May we see and learn for hundred years; May we live healthily for hundred years; May we listen to scholars for hundred years; May we speak softly and always the truth for hundred years; May we live a happy meaningful life for hundred years and indeed even beyond that.

Teacher's sign & date_____

MEASUREMENT

LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Compare length, Measure length using body parts, Compare the weights of objects and the capacities of containers.



Warm up

a. Which animal is heavier? _____ (an elephant / a deer)

b. Which animal is bigger? _____ (a squirrel / a monkey)

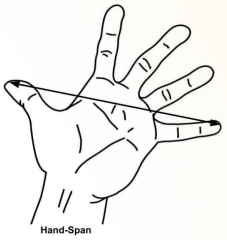
c. Which animal is longer? _____ (a snake / a squirrel)

d. Which animal is smaller? _____ (a fox / a rabbit)

Comparing Lengths

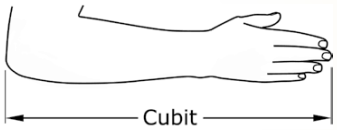
- The words tall, short and long tell us about the height and length of someone or something.

- **We can compare lengths by keeping two objects side by side**



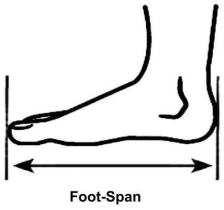
Measuring length using body parts

A hand span is the distance between the tip of the Thumb and the tip of the smallest finger when spread as shown in the picture



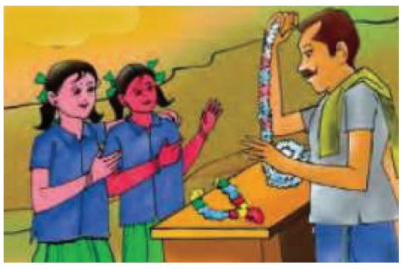
A cubit is the distance from the elbow to the tip of the middle finger.

A foot span is the distance from the tip of the longest toe to the end of the ankle.



Real Life Fact

The person who sells flowers uses a **cubit** to measure the length of a string of flowers.



Do it yourself

a. Your chair is _____ cubits long.

b. Your table is _____ handspans long

c. The blackboard in your classroom is _____ cubits long.

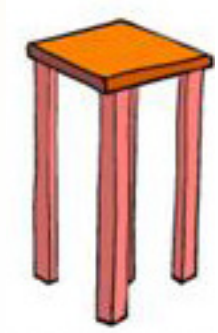
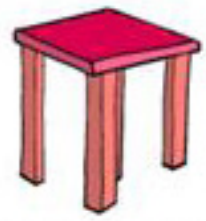
d. The floor of your classroom is _____ foot spans long.

Time to think

Which stick will the mother use to get the kite from the tree? Why?

EXERCISE 11.1

Tick (✓) the taller and cross (×) the shorter one






Teacher's sign & date_____

Some of the tools for measuring length

Comparing weights

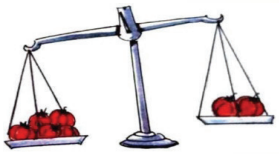
Have you seen a vegetable seller weighing vegetables?

He uses a balance. A balance is like a

see-saw. In a balance the pan that is heavier goes down.

Look at the balance

On one side there are 5 tomatoes and on the other side there are two tomatoes.



Which pan will go down?

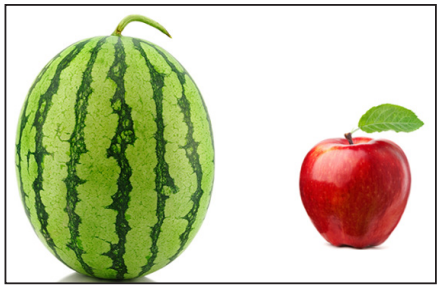
The weight of 5 tomatoes is more than 2 tomatoes. Therefore, the pan with 5 tomatoes will go down.

Different types of weighing machines

1) Tick (✓) the lighter object

2) Tick (✓) the heavier object

3) Tick (✓) the heavier and cross (✗) the lighter one :



4) Activity

a) The weight of the apple is _____the weight of orange.

b) The weight of the banana is _____ the weight of the apple.

c) The weight of the orange is _____ the weight of the pumpkin.

Time to think

If the mother sits in the place of the boy, what will happen?

Measures of Capacity

Capacity of a container is the quantity of liquid, that it can hold. The container which holds more liquid has more capacity.

We can compare the size of objects and estimate which will hold more liquid.

Try This

Which has more capacity?

a. Water bottle (or) Water tank _____.

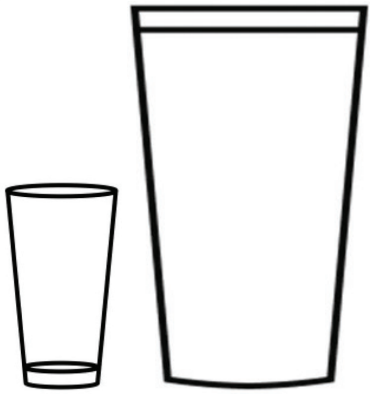
b. Glass (or) Spoon _____.

c. Lake (or) Ocean _____.

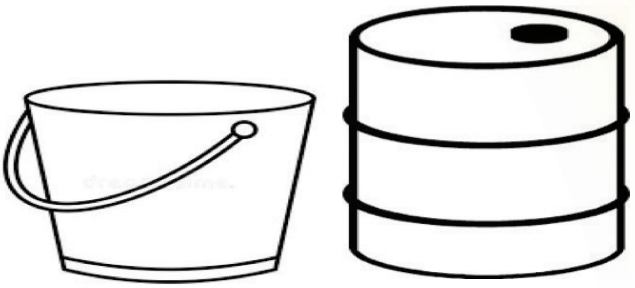
d. Cup (or) Jug _____.

EXERCISE 11.2

a.Colour the container which can hold more



b. Colour the container which can hold less



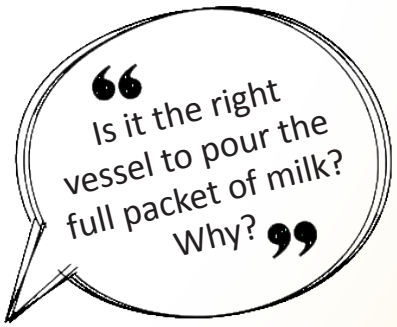
c. Observe and write

This jug can hold _____ full glasses of water.

This kettle can hold _____ glasses of water.

Therefore the jug can hold _____ (more/less) water than the kettle.

Can you guess???



Teacher's sign & date_____

Time to think

Anuj and Payal fetch two pots of drinking water from a tap. Observe the picture and say who fetches more water?

Experiential learning

We use different shaped containers in daily life for various purposes. Have you ever thought the reason for it? Think!

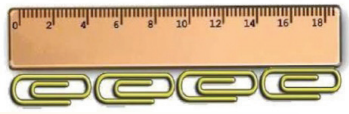
Choose the appropriate containers that can be used for the given activities so that we can save water.

