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MATHEMATICS

2

Term - III



MATHEMATICS

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Class - 2 (Term - III)

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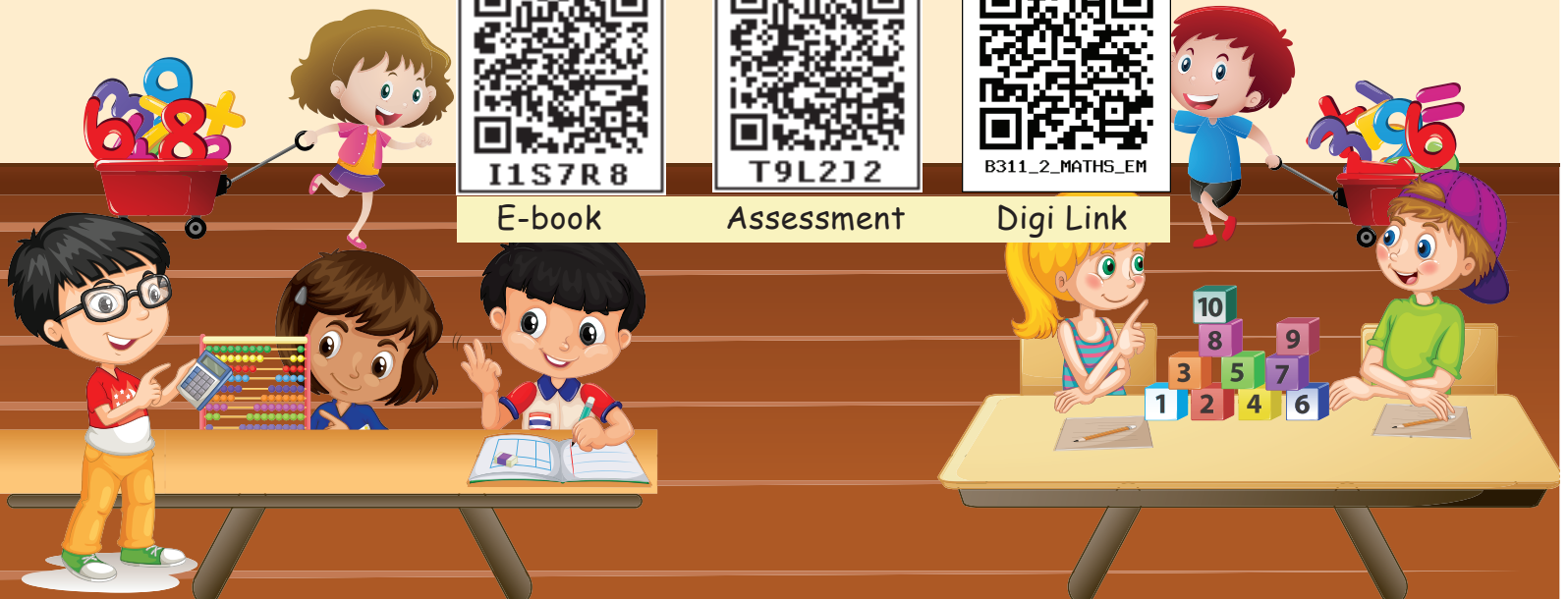
E-book



Assessment



Digi Link



UNIT 1

Numbers

1.1 Odd and Even numbers

Travel Through

Pairs



Keywords

Pair
Odd
Even

Some of the objects that are available in pairs are given below.



Learn

odd and even



Let us consider two objects having same properties. For example, a set of two anklets, a set of two bangles.



Numbers that can be arranged in twos completely are called **even numbers**.

Here, 6 birds make 3 sets of twos. So, 6 is an **even** number.



Objects that cannot be completely arranged in twos are called **odd numbers**.

Here out of 5 birds, 2 sets of twos can be made. But 1 bird is left. Hence 5 is an **odd** number.

Practice



Group the objects in twos and find whether they are **even** or **odd**. One is done for you.

Number of objects	Objects	Odd/Even
5		Odd

Learn



Let us arrange the given seeds in twos according to the number and check whether they are **odd** or **even**.

1	2	3	4	5	6	7	8	9	10
•	••	•• •	•• ••	•• •• •	•• •• ••	•• •• •• •	•• •• •• ••	•• •• •• •• •	•• •• •• •• ••
Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even
11	12	13	14	15	16	17	18	19	20
••• •• •• •• ••	•••• •• •• •• ••	•••• ••• •• •• ••	•••• •••• •• •• ••	•••• •••• ••• •• ••	•••• •••• •••• •• ••	•••• •••• •••• ••• ••	•••• •••• •••• •••• ••	•••• •••• •••• •••• •••	•••• •••• •••• •••• ••••
Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even

From the above table, we can conclude that the numbers **1,3,5,7,9,11,13,15,17,19** and so on have one set of seed that cannot be arranged in twos and they are called **odd numbers**.

The numbers **2,4,6,8,10,12,14,16,18,20** have all the seeds arranged in twos and hence they are called **even numbers**.

Look at the odd numbers given above. These numbers have any one of the numbers 1,3,5,7 and 9 in their one's place.

Look at the even numbers given above. These numbers have any one of the numbers 2,4,6,8 and 0 in their one's place.



Besides, we can observe that **odd** and **even** numbers come alternatively.

Game



- ❖ This game is played by two players using tamarind seeds. First the tamarind seeds are made into two equal groups. Let player 1 take a handful of seeds from one of the groups and player 2 guess whether the number of seeds in his hand is odd or even.
- ❖ Once player 2 gives the answer as odd or even. Player 1 arranges the seeds that are in his hands in twos to check the answer.
- ❖ If the guess made by the player 2 is right, player 1 gives all the seeds in his hand to player 2 and the chance of playing passes to player 2.
- ❖ If the guess made by the player 2 is wrong, player 2 has to give equal number of seeds to player 1 and the next chance of playing will be given to player 1.
- ❖ The game continues like this and the player with more number of seeds wins the game.

Practice



Circle the **odd** number and box the **even** number.

- i) 71, 64, 45, 82
 ii) 9, 7, 11, 8
 iii) 10, 17, 27, 16
 iv) 94, 37, 26, 69
 v) 25, 52, 81, 18

- vi) 16, 21, 33, 30
 vii) 88, 74, 11, 53
 viii) 13, 92, 74, 66
 ix) 8, 18, 83, 86
 x) 96, 69, 72, 27

Write the next five **even** numbers.

- i) 24, 26, __, __, __, __, __
 ii) 40, 42, __, __, __, __, __
 iii) 88, 90, __, __, __, __, __
 iv) 8, 10, __, __, __, __, __
 v) 66, 68, __, __, __, __, __

Write the next five **odd** numbers.

- i) 7, 9, __, __, __, __, __
 ii) 21, 23, __, __, __, __, __
 iii) 83, 85, __, __, __, __, __
 iv) 49, 51, __, __, __, __, __
 v) 71, 73, __, __, __, __, __

Try This



Ramya wants to form all possible two-digit numbers using only the **odd** numbers. Help her to form two-digit numbers using 1,3,5,7,9.

There are _____ number of **odd** two-digit numbers.

Kavitha wants to form all possible two-digit numbers using only the **even** numbers. Help her to form two-digit numbers using 0,2,4,6,8.

There are _____ number of **even** two-digit numbers.

Pleasure Time

Number chart 1-99



Observe the number chart and answer the following questions.

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	

- i) Write all the odd numbers between 30 and 60.

- ii) Write all the even numbers between 70 and 99.

- iii) Write all the odd numbers between 1 to 40.

- iv) Starting from 10, colour the numbers by skip counting in tens. What can you say about these numbers.

- v) Colour the odd numbers in the chart with blue. Observe the uncoloured numbers. What can you say about them.

Try This



Using the given digits, form all possible two-digit odd numbers without repetition of digits.

1) 3,6 2) 8,1 3) 5,2 4) 9,4 5) 0,7 6) 5,1

Among the pair of digits given above, is there any pair of number with which you cannot form two-digit odd number?

Write such pair of digits.

1.2 Ordinal and cardinal numbers

Travel Through

Ordinal and cardinal numbers



Maya had some grains to feed the birds. She threw the grains on the ground. Some birds and animals came there one by one and had their food. The order they had the food is given below.



Crawling crow came **first**.



Pretty parrot came **second**.



Majestic dove came **third**.



Sweet myna came **fourth**.



Cute squirrel came **fifth**.

