



Government of Tamilnadu

STANDARD TWO

TERM III

VOLUME 2

MATHEMATICS

ENVIRONMENTAL STUDIES

NOT FOR SALE

Untouchability is Inhuman and a Crime.

A Publication Under
Free Textbook Programme of
Government of Tamilnadu

Department of School Education

© Government of Tamilnadu

First Edition - 2012

Revised Edition - 2013

Reprint - 2014

(Published under Uniform System of School Education Scheme in Trimester Pattern)

Textbook Prepared and Compiled By

State Council of Educational Research and Training

College Road, Chennai - 600 006.

Textbook Printing

Tamil Nadu Textbook and Educational Services Corporation

College Road, Chennai - 600 006.

This book has been printed on 80 G.S.M. Maplitho Paper

Price : Rs.

Printed by Web Offset at :

Textbook available at
www.textbooksonline.tn.nic.in

CONTENTS

MATHEMATICS

(1 - 47)



Unit	Topic	Page No.
1.	Patterns in Numbers	1
2.	Measures of Capacity	5
3.	Figures	8
4.	Study of Data	12
5.	Measures of Time	19
6.	Multiplication	26
7.	Money	36
8.	Block Patterns	43



ENVIRONMENTAL STUDIES

(48 - 84)

Unit	Topic	Page No.
1.	Air	49
2.	Water	57
3.	Natural Resources	64
4.	Sky	74



MATHEMATICS

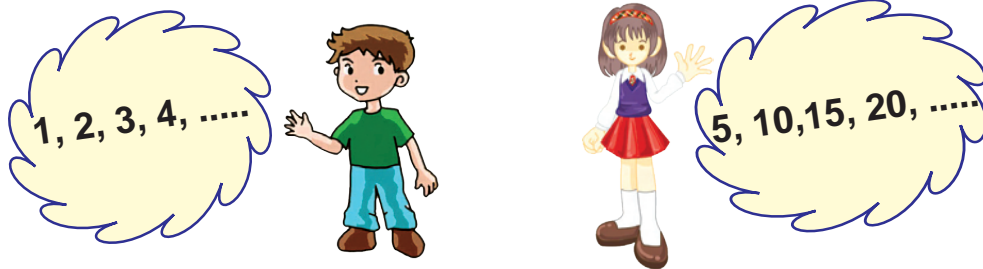
STANDARD TWO

TERM III

1. Patterns in Numbers

We have already seen some patterns with shapes and figures.

Now, we can create patterns with numbers.

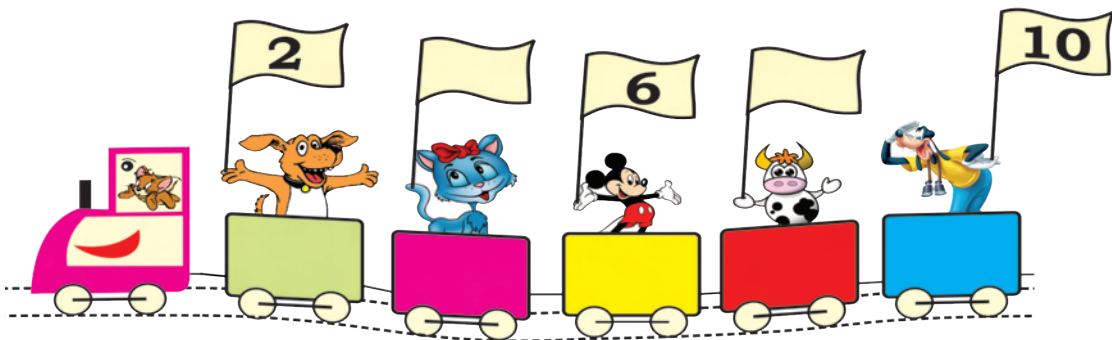


Look at this number pattern.

1, 3, 5, 1, 3, 5, ...
10, 20, 30, 10, 20, 30, ...

*A number pattern is a chain of numbers
which follows a certain order.*

Complete the journey of cartoons.