ACTIVITY	CONTAINER USED
BATHING	Bucket and Mug
DRINKING WATER	Tumbler, Bottle
WASHING UTENSILS	Tub, Dish Washer
WASHING CLOTHES	Washing Machine, Bucket

Skill section

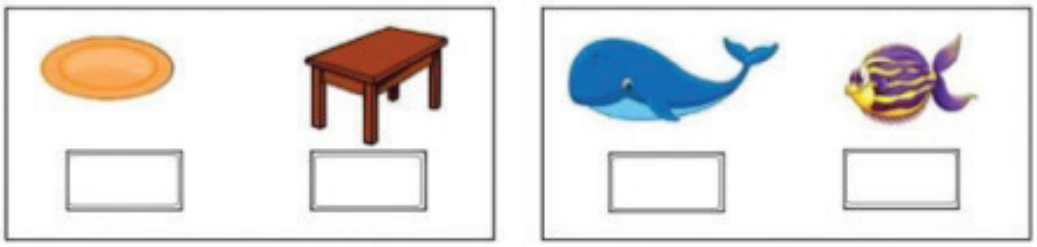
1. Measure using paper clips.

This pencil is _____ clips long.



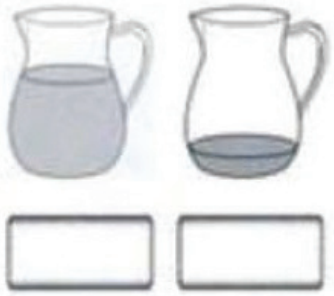
This scale is _____ clips long.

2. Tick the heavier one and cross out the lighter one.

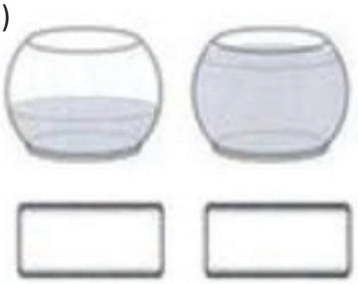


3. Tick the container which holds more

a)



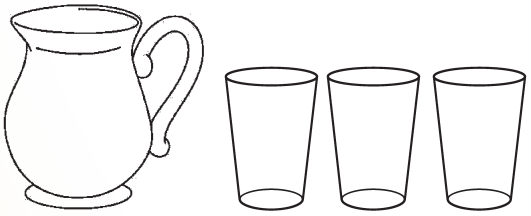
b)



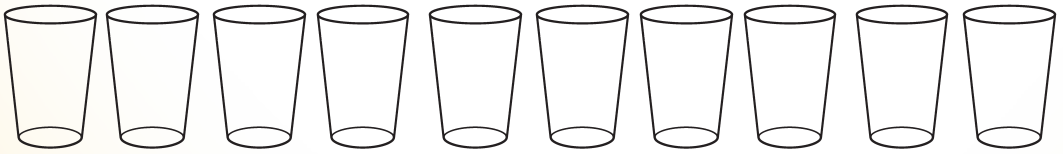
Experiential Learning

Higher Order Thinking Skills(HOTS):

3 glasses of water can fill this jug.



Colour the number of glasses required to fill 2 jugs.



Teacher's sign & date_____

HANDLING DATA

LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Arrange data in order, Record simple data in a tabular form, Interpret data in a pictograph

Concept Section

Data is a collection of facts and information.

Pictograph

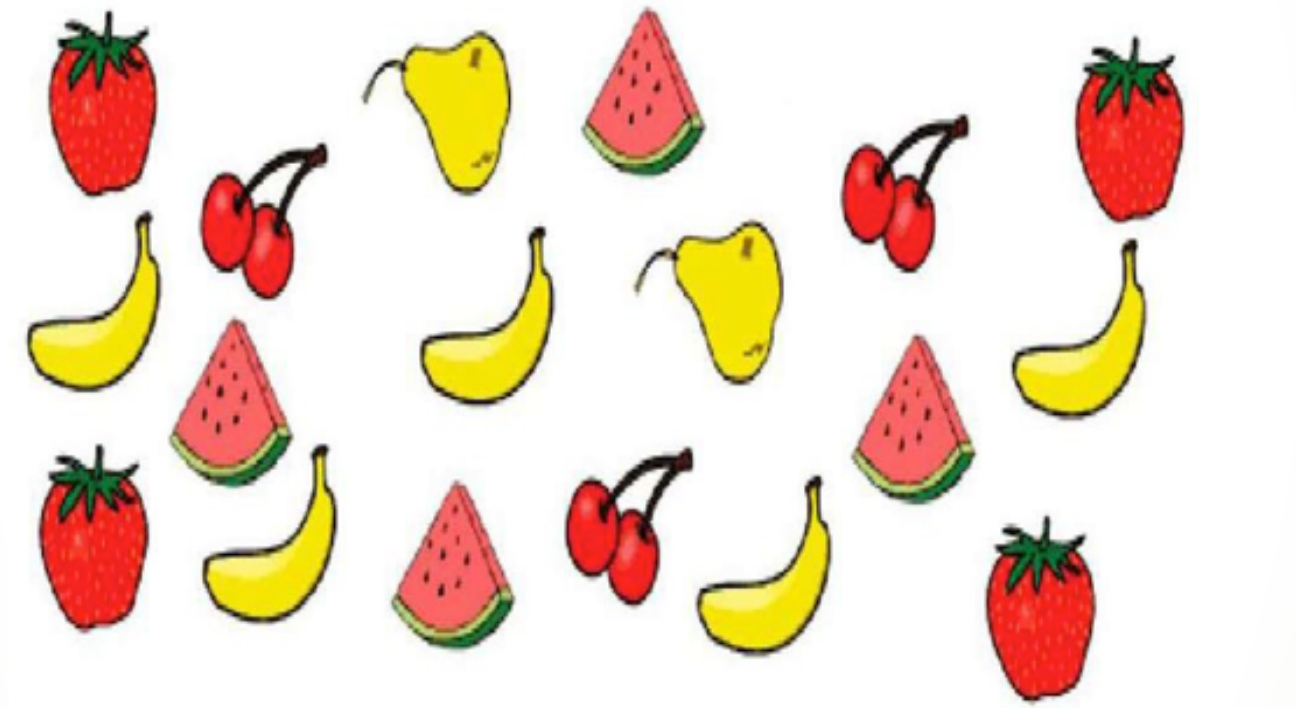
The shopkeeper has displayed a variety of balls. Can you help him count the number of balls in each type.

Ball				
Number				

1. Name the colour of the ball which is the least in number? _____.
2. Name the colour of the ball which is the most in number? _____.
3. How many red colour and green colour balls are there in all? _____.