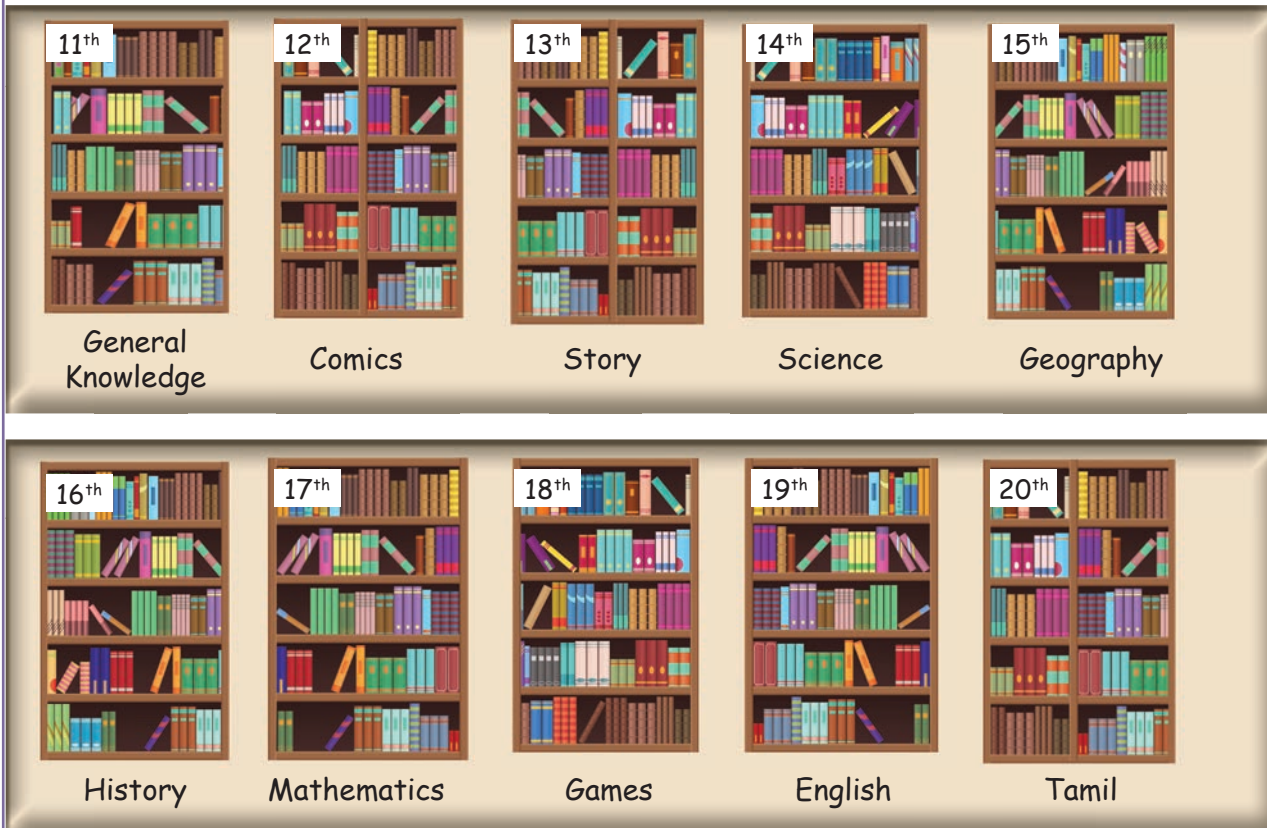


Naughty monkey came **sixth** and finished all the grains.

Learn



In a library, the first 10 racks were allotted for magazines and dailies. Books that are arranged in different racks from 11th onwards as shown below.



Answer the following questions from the above picture.

- i) Story books are arranged in the ____ rack.
- ii) Books on history can be found in the ____ rack.
- iii) Between which two racks are mathematics books placed? ____.
- iv) The English books are next to the ____ rack.
- v) General Knowledge books are in the ____ rack.
- vi) My favourite books are in the ____ rack.

Learn

What is special about 14th of November?



When is your birthday?



NOVEMBER 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					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

Wow! Children's day



It comes on 29th of November.



14th of November, 29th of November are called ordinal numbers. It represents the order of a number.

14, 29 are cardinal numbers. They are counting numbers.

Practice

Answer the following questions based on the above calendar.

- 3rd friday of November falls on _____.
- 7th of November 2019 falls on _____.
- 1st sunday of the month falls on _____.
- The day 15.11.2019 falls on _____ week of November.
- If 4th of November falls on saturday then _____ of November will be the 3rd saturday of the month.

Pleasure Time



i) Write the mobile number of your father or mother.

--	--	--	--	--	--	--	--	--	--

Pick out and write the digits in the following positions.

7th digit is

6th digit is

2nd digit is

The last number appears in _____ place.

ii) Find out who am I?

Here are the clues to find it out.

- ❖ I am 5 lettered word.
- ❖ You can sit on me.
- ❖ If you remove my first letter. I will be on your head.
- ❖ If you remove my second letter you can breathe me (in and out); I am everywhere.

--	--	--	--	--

iii) Here are the clues to find out.

- ❖ I am 8 lettered animal.
- ❖ My first and third letter are same.
- ❖ My last 3 letters refer to a small insect that you could find anywhere where there is sweet but I won't fly.
- ❖ My second letter is the first letter of the word that represent the national flower.
- ❖ I am the biggest animal on land.

--	--	--	--	--	--	--	--

iv) Find the name of the flower.

- ❖ The Fifth letter is 'F'.
- ❖ The Second letter is 'H'.
- ❖ The Fourth and ninth letter is 'E'.
- ❖ 'O' will come in third and seventh position.
- ❖ The Tenth letter is 'R'.
- ❖ The Eighth letter is 23rd letter in the sequence of alphabets.
- ❖ The First letter is 19th letter in alphabet's list.
- ❖ The Sixth letter is twelfth letter of alphabets.



--	--	--	--	--	--	--	--	--	--

1.3 Repeated Addition

Travel Through

Footwear Shop




Mugilan and Yazhini went to a footwear shop. By the time they entered the shop they saw a few of their friends buying footwear. To their surprise, they found the shop was left empty after sometime.




So, they returned home without buying footwear. Can you say, why? Read the following conversation. **Mugilan** and **Yazhini** explained the situation to their **mother**.

Yazhini : Mom, I saw chitu , She flew away with 2 sets of 2 slippers ($2+2=4$)


Mother : Oh! I see.

Mugilan : I saw pussy  in the shop. It went away with 3 sets of 4 slippers ($4+4+4 = 12$)

Mother : Is it so?

Yazhini : Mom! The fly  selected 4 sets of 6 shoes. ($6+6+6+6= 24$).

Mother : What happened next?

Mugilan : Spider  chose 5 sets of 8 shoes. ($8+8+8+8+8=40$) If none of the slippers was left in the shop. Can you guess who came next ?

Yazhini : Finally Centipede  came and emptied the shop.



Teacher's Note:

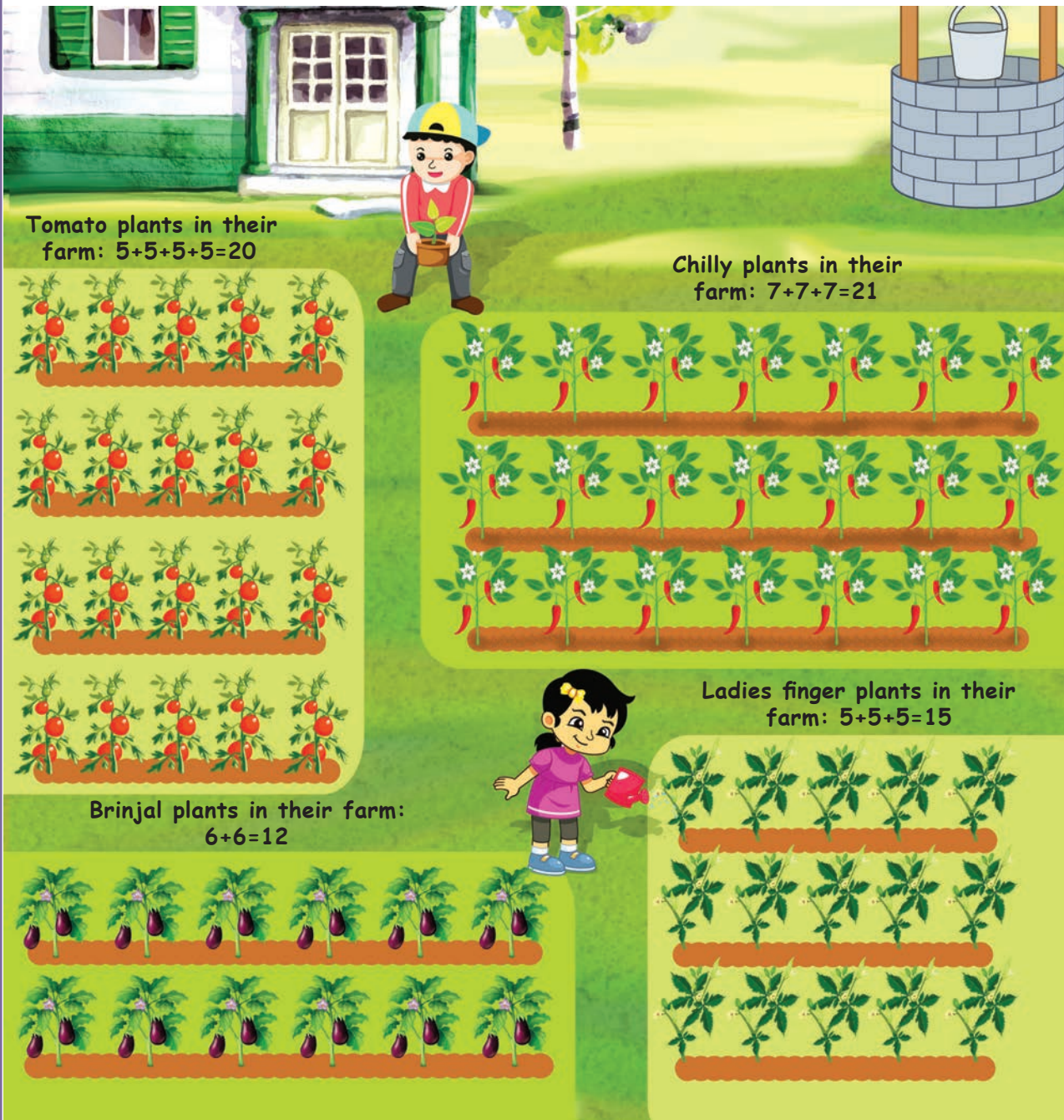
Teacher shall narrate the situation to explain the concept of repeated addition.

Learn

Vegetable farm



Agilan and Azhagi are interested in gardening. In the leisure time, they are always found in the vegetable garden in the backyard. They have four types of vegetable plants. Let us visit the garden.



Teacher's Note:

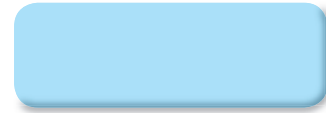
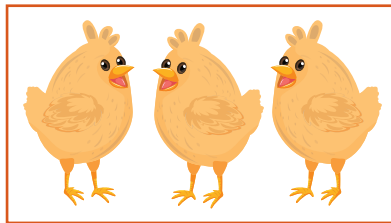
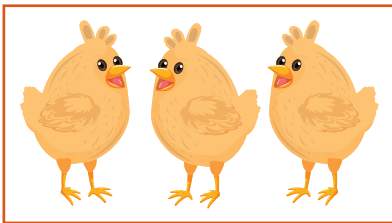
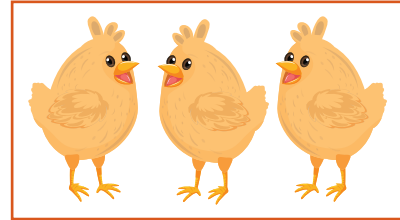
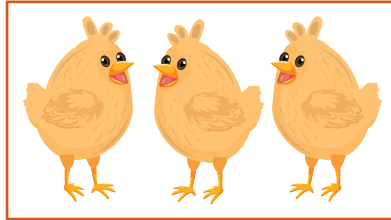
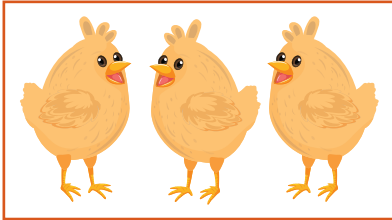
Teacher can create different situation for repeated addition and make children practice in class.

