

SOCIAL SCIENCE

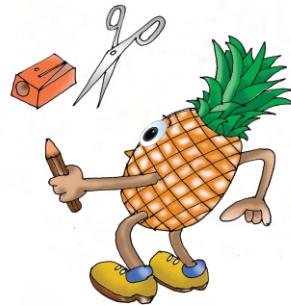
STANDARD FOUR

Term II

What the Logos stand for?



ANSWER THE QUESTIONS



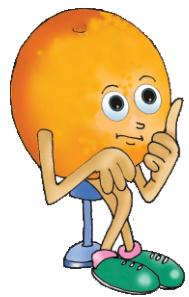
CHOOSE THE BEST ANSWER



MAP ACTIVITY



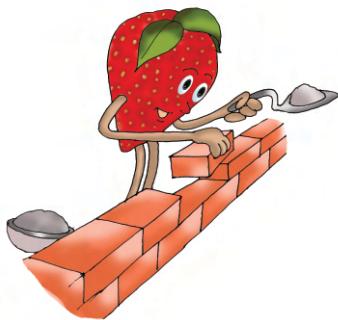
PROJECT



FACTS



MATCH THE FOLLOWING



FILL IN THE BLANKS



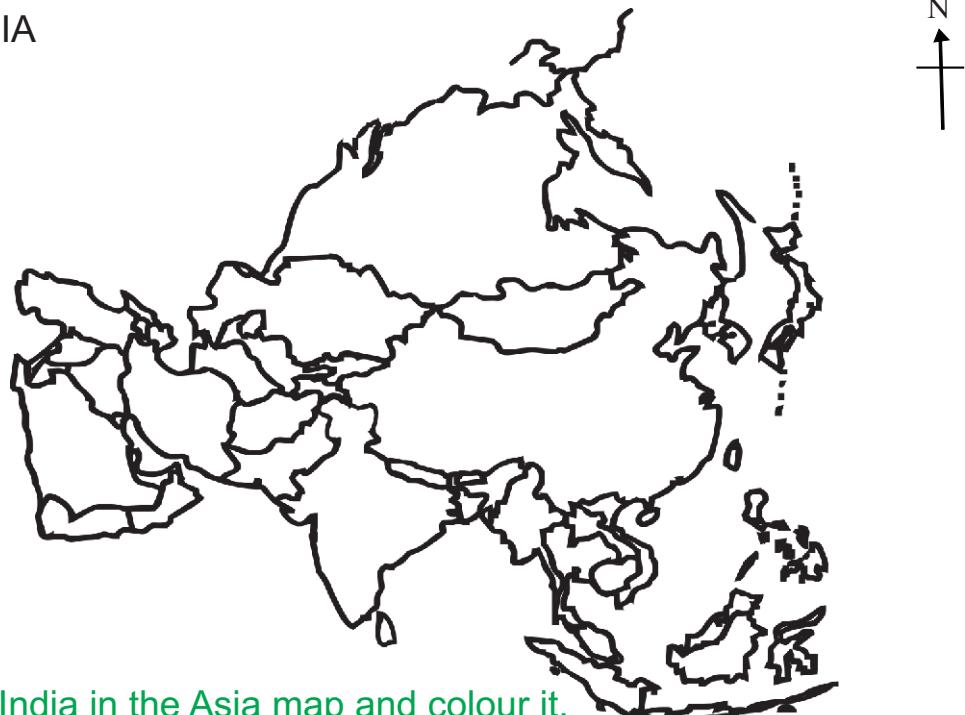
GROUP ACTIVITY



OUR COUNTRY

India is a **subcontinent**. It is a part of the continent Asia. It is located to the north of the **Equator**. India is a big country. It is the seventh largest country in the world in area and second to China in population. The southern part of the country is a **peninsula** as it is surrounded by water on three sides. Its total surface area is 32,87,263 sq.km.