EXERCISE 12.1

Count and fill in the table given below

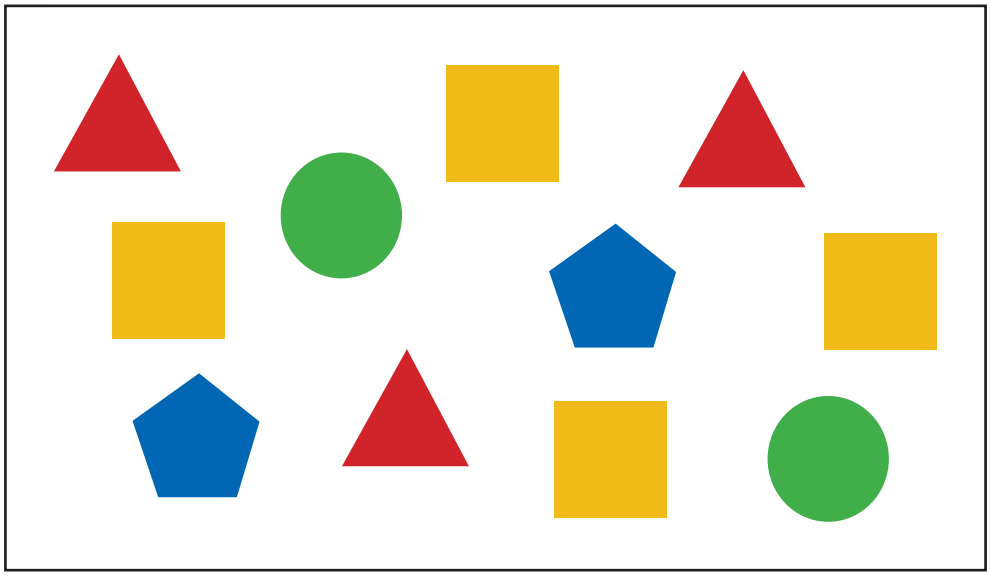


 Stawberry	 Cherries	 Banana	 Pear	 Watermelon

1. Name the fruit which is the most in number _____.
2. Name the fruit which is the least in number _____.
3. Name two fruits that are equal in number _____ and _____.

EXERCISE 12.2

Colour the boxes according to the number of shapes in each type given below.



5				
4				
3				
2				
1				

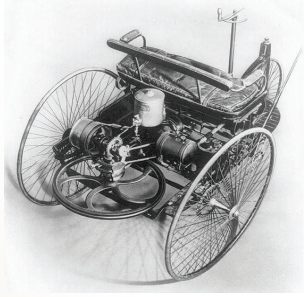
Teacher's sign & date_____

EXERCISE 12.3

Look at the picture and answer the question given below.

1. How many girls are there on the beach? _____.
2. How many boys are there on the beach?_____.
3. How many children are wearing hats?_____.
4. How many green buckets are there?_____.

Teacher's sign & date_____



Facts

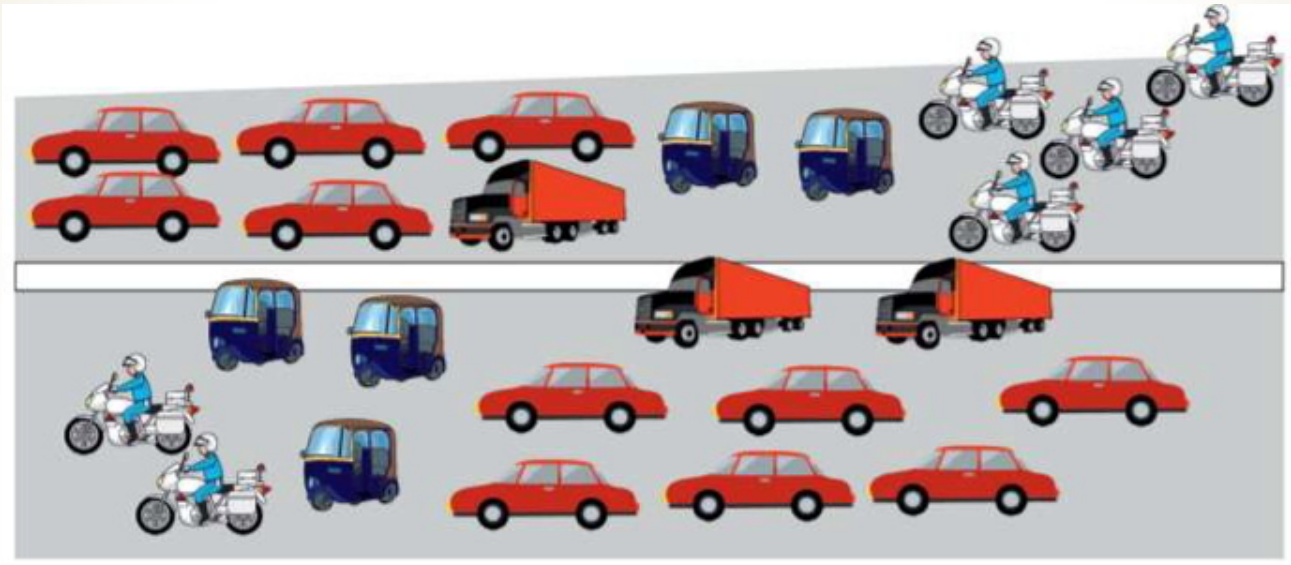
Do you know

This was the first car with three wheels. It was made in 1885

This was the first Ford model car made in 1925.

EXERCISE 12.4

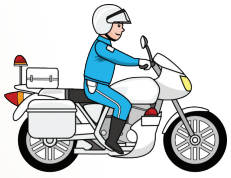
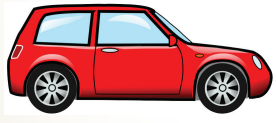
Count and write the number and number name



How many  ? _____. How many  ? _____ .

How many  ?_____. How many  ?_____.

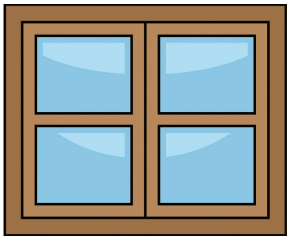
Colour the boxes: Auto – Yellow, Motor Bike – Blue Car – Orange and Truck – Red. One is done for you.