Practice

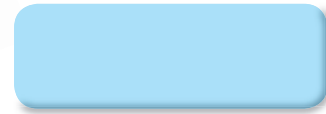


Use repeated addition to find the total.

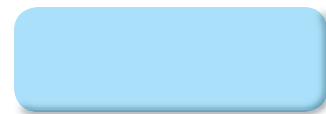
1. There are 5 groups. There are 3 chicks in each group. How many chicks are there altogether?



2. There are 4 bunches. There are 6 bananas in each bunch. How many bananas are there altogether?



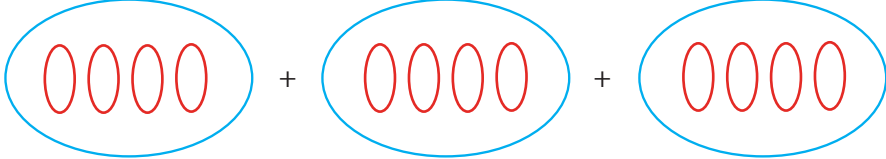
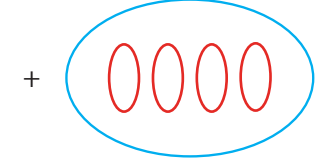
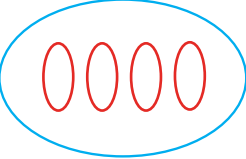
3. There are ___ trays. There are ___ eggs in each tray. How many eggs are there altogether?





**Teacher's Note:**


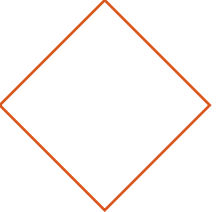

Teacher can make children observe that repeated addition of even numbers is even but repeated addition of odd numbers is either even or odd.

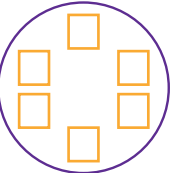
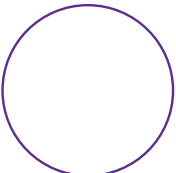
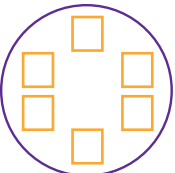
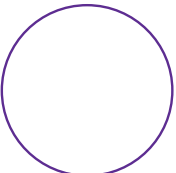
Pleasure Time

Draw the missing figures and complete repeated addition fact.

i.  $+$  $+$  $4+4+4=12$

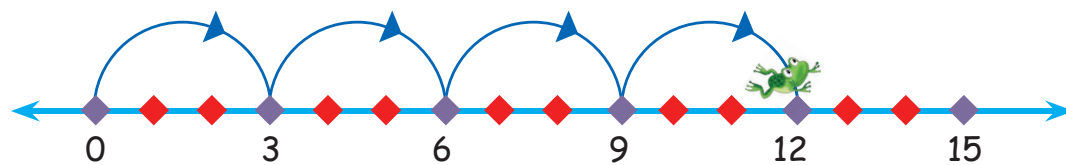
ii.  $+$  $+$  $+$ 

iii.  $+$  $+$ 

iv.  $+$  $+$  $+$ 

Learn

Let us learn repeated addition using number line.



Start from 0 and leap in three's upto 12.

Frog will reach 12 in 4 leaps of 3 units each.

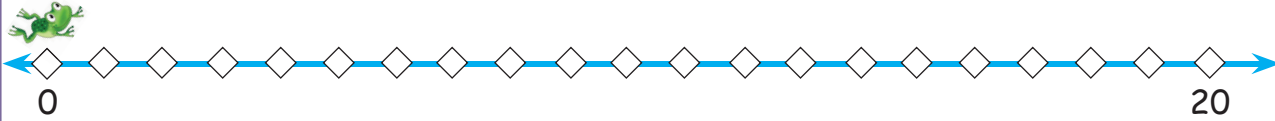
The frog can leap 3 units distance in one attempt. After the 4th attempt the distance covered by the frog will be 12 units it is shown as $0+3=3$; $3+3=6$; $6+3=9$; $9+3=12$ that is 3 when repeatedly added 4 times gives 12 which can be expressed as $3+3+3+3=12$ units.

Practice



For each of the distances given below, draw the leaping positions of the frog on the line to reach 20.

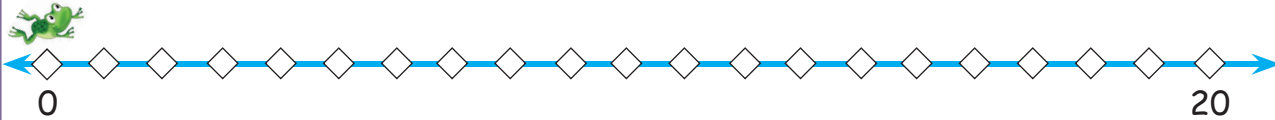
i) one leap covers 2 units distance.



Repeated
addition Facts

Number of
jumps

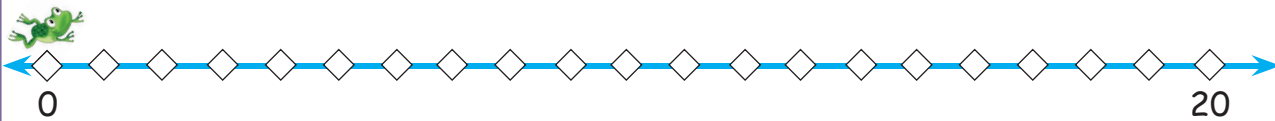
ii) one leap covers 4 units distance.



Repeated
addition Facts

Number of
jumps

iii) one leap covers 5 units distance.



Repeated
addition Facts

Number of
jumps

Mental Maths

- Aditya bought 6 packets of groundnut balls. Each packet had 5 groundnut balls. How many groundnut balls did he buy?
- There are 10 boats. Each boat can accommodate 5 children in it. How many children are there in all?
- Ranjith had a bag that can hold 5 note books. If he had 6 such bags then how many note books does he have in total?
- Maghizhini saves 10 rupees a day. How much will she save in 7 days?
- There are 7 plates. Each of the plates has 3 fruits in it. How many fruits are there in all?

1.4 Repeated Subtraction

Travel Through



Ezhilan, Kumaran and Iniyan went to grandma chinnathai's house for holiday. She prepared tasty paniyarams for them. Observe the way she shared the paniyarams with them. How many paniyarams does each child get?



Kumaran : Wow! Grandma! Paniyarams, I love them.

Ezhilan : I want more.

Iniyan : No! I want more.

Grandma : Don't worry children. I will give you equally.



Grandma : I have 9 paniyarams. I will give you one by one.

Ezhilan : All of us got 1 and 3 paniyarams are over.

Kumaran : You have 6 Paniyarams grandma.

Iniyan : We can write the same as $9-3=6$.



Grandma : This is the second round.

Iniyan : You can again give us one paniyaram each, granny.

Kumaran : Now, You have 3 paniyarams left grandma.

Ezhilan : This can be written as $6-3=3$.



Grandma : Yes! Then I guess I can give another round. This is the third round.

Ezhilan : Wow! The third one grandma.

Kumaran : We all have three paniyarams each and your plate is empty grandma.

Iniyan : So, it is $3-3=0$.

So, $9-3=6$; $6-3=3$; $3-3=0$.

From 9 we can take away 3 paniyarams 3 times.

Learn

One day, Ravi saw a tree full of jamun fruits. The gardener gave him more fruits.



He counted them. There were 20 fruits.

Ravi has 20 jamun fruits. He wants to give them to 5 of his friends. He distributed them one by one.



First, He gave one jamun fruit to each of them which can be expressed as $20-5=15$.



Ravi is left with 15 jamun fruits. He gives one more jamun fruit to each of them in the second time This can be written as $15-5=10$.



Now, Ravi is left with 10 jamun fruits. He again gives 1 jamun fruit to each of his 5 friends. We write this as $10-5=5$.



Now, Ravi is left with 5 jamun fruits. He again gives 1 jamun fruit to each of his 5 friends. We write this as $5-5=0$. Finally, Ravi's bag is empty. He gives 5 fruits four times.

He can distribute 20 fruits to 5 of his friends 4 times.

Practice



1. If grandma chinnathai had 12 paniyarams, how many paniyarams will each one of her 3 grandsons get?

To begin with, we start with 12 paniyarams and distribute them to 3 grandsons and so $12-3=9$. Complete the remaining repeated subtraction facts in the table given below.

12	-	3	=	9
	-		=	
	-		=	
	-		=	

Each grandson gets paniyarams.

2. If grandma had 20 paniyarams, and there are 4 children, how many paniyarams will each child get?

Complete the subtraction facts in the table given below.

	-		=	
	-		=	
	-		=	
	-		=	
	-		=	



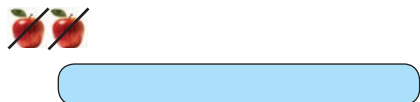
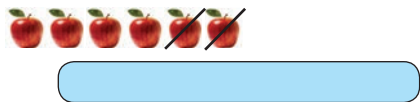
Each child gets paniyarams.