Fill in and complete the number pattern

1. 1, 2, 3, 1, 2, 3,

			,				,			
--	--	--	---	--	--	--	---	--	--	--

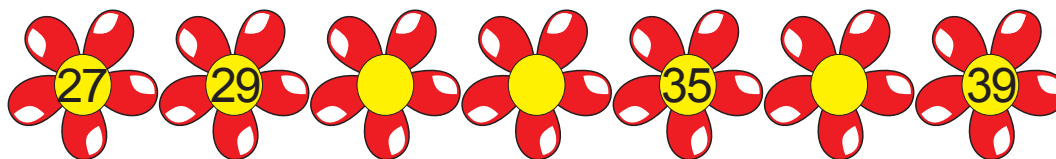
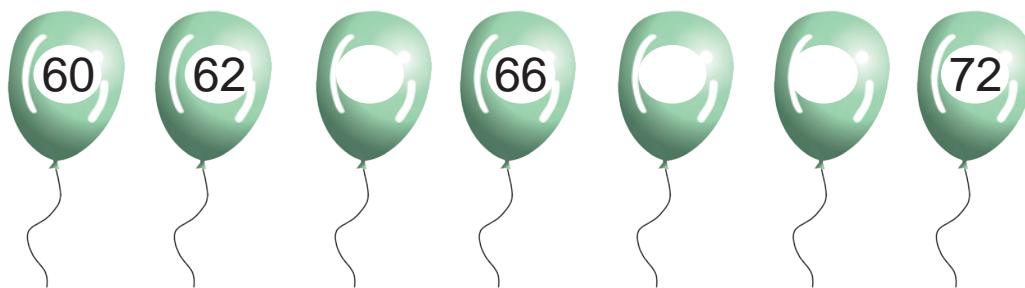
2. 49, 59, 49, 59

		,			,		
--	--	---	--	--	---	--	--

3. 5, 55, 5, 55,

		,			,		
--	--	---	--	--	---	--	--

Identify the number pattern and complete them



Observe each number pattern and fill in the boxes.

$$\boxed{17} \longrightarrow \boxed{71}$$

$$\boxed{45} \longrightarrow \boxed{}$$

$$\boxed{25} \longrightarrow \boxed{52}$$

$$\boxed{} \longrightarrow \boxed{89}$$

$$\boxed{69} \longrightarrow \boxed{}$$

$$\boxed{} \longrightarrow \boxed{35}$$

$$\begin{array}{c} 2 \\ 1 \quad 3 \end{array} \longrightarrow \begin{array}{c} 1 \\ 3 \quad 2 \end{array}$$

$$\begin{array}{c} 6 \\ 3 \quad 9 \end{array} \longrightarrow \begin{array}{c} 3 \\ 9 \quad 6 \end{array}$$

$$\begin{array}{c} 4 \\ 2 \quad 6 \end{array} \longrightarrow \begin{array}{c} 2 \\ 6 \quad 4 \end{array}$$

$$\begin{array}{c} 10 \\ \end{array} \longrightarrow \begin{array}{c} 5 \\ 15 \quad 10 \end{array}$$

$$\begin{array}{c} 3 \\ 1 \quad 5 \end{array} \longrightarrow \begin{array}{c} \\ \end{array}$$

$$\begin{array}{c} \\ \end{array} \longrightarrow \begin{array}{c} 10 \\ 30 \quad 20 \end{array}$$