ASIA



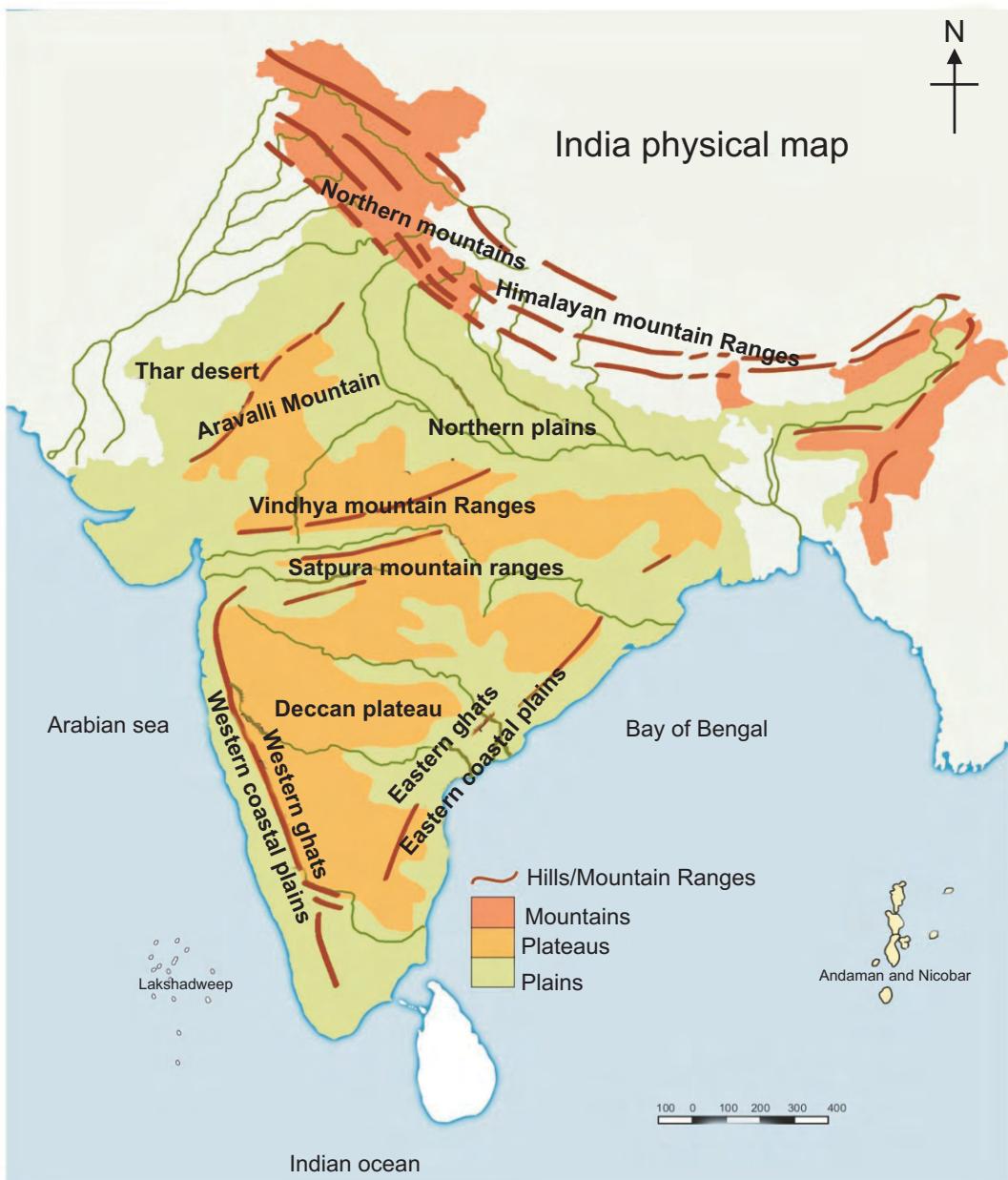
- Locate India in the Asia map and colour it.

- Write down the names of neighbouring countries of India.



INDIA'S PHYSICAL FEATURES

The physical features of India are not same across the country. They vary from place to place. India has dry deserts, high mountains, vast stretches of plains and plateaus. Many rivers originate from the mountains and plateaus and flow into the plains.



INDIA CAN BE DIVIDED INTO SIX PHYSICAL DIVISIONS.

- 1.The Northern Mountains,
- 2.The Northern Plains,
3. The Great Indian Desert,
- 4.The Plateau Region,
- 5.The Coastal Regions,
- 6.The Island Regions.

1. THE NORTHERN MOUNTAINS

World's highest mountain ranges are located in the northern part of India. Himalaya means 'the abode of snow'. Mount Everest, the world's highest peak, is located in this region.