Pleasure Time



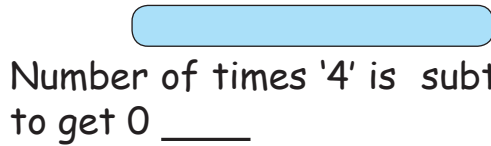
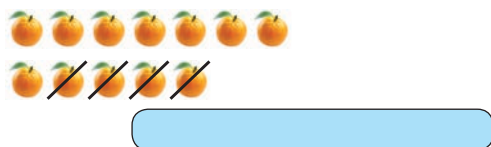
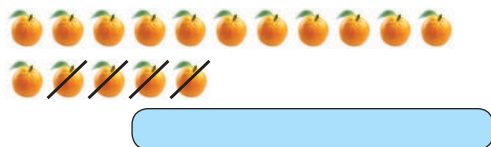
Write the subtraction facts for following.

i. Subtract 2 repeatedly from 10



Number of times '2' is subtracted to get 0 _____

ii. Subtract 4 repeatedly from 20

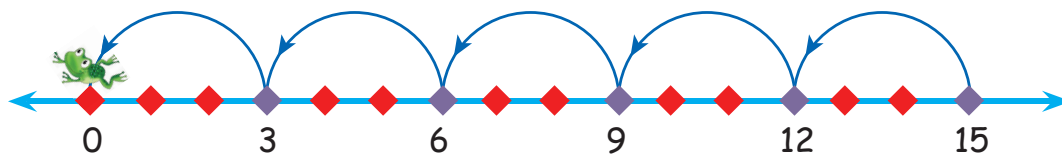


Number of times '4' is subtracted to get 0 _____

Learn



Let us do repeated subtraction using number line.



The frog can leap 3 units in one attempt. If the frog wants to return to its original position from 15 then it can be shown using number line as given above.

Start from 15 and leap in three's upto 0.

Frog will reach 0 in 5 leap of 3 units each.

It has jumped 5 times starting from 15 to reach 0. That is $15-3=12$; $12-3=9$; $9-3=6$; $6-3=3$; $3-3=0$, which gives $15-3-3-3-3-3 = 0$

Practice



Draw the leaping position of the frog on the line to return to 0.

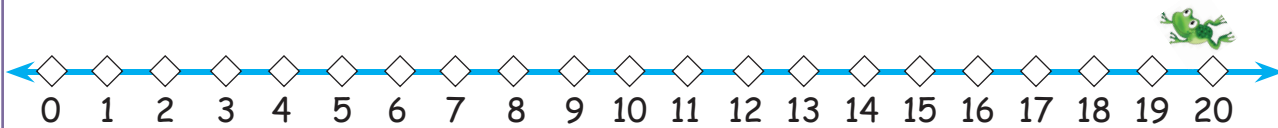
i) 2 units distance



Repeated
subtraction Facts

Number of
leaps

ii) 5 units distance



Repeated
subtraction Facts

Number of
leaps

iii) 4 units distance



Repeated
subtraction Facts

Number of
leaps

Mental Maths

1. Vanitha had 50 mangoes and she made packets of five mangoes each and sold them. How many packets does she make?
2. There are 30 notebooks in a box. If 6 notebooks are to be given to each student, how many students will get the note books?
3. 20 members planned to cross the river by boat. Each boat can carry 4 members. How many time the boat needs to take them?
4. Mani has 15 rupees with him. If he wants to buy newspaper by spending 3 rupees a day, for how many days can he buy the news papers?
5. Kavya's uncle gave her 20 date fruits and asked her to eat 2 fruits a day. How many days can she eat the fruits?

UNIT 2

Patterns

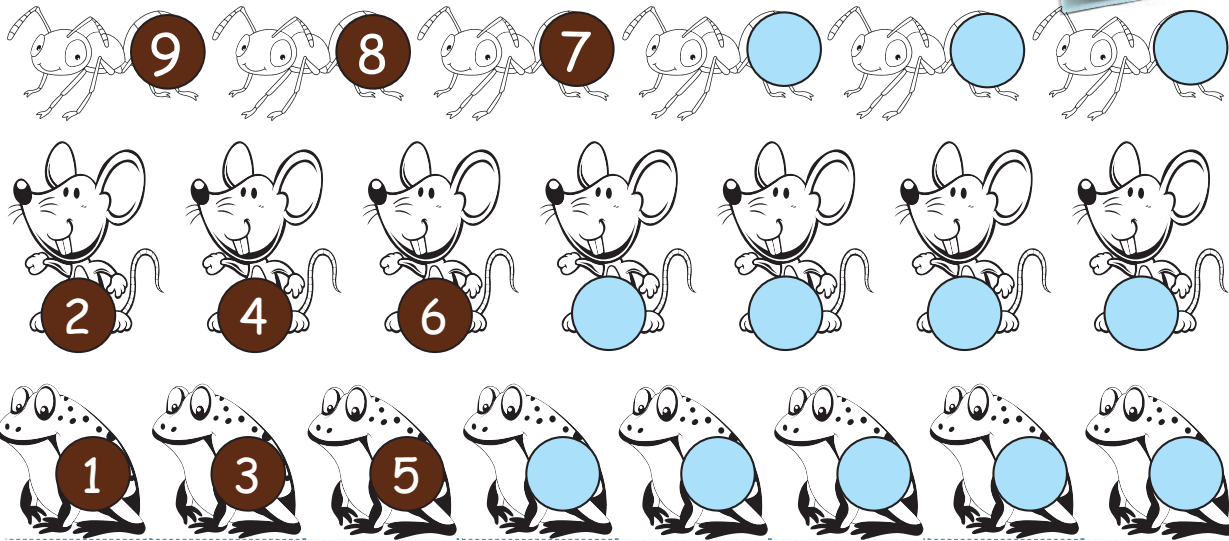
2.1 Patterns in numbers

Keywords

Rule
Arrange
Order

Recall

Observe and complete the patterns in numbers.



Travel Through

Roll and Scroll game



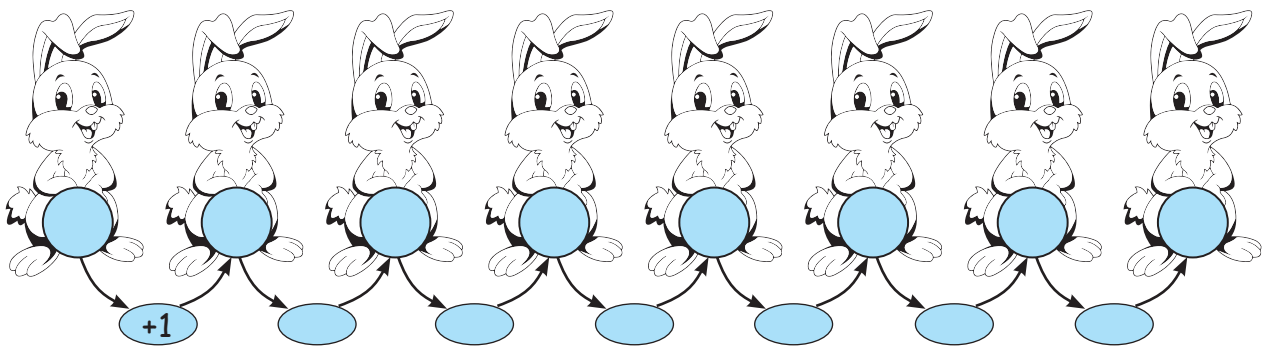
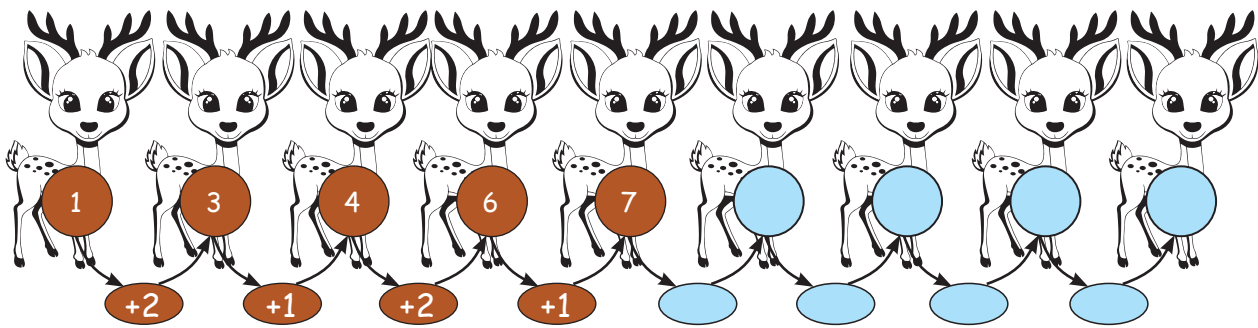
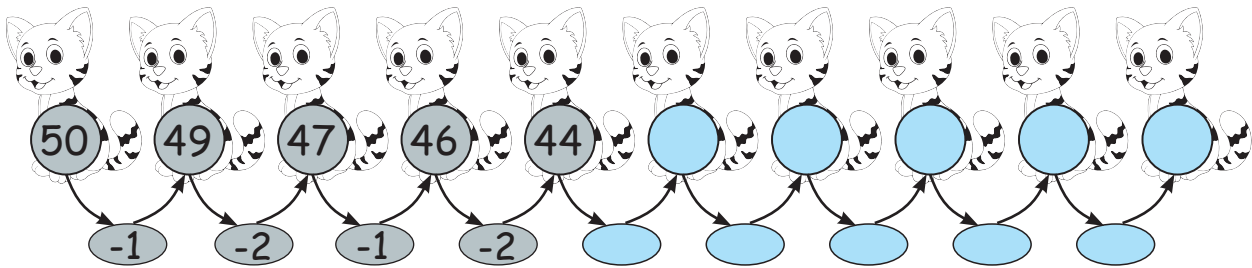
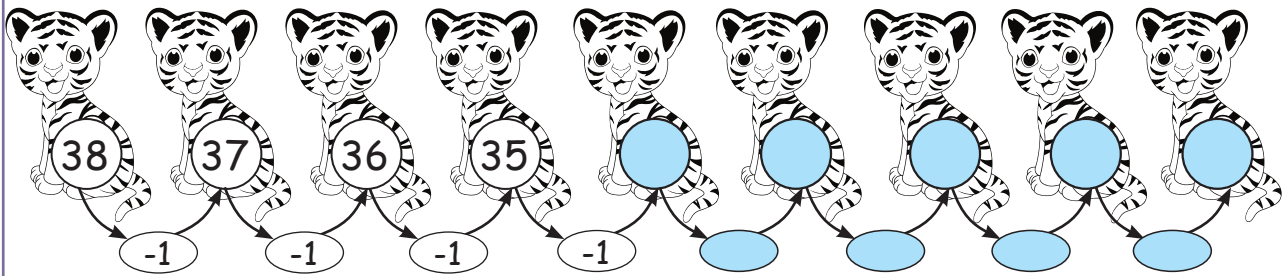
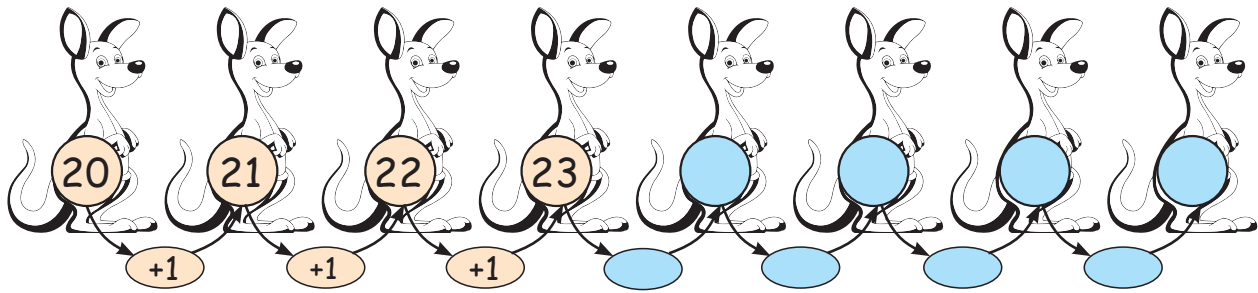
- ❖ Two students can do the activity.
- ❖ Make a number board with numbers from 1 to 37 as shown in the picture.
- ❖ The first player throws a dice and a number appears on the face of the dice say 2.
- ❖ The other player places a coin on the number 2 and skips to number position in twos such as 4, 6, 8, 10 and so on till the last number. The first player records each of the number positions.
- ❖ Now, the second player gets the chance to throw the dice. When the number 2 appears again the player tells all the number positions jumped orally. If he gets a number 3, then the first player moves a coin by skip counting in threes.
- ❖ The second player record each of the number positions jumped. The above procedure is continued till the players are familiarised with the number patterns starting from 2, 3, 4, 5 and 6.