Teacher's sign & date_____

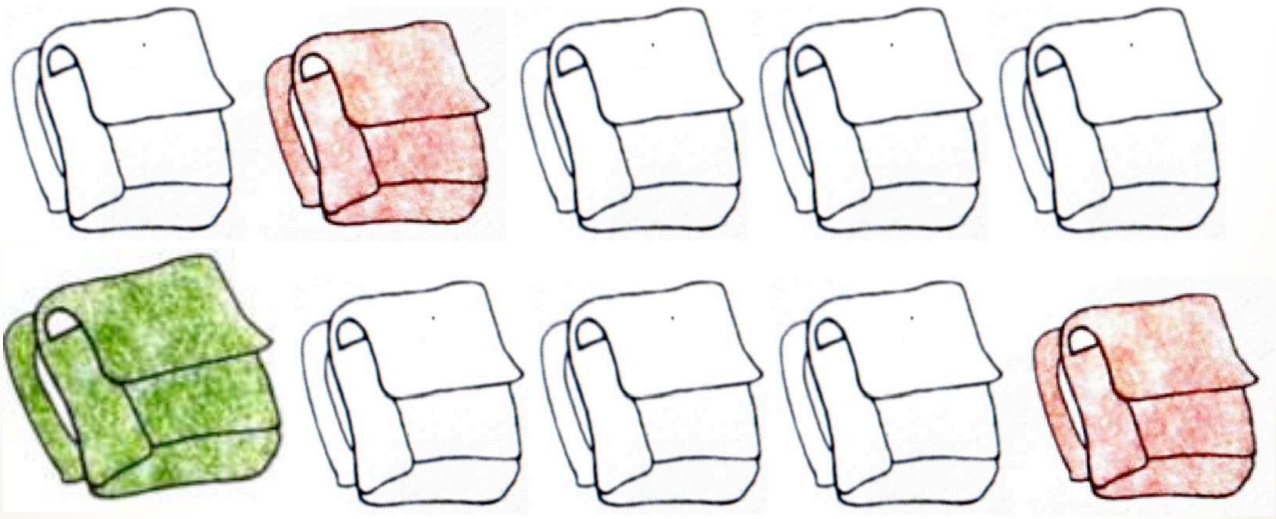
Activity

Find the number of each of these objects seen in your house.

Higher Order Thinking Skills(HOTS)

Here are some bags. Colour 3 more bags in green and the rest of the bags in red.



Which is more in number Green / Red bags?_____

By how many?_____.

Teacher's sign & date_____

WORKSHEET

1. Count and write the number

Number of candles _____.

Number of girls _____.

Number of boys _____.

Number of balloons _____.

2. Fill in the table :

Relationship	Number
 Brother	
 Sister	
 Grand Father	
 Grand Mother	
 Uncle	
 Aunt	

Teacher's sign & date_____

13 INTRODUCTION TO MULTIPLICATION

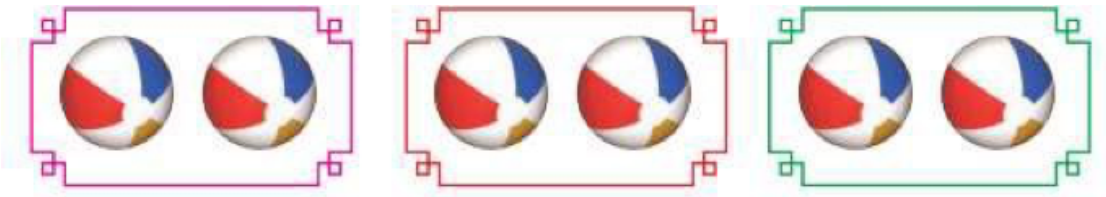
LEARNING OUTCOMES:

At the end of this lesson, children will be able to:
Multiply using repeated addition, Write the addition facts and multiplication facts, Skip count by 2, 5 and 10.

Repeated Addition

Adding the same number again and again is repeated addition.

Look at the given picture,

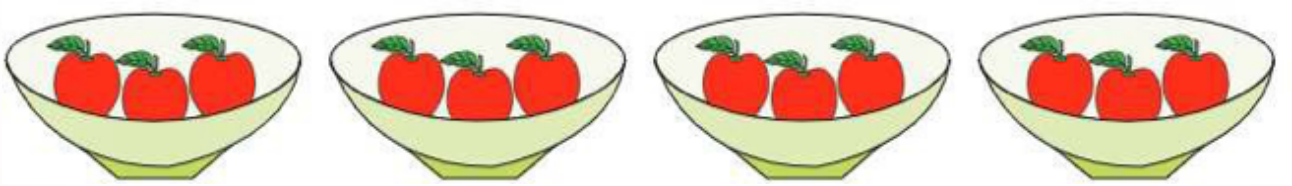


2 + 2 + 2 = 6

3 groups of 2 balls each = 6

EXERCISE 13.1

Write the addition fact

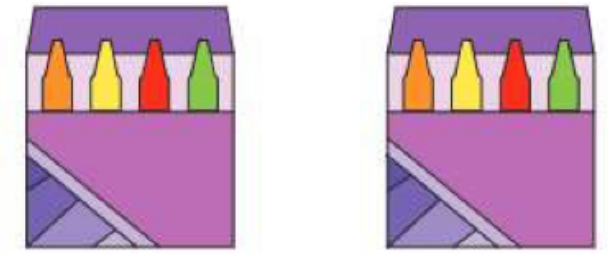


a) _____+_____+_____+_____ = ☐

_____ groups of_____ apples each = ☐

b) _____+ _____+ _____ = ☐

_____ groups of_____ biscuits each = ☐



c) _____+ _____+ = ☐

_____ groups of_____ crayons each = ☐

d) _____+ _____+ _____+_____+_____ = ☐

_____ groups of_____ cherries each = ☐

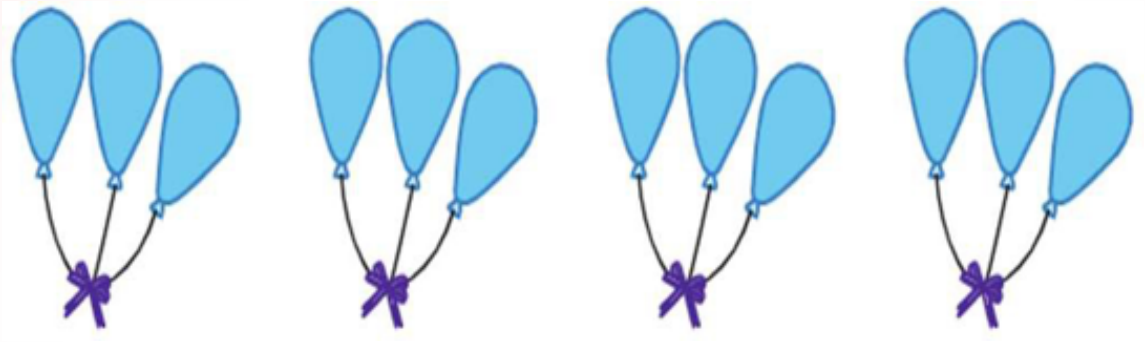
e) _____+ _____+ _____ = ☐

_____ groups of_____ mushrooms each = ☐

Teacher's sign & date_____

Look at the picture

There are 4 groups of 3 balloons each



3 + 3 + 3 + 3 = 12

4 groups of 3 = 12

4 times 3 = 12

We write this as 4 x 3 = 12

The sign for multiplication is ' X '