Himadri or the Greater Himalayas, Himachal or the Middle Himalayas and the Shiwalik, the Outer Himalayas are the three ranges of mountains in this region. Rivers like The Ganga, The Yamuna, The Brahmaputra, The Satluj and The Indus originate from here. The popular hill stations of this region are Mussoorie, Shimla and Darjeeling.



IMPORTANCE OF THE HIMALAYAS

1. They protect us from the cold winds blowing from the north.
2. They bring heavy rainfall to the northern plains.
3. The rivers originating from the Himalayas make our land fertile

2. THE NORTHERN PLAINS

To the south of the Himalayas lie the Northern Plains or the Indo-Gangetic plains. It is a flat region watered by the Himalayan Rivers. These rivers deposit silt or alluvial soil on this plain, which makes the region very fertile. Many crops like wheat, rice, sugar cane and cotton are grown here.



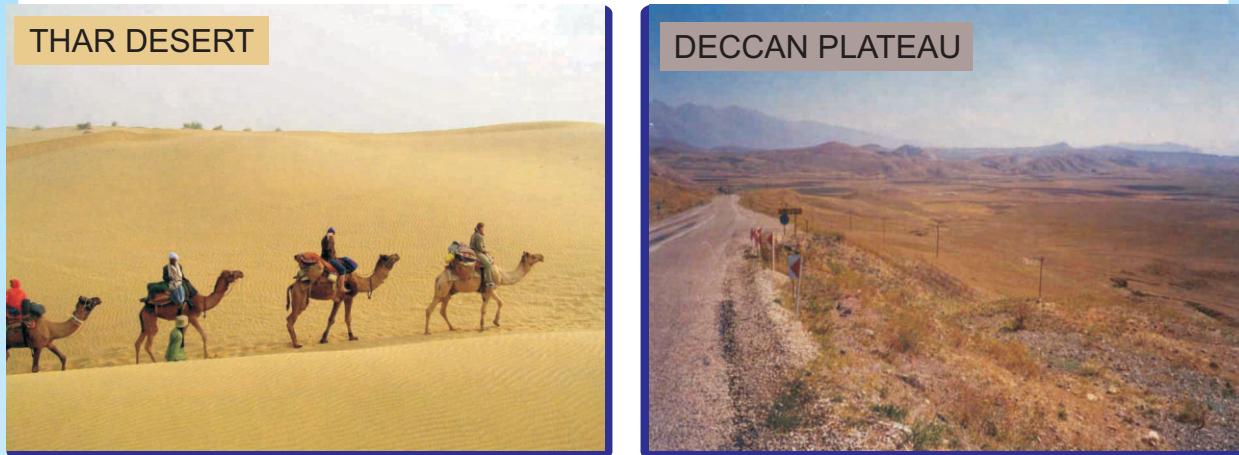
The delta made by Ganga and Brahmaputra is called Sundarbans. It is the largest in the world. This region is thickly populated. Some important places located in this region are Delhi, Agra, Allahabad and Kolkata.

3. THE GREAT INDIAN DESERT

The sandy area known as the Thar or the Great Indian Desert lies to the north west of India. It receives very little rainfall and so it is very dry and sandy. Hot winds and sand storms are very common here.

These winds make sand hills called **sand dunes**. They keep shifting every time when there is a strong wind. There are a few **oases** in this area. [An oasis is a green and fertile place in a desert or wasteland.] A few crops are grown around these oases. People rear **camel and cattle**.

People keep moving from place to place in search of food and water. The **Indira Gandhi Canal** supplies water to the farmers of Rajasthan. The camel is called the **Ship of the Desert** as it can walk easily in the sand and go without water and food for days together.



4. THE PLATEAU REGION

Plateaus are also called tableland. They are elevated portions of the earth. The plateau region of India is divided into three main parts. They are **The Malwa Plateau** in the west **The Chota Nagpur Plateau** in the north and **The Deccan Plateau** in the south.

The Deccan Plateau lies between the western ghats and the eastern ghats in the south. This Plateau is surrounded by chains of hills called the **Western Ghats** in the west and the **Eastern Ghats** in the east. This Plateau slopes from west to east.

Important rivers of this region are **Mahanadi, Godavari, Krishna, and Cauvery**. These rivers start in the west and flow into the **Bay of Bengal** in the east. The west flowing rivers **Narmada and Tapti** start in the east and fall into the **Arabian Sea**. Most parts of this region have black soil. **Cotton and sugar cane** are the major crops here.