Learn



Find the rule and complete the patterns.



Activity



Count and write the number of ice sticks and complete the patterns using the rules.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Practice



Find the rule and write them in each of the pattern given below.

41 → 42 → 43 → 44 → 45

Below each number is a blue oval with an arrow pointing to the next number.

39 → 38 → 37 → 36 → 35

Below each number is a blue oval with an arrow pointing to the next number.

★ 20 → ★ 22 → ★ 24 → ★ 26 → ★ 28

Below each number is a blue oval with an arrow pointing to the next number.

10 → 20 → 30 → 40 → 50

Below each number is a blue oval with an arrow pointing to the next number.



Pleasure Time



1) Write the number patterns for the given instructions.

i) The last number is 21. The first number is 13. Write the rule.



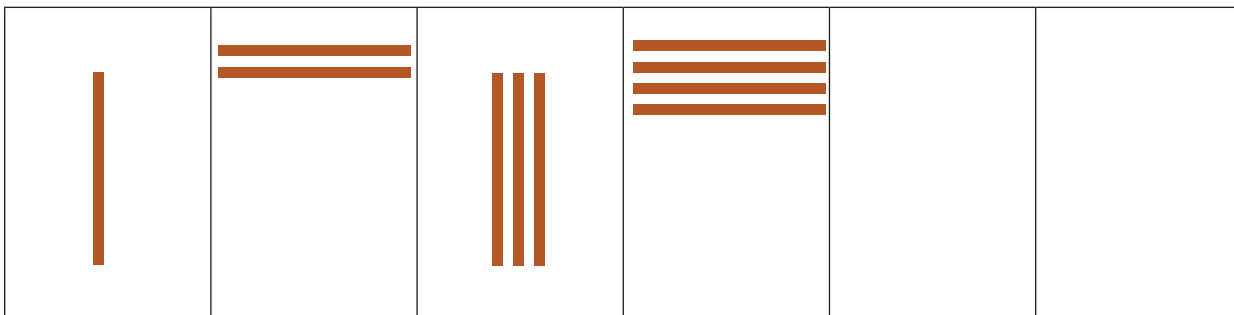
ii) The pattern begins with 39. The next number is 3 less than the previous number.



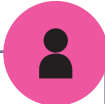
iii) The middle number in the pattern is 45. The number previous to it is 40.



2) Draw sticks to continue the pattern.



Try This



Draw the missing black keys in a pattern.





2.2 Iterative pattern

Travel Through

Rani's house



Observe the iterative nature of the number of toys with respect to the number of tokens.

 Number of tokens	 Number of toys
1	2
2	4
3	6
4	8




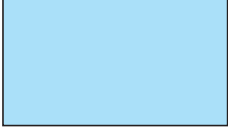
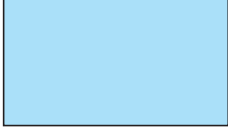



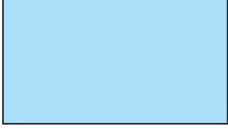
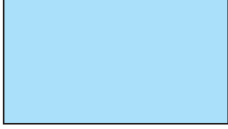



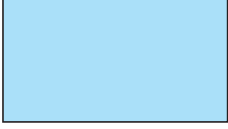
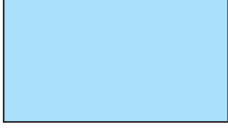
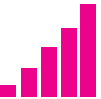
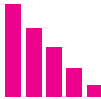

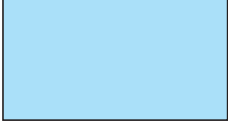
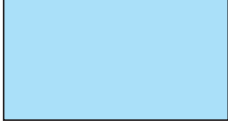
Answer the following questions.

- What is the pattern found in the numbers of tokens?
- What is the pattern seen in the numbers of toys?
- How are the number of tokens related to the number of toys?
- Can you guess the number of toys if there are 5 tokens?

Learn





Observe and continue the patterns for two more steps.


				
				
				
				


Try This

Strike the odd one in the given pattern. Draw the correct image to replace it in the given space.

i) 

ii) 

iii) 

iv) 

Pleasure Time

Sugar & Chilli



- i) What is the first one?
- ii) What is the nature of it?
- iii) What is the second one?
- iv) What is the nature of it?
- v) What is the third one?
- vi) What is its nature?
- vii) Can you tell how are the items ordered/arranged ?
- viii) Can you tell what could be the next one in the series?



Think Like A Mathematician

How are the tables and chairs arranged in your classrooms? Do you find any pattern in them? Discuss with your friends.

**UNIT
3**

Measurement

3.1 Comparison of weight

Travel Through



Keywords
heavy-light

Thenaliraman and two villagers went to a town to visit their king. They want to give some gifts to him.



Teacher's Note:

Discuss the story with children and make them realize the concept of heavy and light.

Learn

Blow and Observe







Place a feather, a dry leaf, a key and a nail cutter on a table. Blow the things. What did you observe?

The feather and dry leaf moved away from the table but the nail cutter and keys did not, why? Feather and dry leaf are lighter and nail cutter and keys are heavier. So lighter objects fall down when air is blown.



Compare the weight of the objects that are placed on the table.



 Sharpener is **lighter** than the book  .
 Pencil box is **heavier** than the eraser  .

Teacher's Note:

Teacher can instruct children to carry two things at a time and say which one is heavier or lighter.

Practice

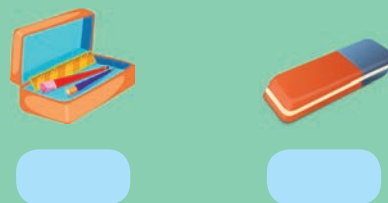


From your school bag, lift the objects given below and answer the following questions.

i) Tick the heavier object.



ii) Tick the lighter object.



Practice



Compare the weight of objects given below and order them from lightest to heaviest by giving numbers 1, 2, and 3.

i



ii



iii



iv



3.2 Measuring weight using simple balance

Travel Through



Bharath and Kannagi buy grapes from two different fruit sellers from the road side shop.

Give me one bunch of Grapes.



1

Give me one bunch of Grapes.



2

I have bought more grapes than you.



3

Come, let's weigh our fruits in the shop.



4

See! mine is more than yours. We need a standard tool to measure weight.






Teacher's Note:

Teacher can make students understand the need of standard measures.

Learn



Small things can be weighed using simple balance.
 Big things can be weighed using weighing machine.
 A simple balance has two pans.

		
HEAVY LIGHT	LIGHT HEAVY	SAME WEIGHT
The pan with heavier object comes down.	The pan with lighter object goes up.	If both the objects are equal in weight, the pans will be in the same level.

Practice



A. Fill the boxes with 'H' for heavy and 'L' for light.





B. Tick (✓) the lighter side and cross (×) the heavier side of the simple balance.





Pleasure Time

Match the objects with the suitable balance that are used to measure the weight.




The objects to be measured are:

- Beads (a cluster of blue beads)
- Rice bag (a brown sack)
- Sugar bag (a brown sack with a small container on top)
- Goldstuds (two gold earrings)
- Jaggery (a pile of brown sugar lumps)
- Elaichi (a bowl of green cardamom pods)

The balances available are:

- A traditional brass beam balance with two pans.
- A digital analytical balance with a glass enclosure and a display showing 0.18900.
- A platform scale with a large flat base and a vertical column with a weighing hook.

Activity



- ❖ Take two coconut shells, thread and a ruler.
- ❖ Tie the thread at the centre of the ruler.
- ❖ Tie the shells on both sides at equal distance from its centre. Now, the simple balance is ready.
- ❖ Take some marbles, pencil, eraser, crayons, chalk piece, paper, pencil box and paper.
- ❖ The children can be divided into group of three each.
- ❖ One child keeps the objects whose weight is to be measured on the right pan of the balance.
- ❖ The other child keeps adding marbles on the left pan of the balance till both the pans are balanced.
- ❖ The third child counts the marbles and records the weight of different objects.



3.3 Measuring capacity

Recall

Comparison of capacity

Keywords
Capacity

Tick (✓) the container that contains more water.