EXERCISE 13.2

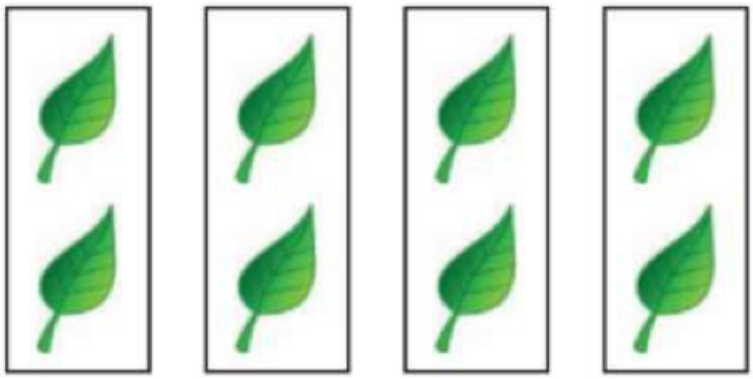
Write the addition and multiplication fact

a)

_____ +_____+ _____+_____ = ☐

_____x_____ = ☐

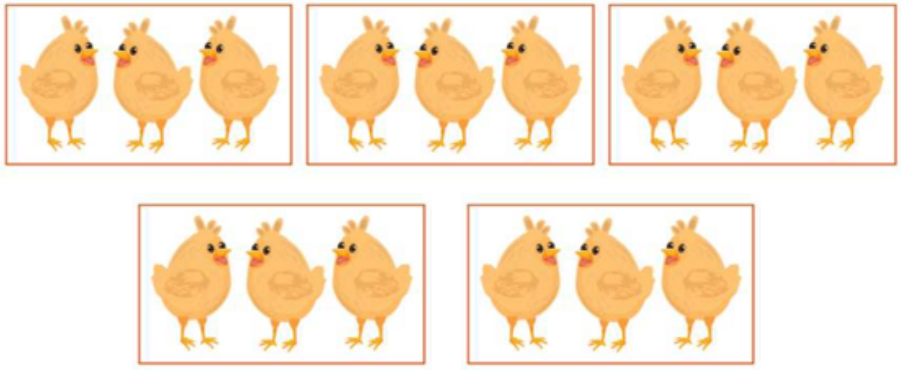
b)



_____ +_____+ _____+_____ = ☐

_____x_____ = ☐

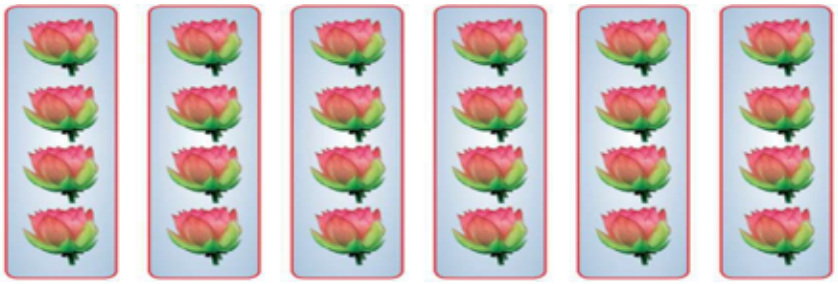
c)



_____ +_____+ _____+_____+ _____ = ☐

_____x_____ = ☐

d)



_____ +_____+ _____+_____+ _____+_____ = ☐

_____x_____ = ☐

Teacher's sign & date_____

EXERCISE 13.3

Write the multiplication fact

8 + 8 + 8 + 8 + 8 + 8 + 8	=	
3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3	=	
0 + 0 + 0 + 0	=	
1 + 1 + 1	=	
2 + 2 + 2	=	3 x 2
4 + 4 + 4 + 4	=	
6 + 6 + 6 + 6 + 6	=	
9 + 9 + 9 + 9 + 9 + 9	=	
5 + 5	=	
7 + 7 + 7 + 7	=	

EXERCISE 13.4

Write the repeated addition facts.

a) 6 X 2 = 2 + 2 + 2 + 2 + 2 + 2

b) 7 X 4 =

c) 3 X 8 =

d) 2 X 9 =

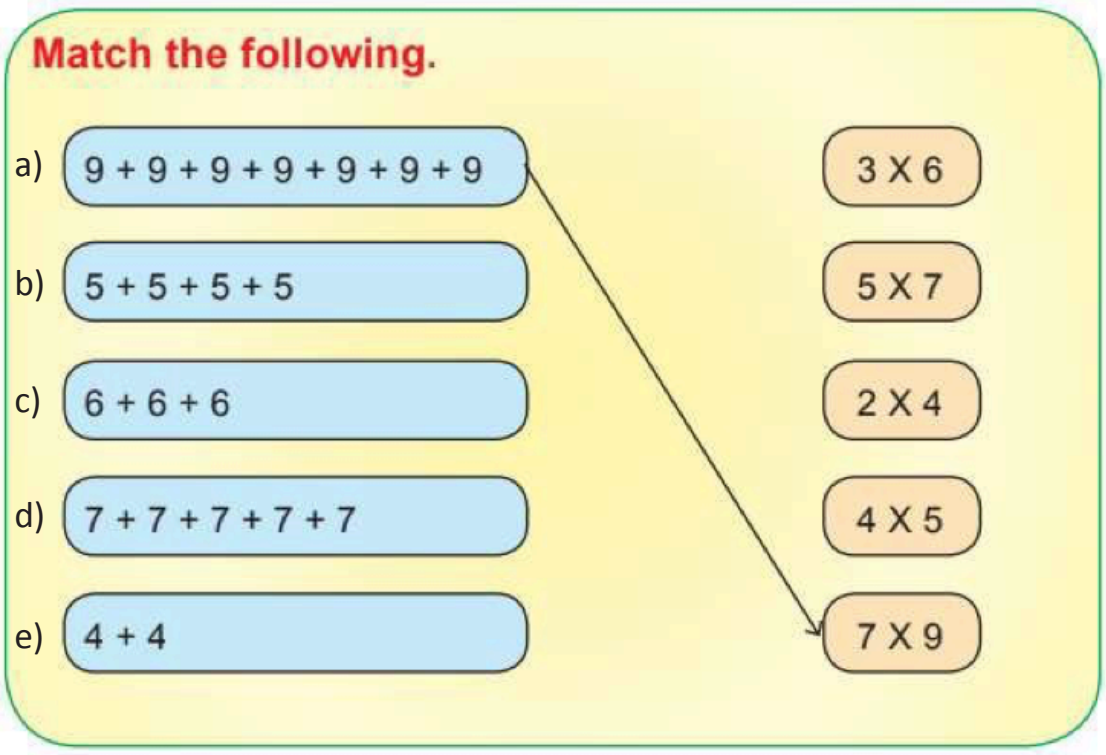
e) 4 X 6 =

f) 5 X 3 =

Skill Section

1)

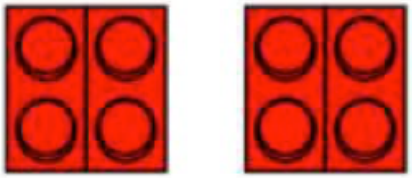
Match the following.