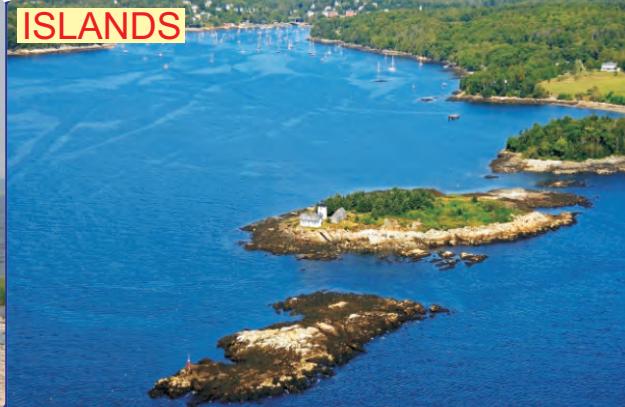
5.THE COASTAL REGIONS

Narrow strips of plains are found along the east coast and the west coast of India. They are called **The Eastern Coastal Plains** and the **Western Coastal Plains**. The two coasts meet at **Kanniyakumari**.

COASTAL REGIONS



ISLANDS



6.THE ISLAND REGIONS

An **island** is a piece of land surrounded by water on all sides. The islands that belong to India are **Lakshadweep** in the Arabian Sea and the **Andaman** and **Nicobar** islands in the Bay of Bengal.

INDIA POLITICAL DIVISIONS

India is a democratic Republic. It has been divided into smaller areas called States and Union Territories for effective administration. We have a **Central Government** which looks after the affairs of the whole country and the affairs of the states are looked after by the **State Governments**. At the state level the governments are elected by the people of that state. We have 29 states and 7 union Territories and New Delhi is the National capital territory.

In which direction is the capital city of India located? _____

If a tourist from a foreign country visits India where will you take him/ her? Why? _____

Union Territories are ruled directly by the Central Government. The President of India appoints an Administrator or Lieutenant-Governor for each union territory.



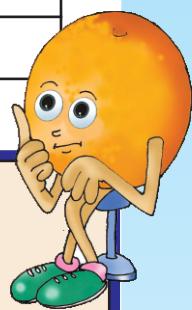
With the help of the map given in the previous page ,
Write the capitals for the following states .

1.	Andhra Pradesh	
2.	Arunachal Pradesh	
3.	Assam	
4.	Bihar	
5.	Chattisgarh	
6.	Goa	
7.	Gujarat	
8.	Haryana	
9.	Himachal Pradesh	
10.	Jammu and Kashmir	
11.	Jharkhand	
12.	Karnataka	
13.	Kerala	
14.	Madhya Pradesh	
15.	Maharashtra	
16.	Manipur	
17.	Meghalaya	
18.	Mizoram	
19.	Nagaland	
20.	Odisha	
21.	Punjab	
22.	Rajasthan	
23.	Sikkim	
24.	Tamilnadu	
25.	Tripura	
26.	Telangana	
27.	Uttar Pradesh	
28.	Uttarakhand	
29.	West Bengal	



Find out and write the names of Union Territories and its capitals with the help of the political map of India