<p>i)</p>  <p><input type="checkbox"/> <input type="checkbox"/></p>	<p>ii)</p>  <p><input type="checkbox"/> <input type="checkbox"/></p>
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Travel Through

Water! Water!



Kamali and kannan fetch 2 pots of drinking water from a tap. Observe the picture and say who will fetch more water?









Learn



Capacity is the quantity that a vessel can hold within it.

Here tumbler, jug, vessel and pot are some of the containers used to hold water. The capacity of each is different from the other due to the differences in their size.

To measure the capacity, a common measuring container is necessary. Here let us take the common measuring container as the tumbler.

			
			
The tumbler can hold 2 tumblers of water.	The jug can hold 5 tumblers of water.	The vessel can hold 10 tumblers of water.	The pot can hold 20 tumblers of water.

Activity

Ordering by capacity



Collect the information about measuring containers from your elders and complete the table.

Measuring container used by	To measure milk	To measure rice
My mother		
My grandmother		
My friend's mother		
My friend's grandmother		

Teacher's Note:

Let children discuss on how measuring tools vary across generations (vertically) and vary between family to family (horizontally).







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Practice

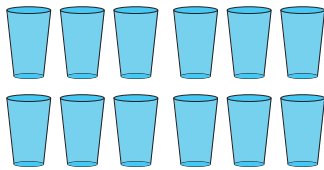
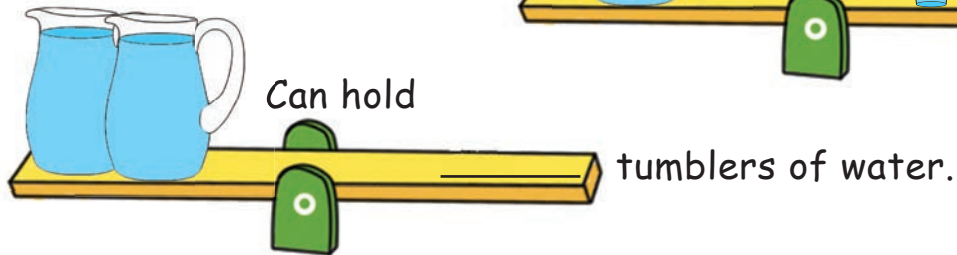
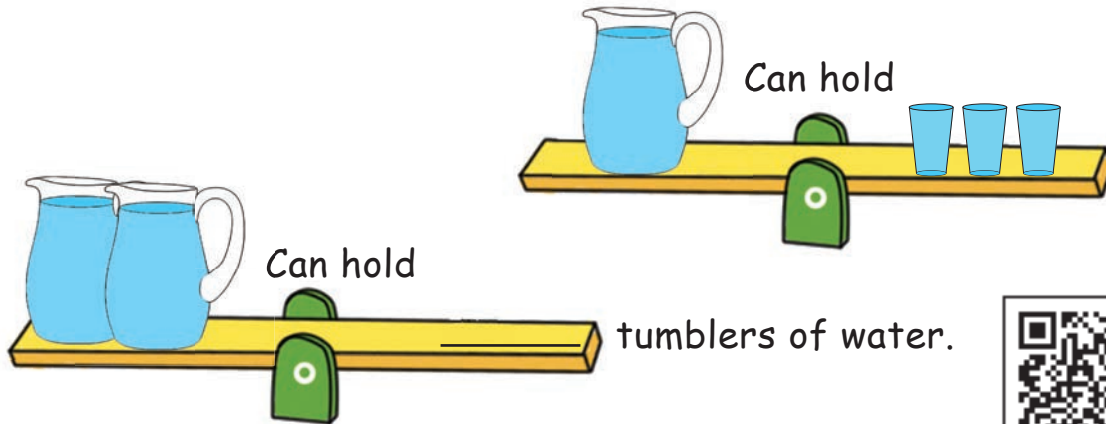


Guess the capacity of the given container in terms of measuring vessel. Verify your guess by actually measuring it.

Given Vessel	Measuring vessel	Guessed Capacity	Measured Capacity
			
			
			
			
			

Try This

Find the capacity given that 1 jug can hold 3 tumblers of water.



Can fill _____ jugs of water.



Pleasure Time

We use different shaped containers in daily life for various purposes. Have you ever thought the reason for it? Think! Complete the following table by putting a tick (✓) mark below the container that is appropriate for the given activities.

Activity	Jug	Bucket
Bathing		
Washing hands		
Washing face		
Washing your lunch box		
Brushing your teeth		










UNIT 4

Money

Recall

Keywords
Notes
Coins
Currencies

i) Shown below are the stationery items and the currency notes paid to the shop keeper. Write the price of each of the items.

Stationery items	Amount paid	Price
	 	20+5=25 Rupees
	 	
	 	

ii) Muthamizh wants to buy a doll and a pencil box. Guessing the price, she takes two sets of different denominations to purchase them. In the shop she notices the price tags on the things. Circle the coins that she has to pay to the shop keeper.

Practice



Observe the price tags. Put a tick (✓) mark for the amount to be paid.

	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>

4.1 Notes and coins

Travel Through

In the bazaar



Kuzhalini and her mother went to the market. In all the shops she saw tags with different amount written on it. She asked her mother about it. Help them purchase things within the amount they have.



Teacher's Note:

Teacher can motivate children to prepare a list of things that can be purchased for the given amount.

Learn

Introduction of ₹ 50 currency notes.



50 rupees is equal to five 10 rupees.





Practice



Complete the table for the given amount.

Amount paid	Number of Ten rupees 	Number of One rupee 
35	3	5
78		
89		








Calculate the amount paid.

Number of Ten rupees 	Number of One rupee 	Amount paid
4	8	48
5	6	
6	0	

Pleasure Time



Write the total amount of given currency notes and coins.

S.No	Currency notes and coins	Total	
		T	O
1	  		
2	   		

Learn

Comparison of price



Pari bought a doll for ₹ 50 for his sister.
Arivu bought a doll for ₹ 70 for his brother.



Arivu bought the doll with **more money** than Pari.
So, we can express this as Arivu's doll is **costlier** than Pari's.



Kural bought a water bottle for ₹ 80.
Madhi bought a water bottle for ₹ 95.



Kural bought the water bottle with **less money** than Madhi.
So, Kural's water bottle is **cheaper** than Madhi's.

Practice

Tick (✓) the object which is costlier between the given two.

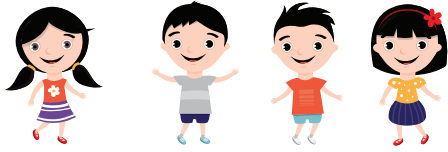
 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
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Tick (✓) the object which is cheaper between the given two.

 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>	 <input type="checkbox"/>
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Learn

In a festival day.



Iraivi, Kathir, Vaanchi, Mukil visited a trade fair along with the family. Some of the rides which children love to take are shown below.



Merry-go-round
₹ 20



Giant wheel
₹ 30



Ship ride
₹ 25







Dashing car
₹ 15

Practice



Answer the following questions:

1. If Kathir  wants to go in all the 4 rides one time. How much should he pay?

2. Mukil  played giant wheel two times and gave  + . How much balance will she get?

3. Kathir,  Vaanchi  and Mukil  played merry-go-round once. How much they have to pay totally?











Teacher's Note:

Teacher encourages children to add the amount to spent on 3 rides in all possible ways and to choose the one accordingly for the given amount.

Practice



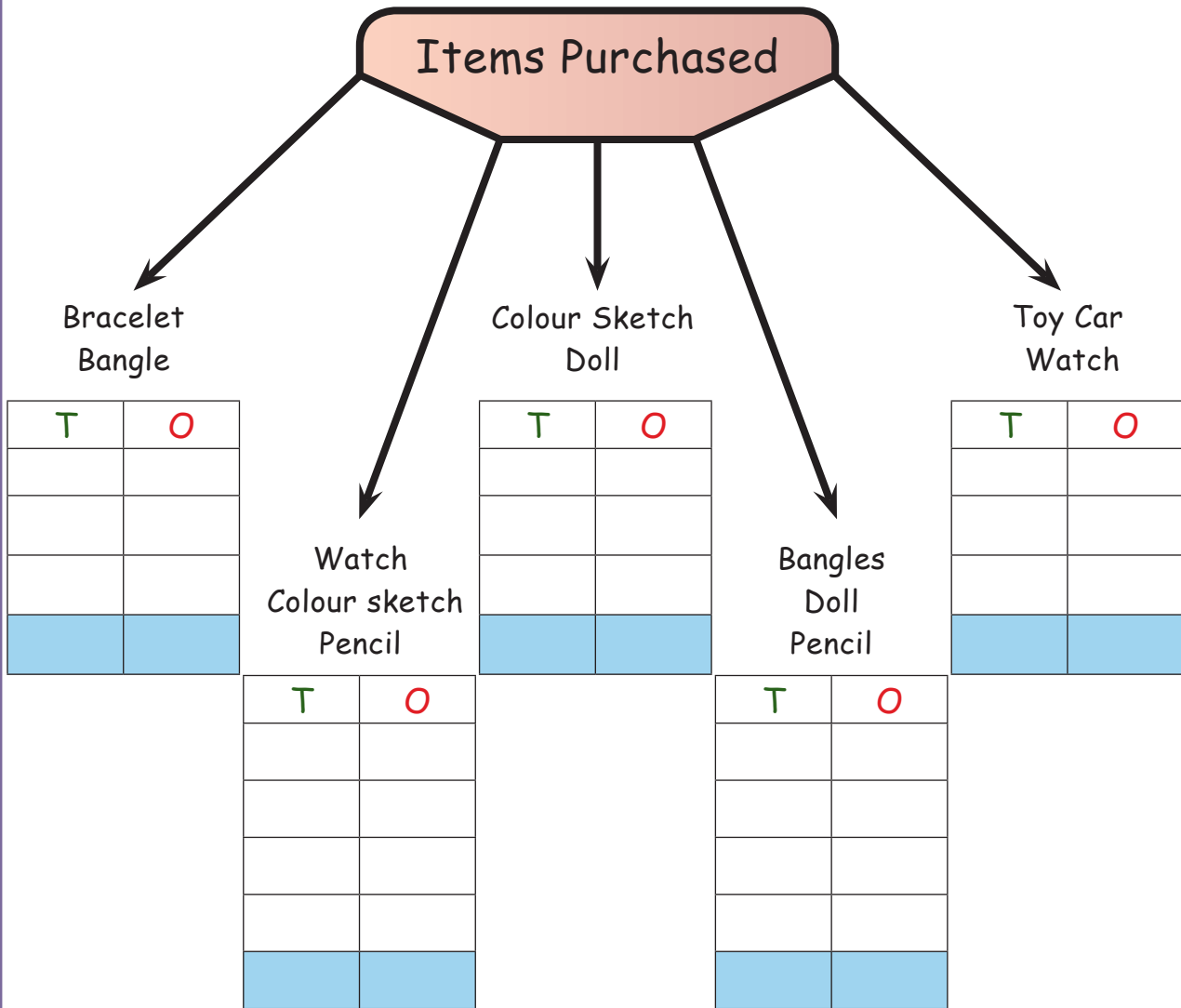
Observe the price of the articles purchased. Count the money you have. Calculate the amount spent and balance left.