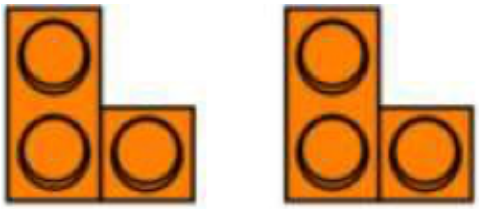
2. Write the multiplication fact

a) 

_____x_____=

b) 

_____x_____=

c) 

_____x_____=

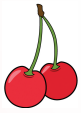
d) 

_____x_____=

e) 

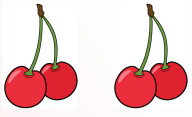
_____x_____=

3. Write the multiplication fact of 2



2 cherries

1 groups of 2 = 1 x 2 = _____

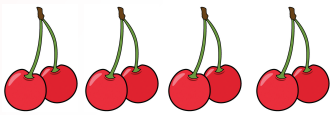


2 + 2

2 groups of 2 = 2 x 2 = _____

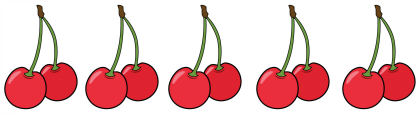
2 + 2 + 2

3 groups of 2 = 3 x 2 = _____



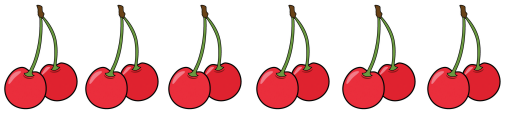
2 + 2 + 2 + 2

4 groups of 2 = 4 x 2 =_____



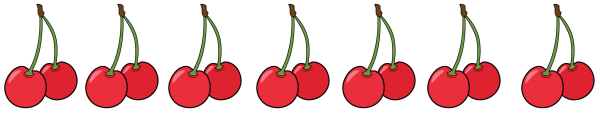
2 + 2 + 2 + 2 + 2

5 groups of 2 = 5 x 2 = _____



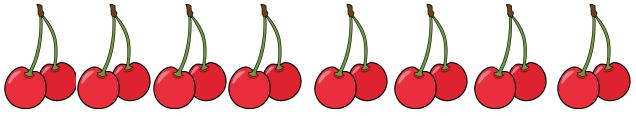
2 + 2 + 2 + 2 + 2 + 2

6 groups of 2 = 6 x 2 = _____



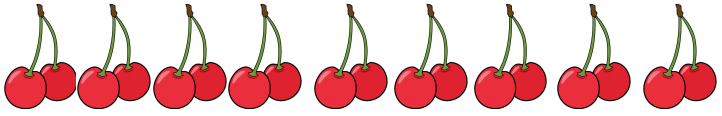
2 + 2 + 2 + 2 + 2 + 2 + 2

7 groups of 2 = 7 x 2 = _____



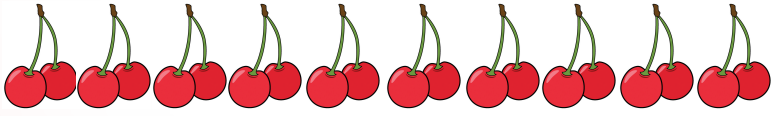
2 + 2 + 2 + 2 + 2 + 2 + 2 + 2

8 groups of 2 = 8 x 2 = _____



2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2

9 groups of 2 = 9 x 2 = _____



2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2

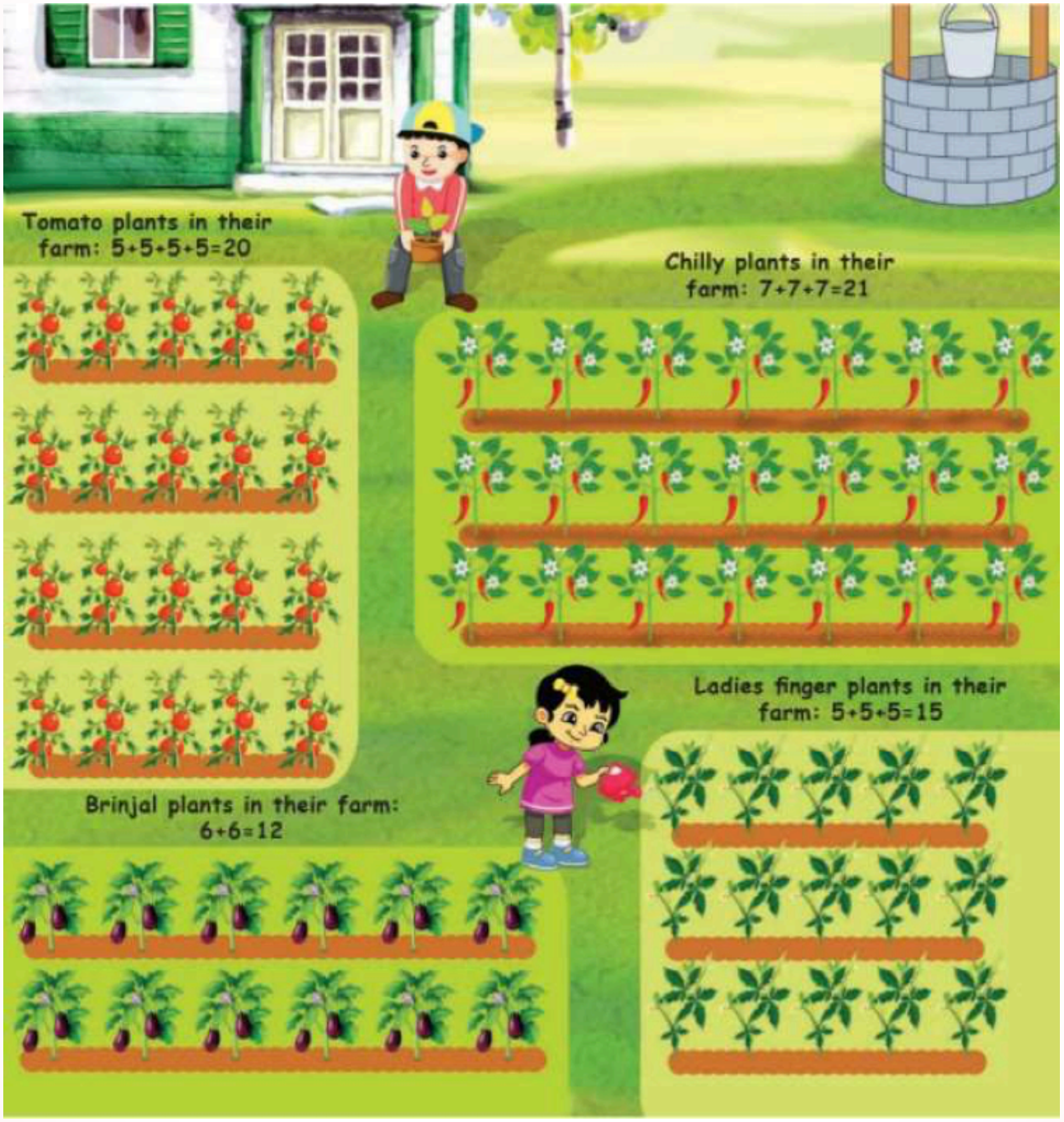
10 groups of 2 = 10 x 2 =_____

Teacher's sign & date_____

Multiplication in every day activities

Arjun and Aparna are interested in gardening. In their leisure time, they are always found in the vegetable garden in the backyard.