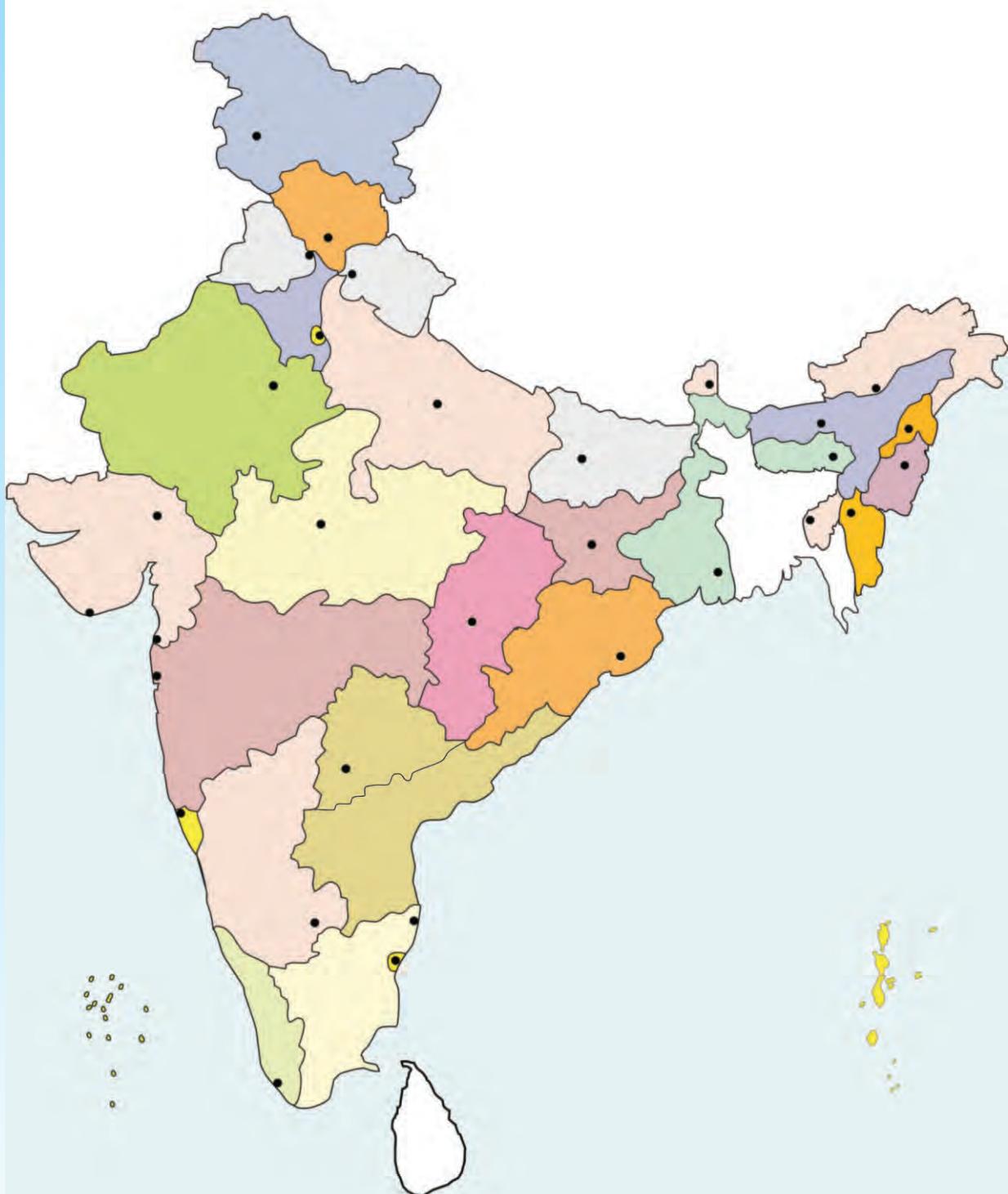
SL.NO	UNION TERRITORY	CAPITAL



FACTS

1. India got its name from the word Indus.
2. The snow – clad Himalayas have been described by Kalidasa as the 'King of Mountains'
3. The camel is called the ship of the desert because it is used as a "beast of burden" in the deserts.
4. Most of the beautiful cities of India are located on the plateaus, E.g. Gwalior, Bhind, Morainia and Shirpuri.
5. Rajasthan is popularly known as 'the most colourful desert in the world' and is a Number one Tourist destination.
6. The Andaman and Nicobar Islands consist of a group of 204 Islands. Lakshadweep has 43 islands.
7. Port Blair, the Capital city of the Andaman was the dreaded site of the cellular jail used by the British for banished convicts.
8. Marina beach in Chennai is the second longest beach in the world.
9. India is the largest democracy in the world and one of the most ancient civilizations.

LABEL THE STATES AND ITS CAPITALS IN THE GIVEN MAP.