Purchased articles	Money you have	Money you spent		Money which is left with you	
		T	O	T	O
 ₹ 15 ₹ 20					
 ₹ 20 ₹ 5					
 ₹ 10 ₹ 20					
 ₹ 5 ₹ 6					
 ₹ 20 ₹ 10					

Try This

Observe the price of different articles given below and complete the table.

 Watch -₹ 60,  bracelet -₹ 20,  doll -₹ 40,  bangles -₹ 45,
 toy car -₹ 25,  colour sketch -₹ 30,  pencil -₹ 5



If you have ₹ 20, then what do you wish to buy?



UNIT 5

Time

Recall



1. Fill in the blanks.

- i. There are _____ months in a year.
- ii. March is the _____ month of the year.
- iii. June comes before _____.
- iv. _____ comes between April and June.



2. Write the day that comes between the given days.

- i. Thursday, _____, Saturday.
- ii. Saturday, _____, Monday.
- iii. Friday, _____, Sunday.
- iv. Wednesday, _____, Friday.



3. Fill in the birthday chart and arrange the birthdays in order of celebration this year. (write only the date and month for example, 2nd October)

	My family	My friend's family	Birthday celebrated first	Birthday celebrated Next
Self				
Father				
Mother				

Six birthdays in order

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

4. Answer the following questions.

- i. Write the names of all the months having 30 days?
- ii. Write the names of all the months having 31 days?
- iii. The month which comes after April is _____.
- iv. The last month of a year is _____.

5.1 Calculating time

Travel Through

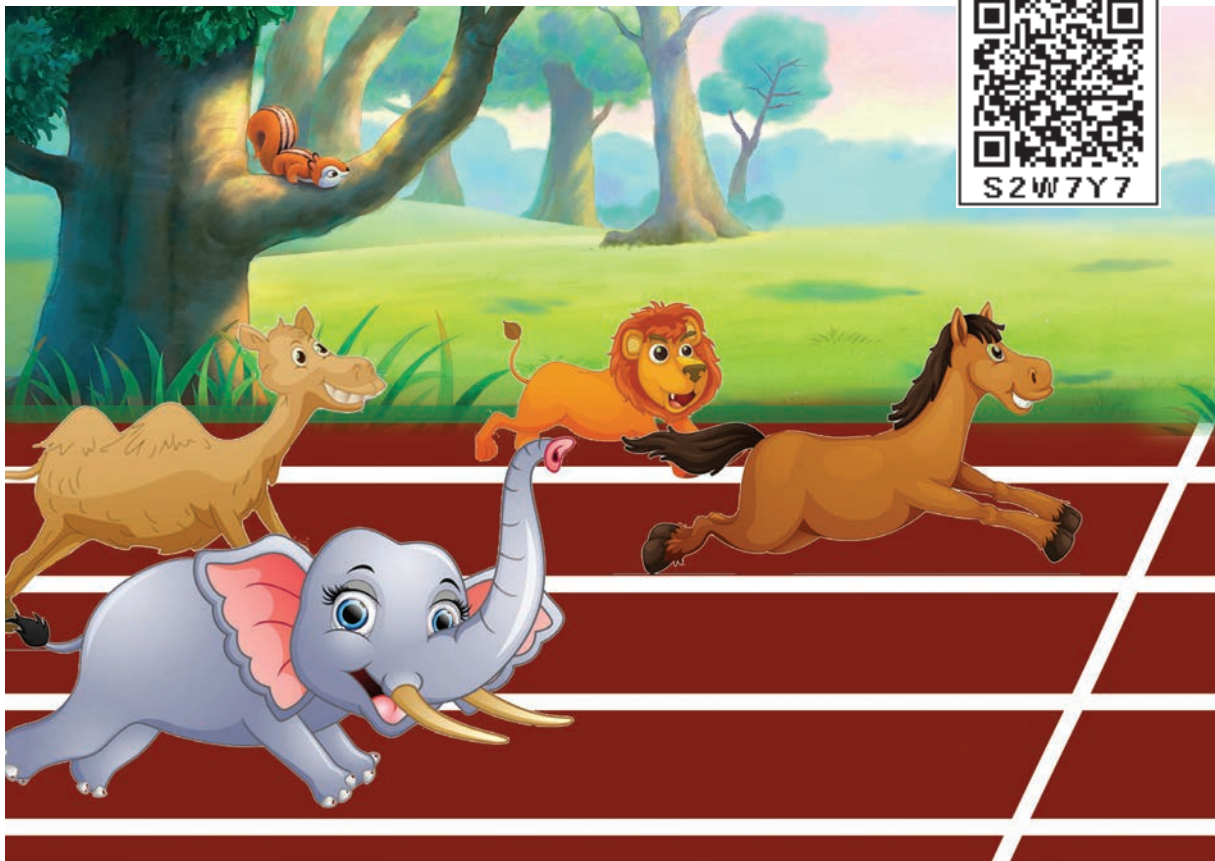
Who will win?



Animals in the zoo wants to know who runs faster. They run a race. Guess the winner.

Keywords

Fast
Slow
Less time
More time



Teacher's Note:

Teacher can facilitate the key words fast, slow, less time, more time by narrating the above scenery.

Learn

Fast - Slow



Boiling of milk takes less time.



Conversion of milk to curd takes more time.

Practice



Tick (✓) the actions which takes less time.

Travelling from Chennai to Delhi.



Reaching the school from your house.



Painting or colouring



Learn

Making of a tent takes less time than constructing a house.



Here, the time taken for making a tent can be expressed in hours. We use a clock to measure time in hours, minutes and seconds.

The duration of time taken to complete the construction of a house is expressed in months. We use calendar to express duration in months, weeks and days.



Practice

Tick (✓) the appropriate time measuring device.

Events			
Summer vacation		<input type="checkbox"/>	<input type="checkbox"/>
Library time		<input type="checkbox"/>	<input type="checkbox"/>
Pongal celebration		<input type="checkbox"/>	<input type="checkbox"/>
Morning breakfast		<input type="checkbox"/>	<input type="checkbox"/>

Learn








Small containers can be filled faster than big containers.

Practice



Tick (✓) the container which takes less time to fill.

	Tank <input type="checkbox"/>		Tub <input type="checkbox"/>
	Jug <input type="checkbox"/>		Can <input type="checkbox"/>
	Rice sack <input type="checkbox"/>		Padi <input type="checkbox"/>

**UNIT
6**

Information Processing

6.1 Representation of data and drawing inferences

Travel Through



Keywords
Categorise
Information
Data
Record



Observe the living creatures seen in the pond. categorise and record them.

Creature	Number of creatures

1. Tick the bird found in more number. - crane / duck
2. Tick the creature found in less number. - turtle / dove
3. Tick the bird found in less number. - dove / duck
4. _____ is seen in large number in the pond.
5. Among all the living creatures, the least found in the pond is _____.

Learn





Tally marks

Tally marks are lines which represent the number as follows

1		2		3		4		5		6		7		8		9		10	
---	--	---	--	---	--	---	--	---	--	---	--	---	--	---	--	---	--	----	--

Arivu, the farmer records the number of animals that are seen inside the fence using tally marks.



Animals	Tally Marks	Number of animals
		4
		5
		7
		3
Total		19

Teacher's Note:

Teacher can encourage the students to first draw the tally marks and then count the number of tally marks drawn.

Practice

What is my height?

Form groups as per the strength of the class. Collect the information from your friends and complete the table.

Name of your group member	Height (in cm)











From the above table, fill in the data using tally marks.

Height	Number of students
Less than 80cm	
Between 81cm and 90cm	
More than 91cm	

Try This

Divide the class into groups as per the strength of the class. Record their blood group in the table given below using tally marks.

Blood Group	No. of Friends	Blood Group	No. of Friends
 A+		 AB+	
 A-		 AB-	
 B+		 O+	
 B-		 O-	

From the table, answer the following questions.

- Which blood group is the most common among the groups?
- Which is the least found blood group among the groups?
- O- is the universal donor. The maximum number of chance that the O- can donate to is _____

Teacher's Note:

Teacher can tell children that any blood cannot be used by other. Also tell them that +ve is different from -ve. To donate the blood, same group of blood should be used. O- can be donated to any other group. AB+ can accept any other blood group.

6.2 Relationship

Travel Through

Family time



Keywords
Relation
Elder
Younger
Sibling



Malar : Grandpa, see there. My friend is coming.

Punniyakoti : What is his name? I have never seen him before.

Malar : Grandpa, his name is Chezhiyan.

Chezhiyan : Good morning, grandpa.

Punniyakoti : Good morning dear Chezhiyan, who is your father? what is he?

Chezhiyan : Anbarasan is my father. He is a teacher.

Punniyakoti : Oh! Are you the grandson of Poovarasan?

Chezhiyan : Yes, grandpa.

The conversation continues...