$$\{1, 3, 5\} \longrightarrow \{2, 4, 6\}$$

$$\{33, 35, 37\} \longrightarrow \{, , \}$$

$$\{11, 13, 15\} \longrightarrow \{12, 14, 16\}$$

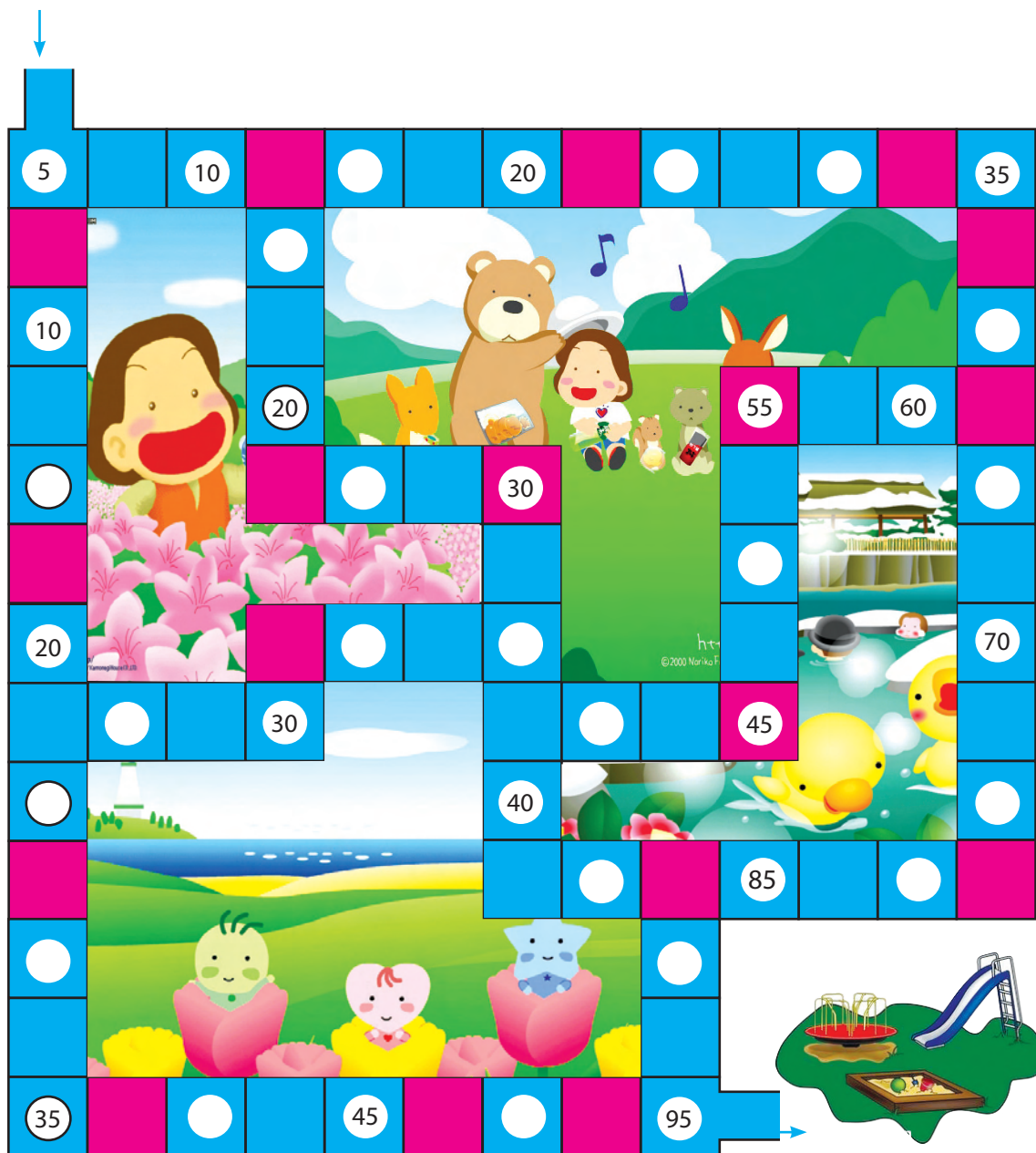
$$\{77, \} \longrightarrow \{78, 80, 82\}$$

$$\{21, 23, 25\} \longrightarrow \{, , \}$$

$$\{, \} \longrightarrow \{44, 46, 48\}$$



Help Anand to go to the playground by crossing some number patterns !



2. Measures of Capacity

We observe that...



has more capacity than a



has less capacity than a



The capacity (volume) of a container depends on its size.



ACTIVITY

Filling water

- a) Take an  to fill up a 

Ans : ink filler

- b) Take a  to fill up a 

Ans : bottle cap

c) Take a  to fill up a 

Ans : bowl

d) Take a  to fill up a 

Ans : bottle



ACTIVITY

★ Take sand grains in a  and pour them down on a sheet of newspaper.

★ Take sand grains in your  and pour them next to the previous heap.

★ Take sand grains in a  and pour them next to the two heaps.

Compare the three heaps of sand grains and find out which one of them has the least capacity.

[Spoon / bowl / two palms]

We buy oil, milk, petrol by measuring their volume (capacity).



- ✱ The smallest unit of capacity is Millilitre.
- ✱ The standard unit for measuring liquids is Litre.



ACTIVITY

Ask and learn from your mother

- ★ The quantity of oil she buys for a month
- ★ The quantity of milk she buys every day.

Do you know ?