ACTIVITIES (WITH THE HELP OF ATLAS)

1. Write the names of the states and capitals that begin with the letters given.

States

G _____
O _____
A _____

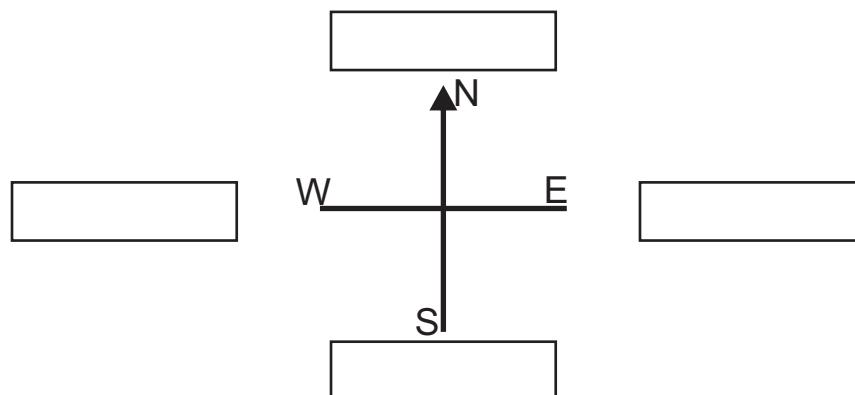
Capitals

S _____
H _____
I _____
M _____
L _____
A _____

2. Which is the smallest state in India?
3. Write the names of the mountain ranges, islands, valleys, rivers and plateaus in India.
4. Which is the southern tip of India?
How would you reach there from your place?
5. A cultural dance troupe starts from Tamilnadu by train to give performance in New Delhi.

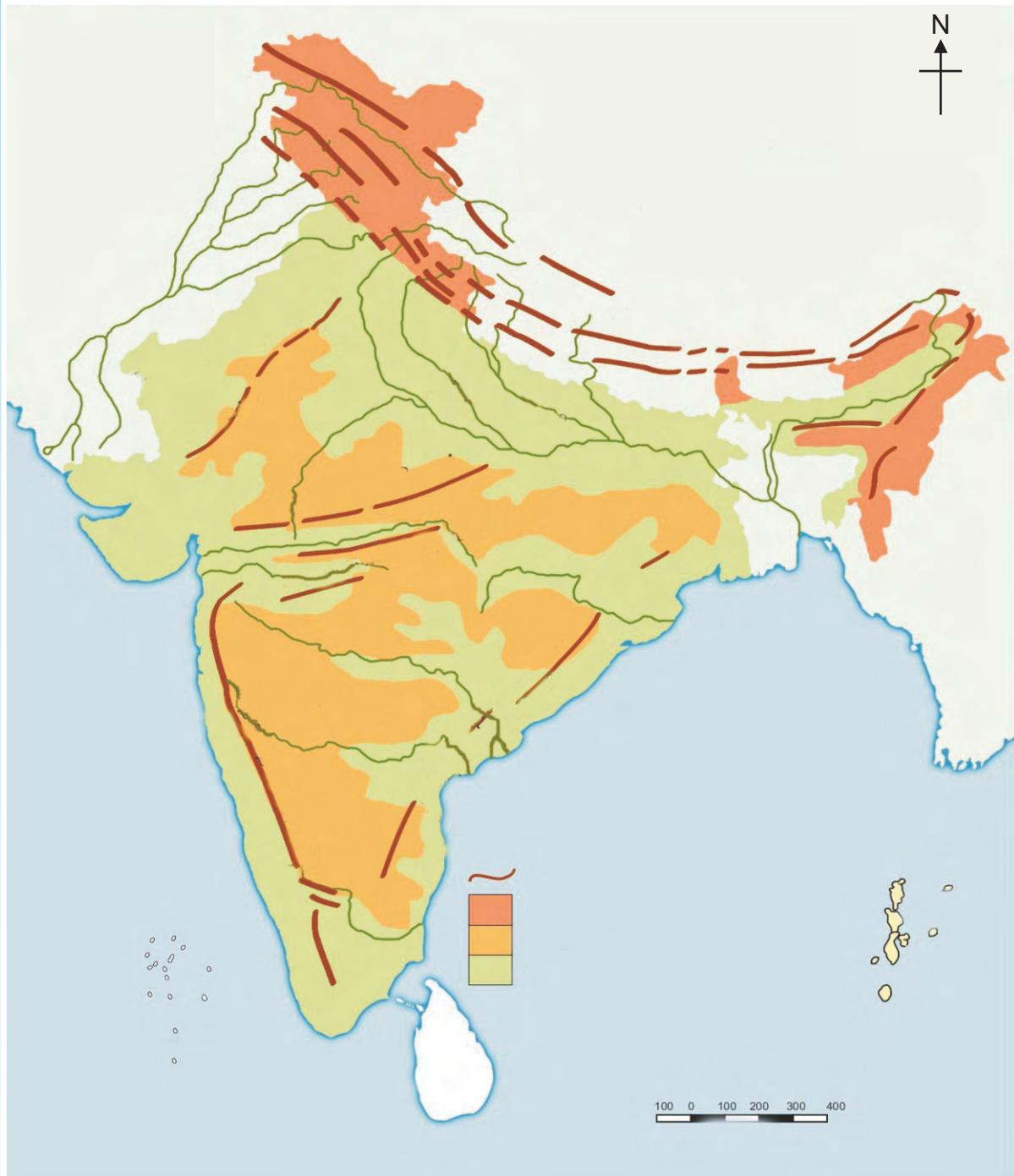
List the states they have to pass through on their journey to New Delhi.