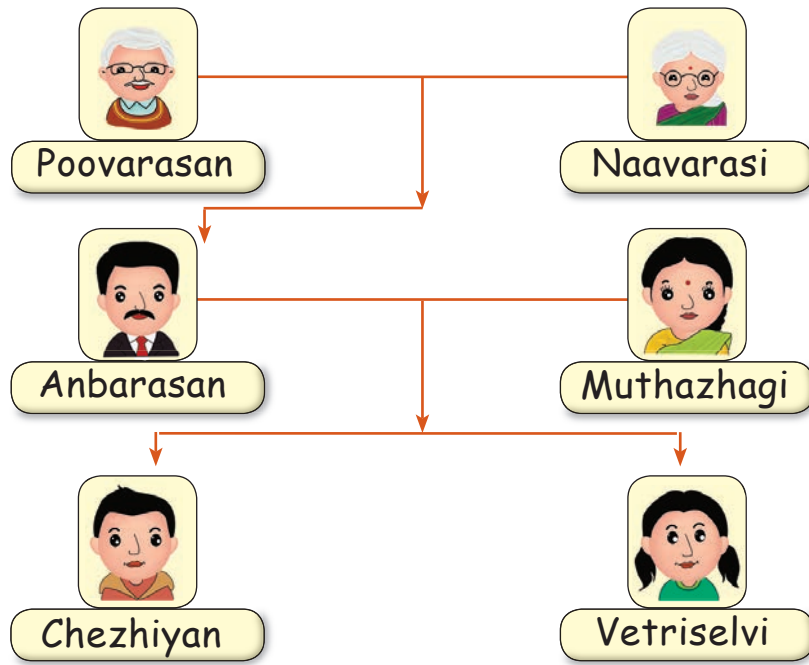
Teacher's Note:

Teacher shall prompt the children to continue the conversation. So children are made familiar to relate themselves with their relations of their mother and father.

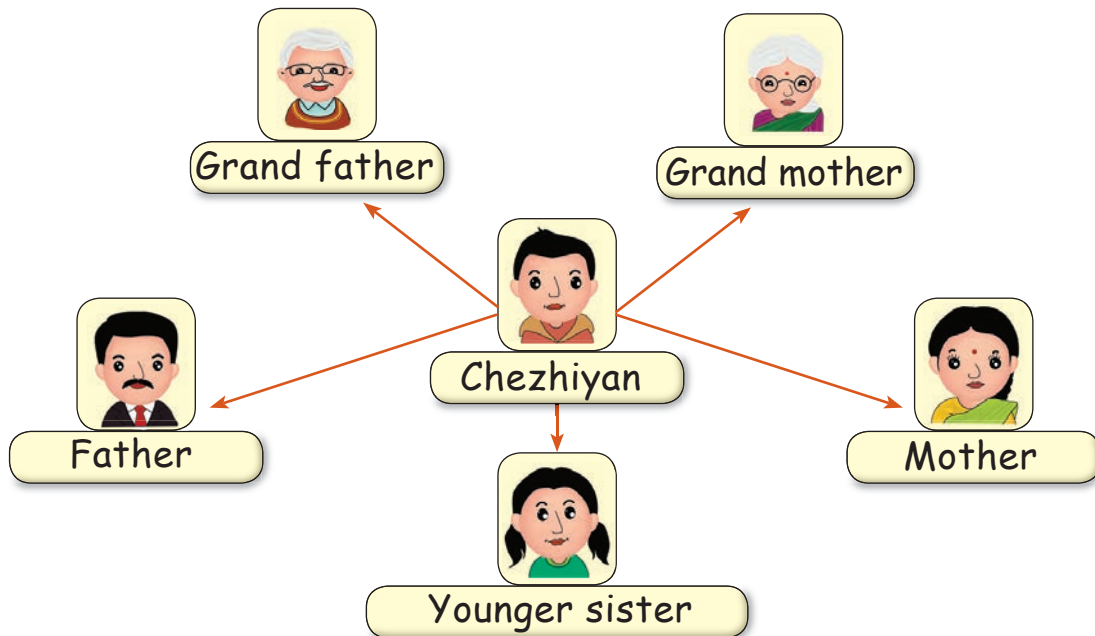
Learn



Chezhiyan's Family.



From the above family tree, let us learn Chezhiyan's relationship with other members.



Practice



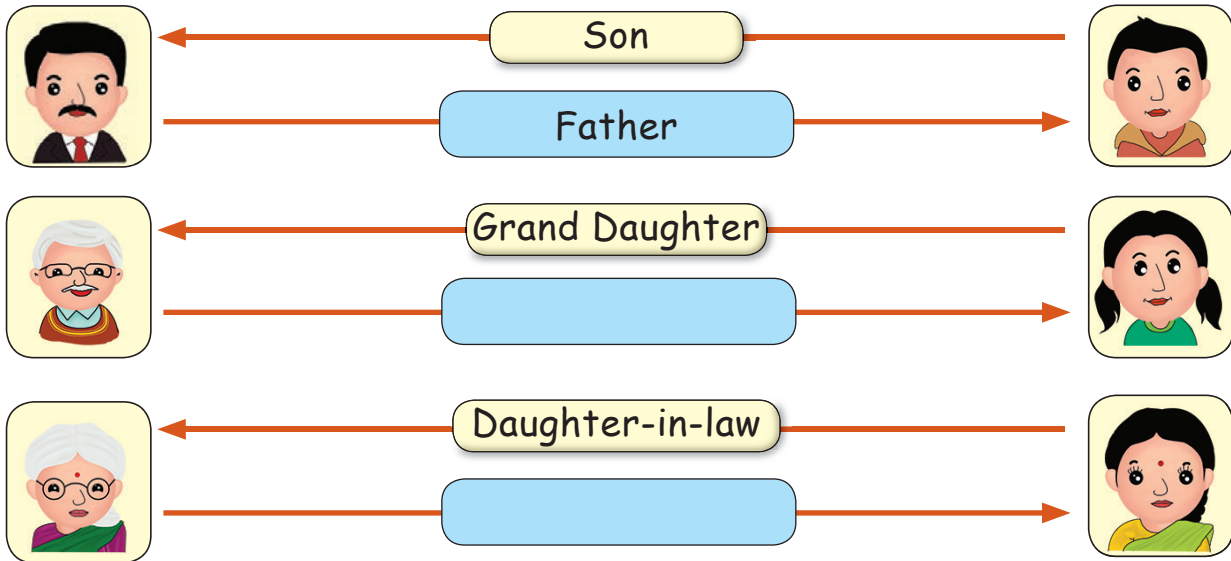
Who is the youngest in chezhiyan's family?

Who are all elders to that person?

Practice



Write the suitable relation for the given box.



There are two children in Chezhiyan's family. Who is the sibling of Chezhiyan? *Grand father / father / sister*

Pleasure Time



Make your family tree and mention the name and age of your family members in the tree. and answer the following questions.

i) Who are the family members elder than you?

ii) Who are the family members younger than your grandparents?

iii) How many of your family members are elder than your father?

iv) Who are the family members are younger than you?

v) How is your father's father related to you?

6.3 Shapes and nature of objects

Travel Through



Keywords

Shapes
Container
Nature
Items

Ravi and Vani went to the milk shop and then to a book shop. Observe the objects they have in their hands to collect the items.



Who has the most suitable container to buy milk? Why do you say so?



Which bag can be used to buy books? Why do you say so?

Learn



Materials are stored in different containers based on their properties. Solid materials like rice can be stored in sacks, liquid materials can only be kept in containers and gases are stored in closed containers.

Observe the above picture and match the following.

Milk

Rice

Water

Fruit



Think Like A Mathematician

Gases are stored in closed containers. Why?



6.4 Algorithms and Instructions

Keywords

Instructions
Steps

Learn

Play time



Kuzhali's play thing is different from all of ours.

Children, Did you bring the play things that I told you Yesterday?



Yes mam, I brought an indoor game board.

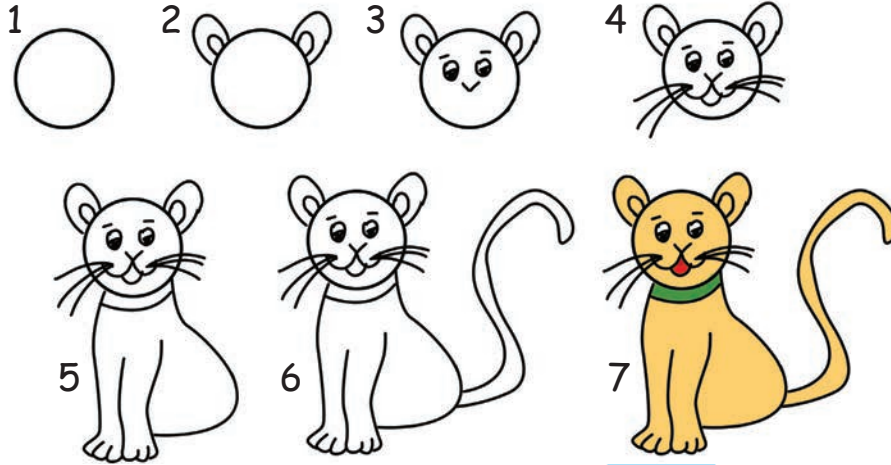
Kuzhali explained the steps to play the board game ludo.

- ❖ Two to four players can play this board game by rolling a dice.
- ❖ Each player will have four coins at the bay. The aim of the game is to take all four coins to the end point. Player who does this first will be the winner.
- ❖ The player can take each of his coin from the bay to the starting point only when he gets one on the dice and moves from there as per the number for on the dice.
- ❖ A player can put his opponent's coin back to the bay when his coin gets to occupy the same position as that of the opponent's coin.
- ❖ Then the opponent should move the coin once again from the starting point only when he gets one on the dice.

Practice



Arrange the instructions in order by writing the numbers 1 to 7 that help us to draw the picture of a cat.



Draw eyes and nose.

Draw a circle.

Colour the cat.

Draw the neck, body and two legs.

Draw mouth and mustache.

Draw two ears.

Draw a tail.



Pleasure Time



Follow the instructions to make a paper boat.

- ❖ Take a square shaped paper.
- ❖ Fold it along the centre to make it half.
- ❖ Make the second fold to make it a quarter.
- ❖ Fold one of the four flaps diagonally.
- ❖ Fold the remaining three flaps together in the opposite direction.
- ❖ Open up the folds. The paper boat is ready now.

Primary Mathematics - Class II (Term 3)

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