They have four types of vegetable plants in their garden. Let us visit the garden.



1. Write the multiplication fact for the number of
   a. Tomato plants : _____x _____
   b. Brinjal plants : _____x _____
   c. Chilly plants :_____x _____
   d. Ladies finger plants :_____x _____

2. Amongst the vegetables grown, what do you like the most?_____

3. Name another vegetable that you would like to grow in your garden._____

WORKSHEET

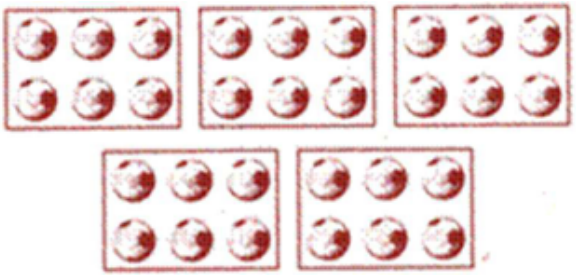
1)

Number of groups : _____

Number of triangles in each group : _____

Total Number of triangles : _____x_____=_____

2)



There are 5 groups of _____balls in each group.

3. 6 groups of 5 =_____x_____=_____.

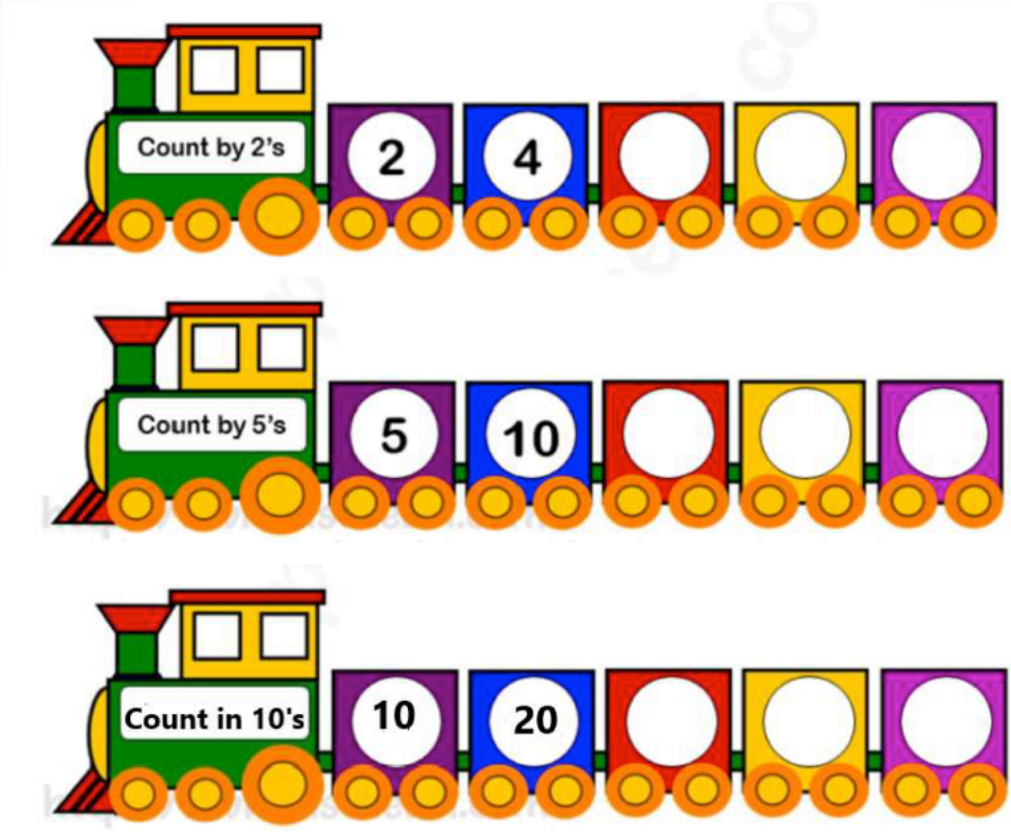
4. 3 + 3 + 3 + 3 + 3 =_____x 3.

5. Write the addition fact for 4 x 9 =_____+_____+ _____+_____

6. Skip count in 2 and fill in the boxes

1	3	5	7						

7. Fill in the missing numbers



8. Choose the correct answer

a. 9 + 9 can be written as:

(i) 9 x 9 (ii) 2 x 9 (iii) 9 + 2 (iv) 99

b. 7 groups of 10 can be written as:

(i) 7 + 10 (ii) 7 x 10 (iii) 10 + 7 (iv) 10 – 7

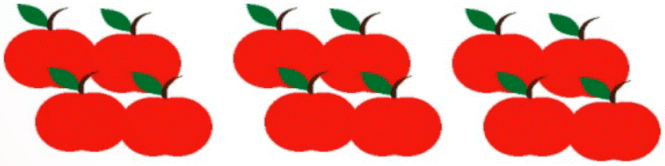
9. Complete the pattern

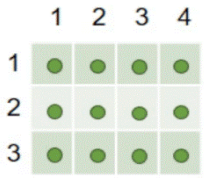
a. 12, 14, 16, _____,_____,_____.

b. 15, 20, 25, _____,_____,_____.

c. 30, 40, 50, _____,_____,_____.

10.

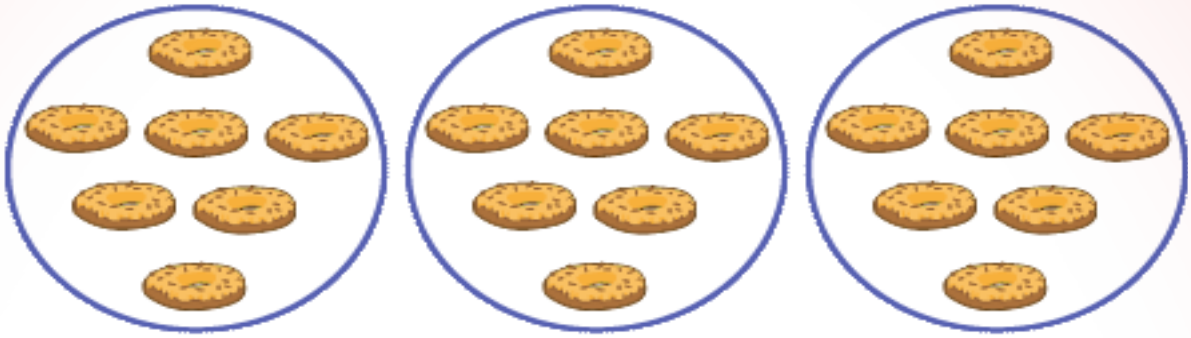




3 groups of 4 apples

4 + 4 +4 =_____

11)



There are ☐ groups of doughnuts.