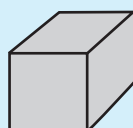
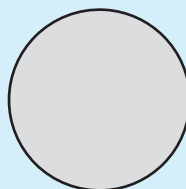
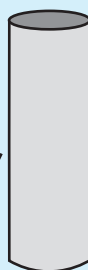
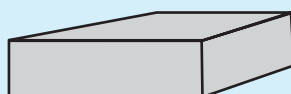
A child must drink 6 to 8 tumblers
(nearly 2 litres) of water every day



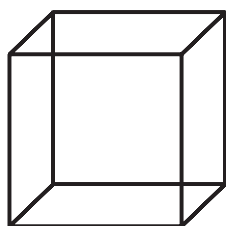
3. Figures

ACTIVITY

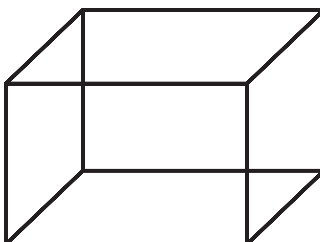
Match the objects with their figures.



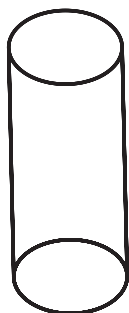
Look at the shapes of these figures ! Learn their names!



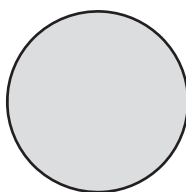
Cube



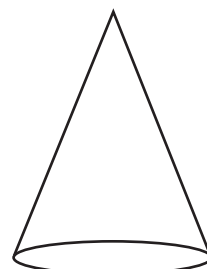
Cuboid



Cylinder



Sphere



Cone



ACTIVITY

Children are asked to sit in circles and close their eyes.



Teacher gives different objects and asks the children to name them.





Draw outlines of objects and learn!

Collect dice, bottle cap, matchbox, eraser, coin, prism etc... and trace below as shown.



Now, you have learnt that the faces of the three dimensional figures give the outlines of two dimensional shapes.

List the names of the things you have used to draw the following figures.

			
Eraser			

Find out the shapes of the following.

Cuboid, Cube, Cone, Cylinder, Sphere

Sweet lime _____ Sphere _____

Matchbox

Dice

Tube light

Funnel

Book

Globe

Flute

Joker's cap





Pile of one-rupee coins

4. Study of Data

Uma wants to count the flowers in her garden. The data of different types of flowers in her garden are given below.

Let us help Uma to count the flowers.



Flowers	In numbers
	
	
	
	



'Data' is a collection of facts and figures



Ravi tabulated the weight of his friends. Arrange the data in descending order.

Name	Weight(kg)
Babu	18
Elango	21
Mamtha	16
Rajan	22
Sumathi	19
Aruna	17



Name	Weight (kg)
Rajan	22

Among Ravi's friends.....

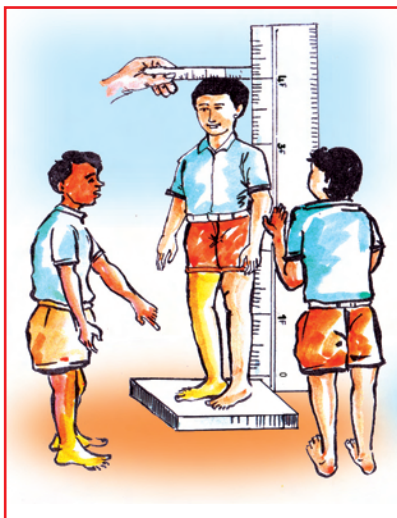
Who weighs the most?

Who weighs the least?

Who weighs more than Elango?

Who weighs less than Aruna?

Let us find out



With the help of your teacher, write the names of your friends and their measure of heights.

Name	Height (cm)

Arrange the data in ascending order.

Name	Height (cm)

- * The highest measurement iscm.
- * The least measurement is.....cm.
- * What is your height?cm.
- * How many of them are taller than you?
- * How many of them are shorter than you?