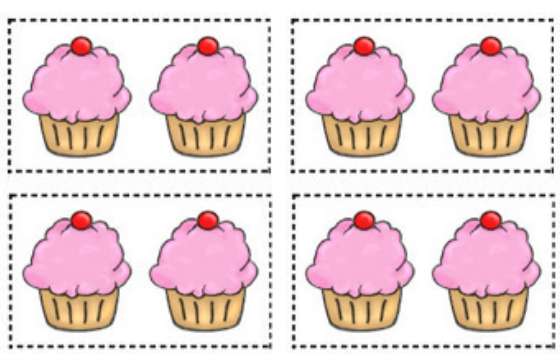
☐ + ☐ + ☐ = 21

☐ × ☐ = 21

12)

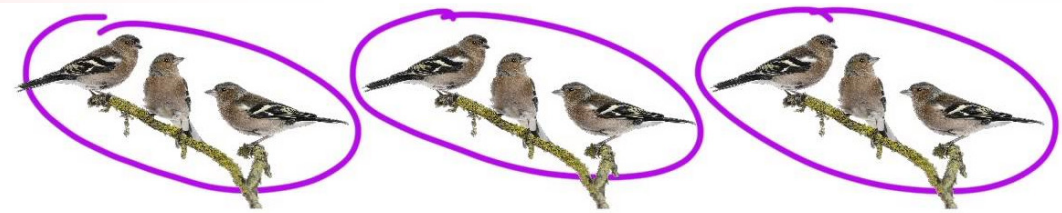
Number of flower pots =_____
Number of flowers in each pot =_____
Total number of flowers =_____

13)



Number of groups = _____
Number of cupcakes in each group= _____
Total number of cupcakes = _____

14. How many birds are there altogether?

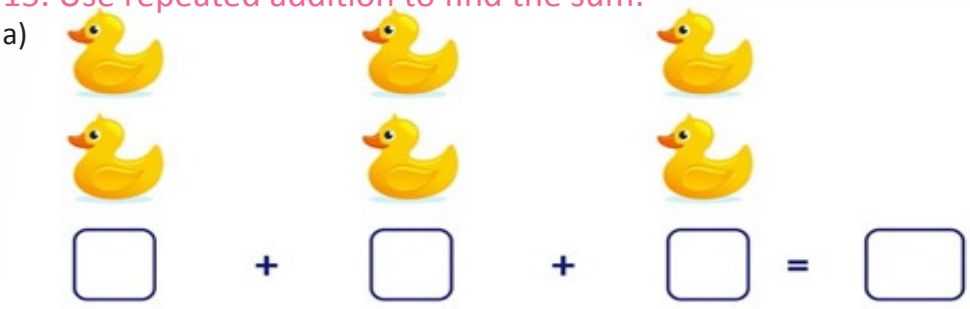


3 groups of ____ birds each

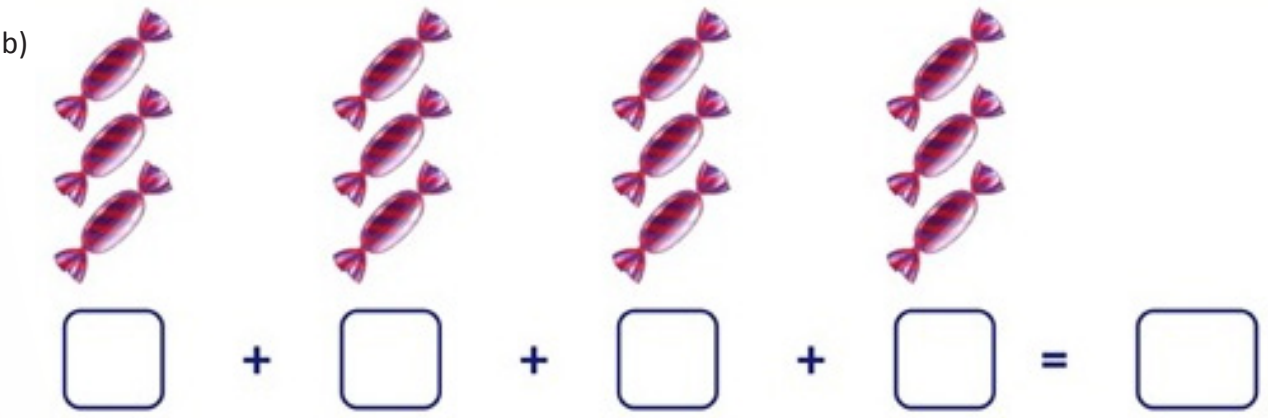
3 + 3 + 3 =____

15. Use repeated addition to find the sum:

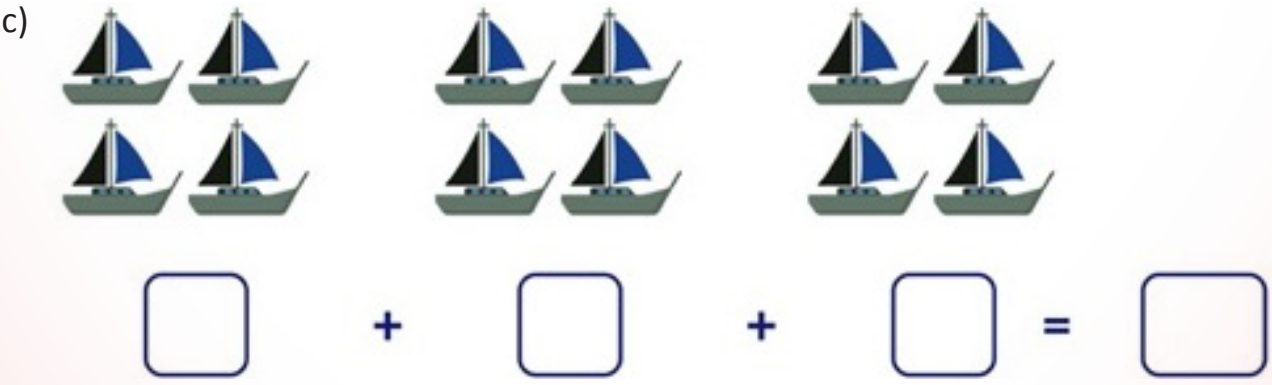
a)



b)



c)



Teacher's sign & date_____

Vedic Mathematics

AKHILAM & NIKHILAM

What is अखिलम् (Akhilam) ?

The word अखिलम् (Akhilam) in Sanskrit means complete.

For a 1 digit number, the smallest 2 digit number (10) is the Akhilam

For a 2 digit number, the smallest 3 digit number (100) is the Akhilam and so on.

What is निखिलम् (Nikhilam) ?

The word निखिलम् (Nikhilam) in Sanskrit means that which makes it complete (Akhilam) or it also means complement.

The Nikhilam of 1 is 9 (1+9 = 10)

The Nikhilam of 96 is 4 (96+4 = 100)

Srinivasa Ramanujan was an Indian mathematical genius who was born on December 22, 1887. Every year, his birth anniversary is celebrated as National Mathematics Day.

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