Data on favourite game

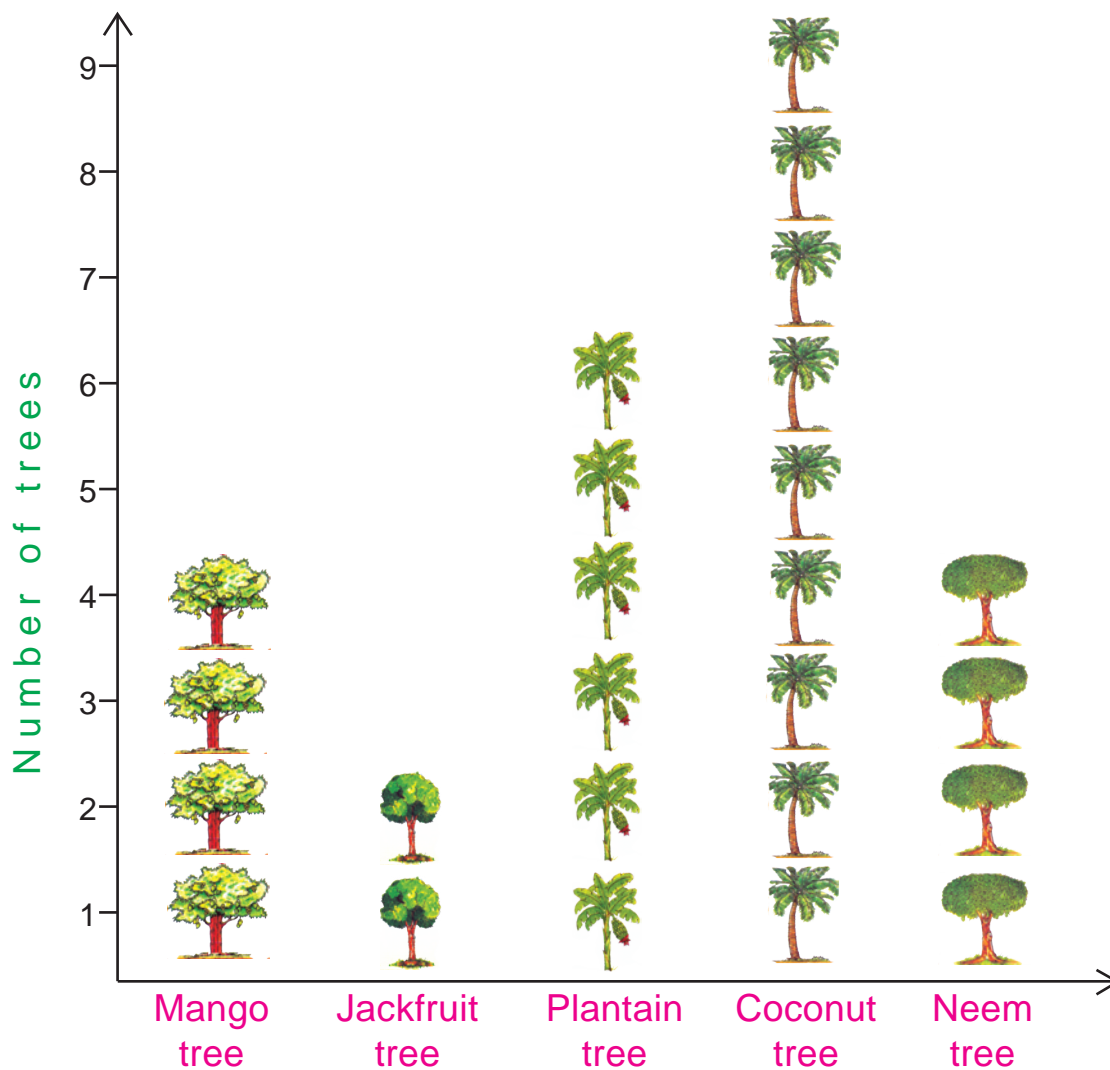


Complete the table

Game	Children (Pictograph) 😊									In numbers
Volleyball	😊	😊	😊	😊	😊					5
Cricket	😊	😊	😊	😊	😊	😊	😊	😊	😊
Kabadi	😊	😊	😊	😊	😊				
Basketball	😊	😊	😊	😊					
Football	😊	😊	😊	😊	😊	😊	😊	😊	

- ✳ How many children like volleyball?
- ✳ Which is the game liked by most of the children ?
- ✳ How many of them like kabadi?
- ✳ How many of them like basketball?
- ✳ How many of them like football?
- ✳ The total number of children in the classroom:

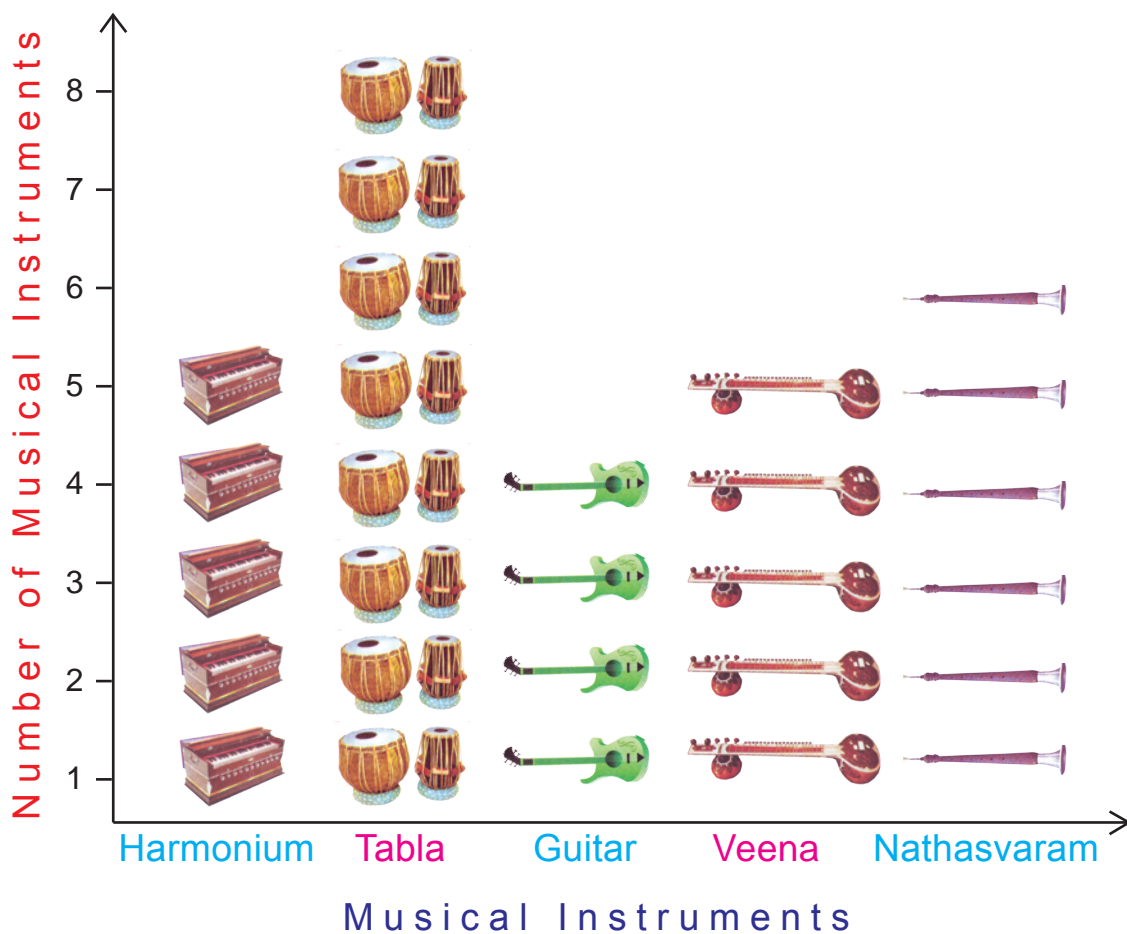
Let us study the data on various trees in a farm.



Types of trees

- ♣ Number of mango trees
- ♣ Number of jackfruit trees
- ♣ Number of neem trees
- ♣ Name the trees which are equal in number
..... ,
- ♣ The total number of trees in the farm

Look at the Musical Instruments. Fill in the blanks.



Number of 

Number of 

Number of 

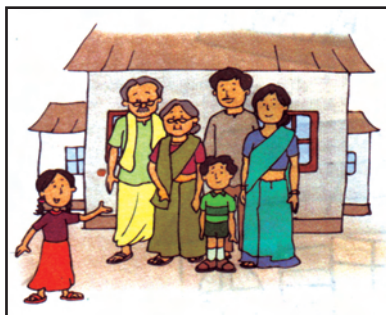
Name the instrument that is the least in number

Name the instrument that is the most in number

Name the instruments which are equal in number
,

ACTIVITY

Name the month in which your family members were born.



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



Myself:.....

ACTIVITY

Collect the names of favourite fruits of your friends.
Tabulate the details.



(Apple, Banana, Jackfruit, Mango, Grapes, Orange, ...)

Fruits	Friends (Pictograph) 😊	In numbers