6. Collect the wrappers of household items. Find out where these products are manufactured. Paste a piece of that cover in the state in which it is manufactured.
7. Write the boundaries of India in the word web.



MARK THE FOLLOWING IN THE GIVEN MAP

1. Deccan Plateau
2. Thar Desert
3. Coastal Plains
4. Mountain Ranges



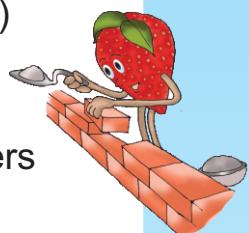
EXERCISE

I. UNSCRAMBLE THE WORDS AND FILL IN THE BLANKS.

1. I am the largest desert in India _____ (HART)
2. I am an island region of India _____ (EEWDPALKAHS)
3. I am the highest peak _____ (TESEREV)

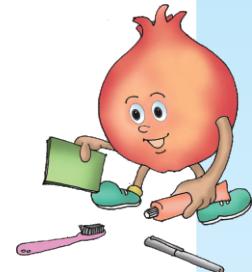
II. FILL IN THE BLANKS

1. _____ and _____ rivers originate in the Himalayas.
2. The _____ is called the ship of the desert
3. The Northern Plains are also called the _____
4. The Andaman and Nicobar islands lie in the _____
5. The Coastal Plains meet at _____



III. MATCH THE FOLLOWING

- | | | | |
|------------------------|---|-----------|----------|
| 1. Thar | - | island | () |
| 2. Andaman and Nicobar | - | desert | () |
| 3. Himalayas | - | tableland | () |
| 4. Northern Plateau | - | mountains | () |



IV. ANSWER THE FOLLOWING

1. Why are the Himalayas important to India?
2. How do the rivers in the Northern Plains have water even in summer ?
3. What is a sand dune? How are sand dunes formed in a desert?
4. Why do most rivers in the Deccan plateau flow from west to east?
5. Why has India been divided into States and Union Territories?
6. How are Union Territories governed?



V. ACTIVITY

Make a Collage for the classroom on India - Unity in Diversity



NATIONAL SYMBOLS

The national symbols of India are unique. They represent the spirit, values and ideals of our nation. They are helpful in developing the feeling of universal brotherhood. We, as Indians, should always respect these symbols.

NATIONAL FLAG

Our National Flag is horizontal and has three colours Saffron at the top, White in the middle, stands for truth and justice and Green at the bottom, stands for prosperity and growth.

In the centre of the white band we have a navy-blue wheel which represents the **chakra**. It is adopted from the **Sarnath Lion Capital of Ashoka**. It has **24 spokes**.



The design of the National Flag was adopted by the Constituent Assembly of India on **22 July 1947**.

NATIONAL EMBLEM

The National Emblem is a symbol of our country's authority. It was adopted by the Government of India on **26 January 1950**.

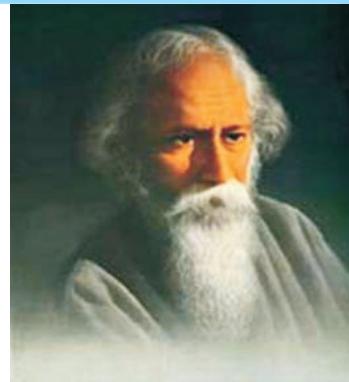


The emblem consists of three visible lions and the fourth being hidden from view. The wheel appears under the lions with a bull on the right and a horse on the left. Written below in Sanskrit.

The words **Satyameva Jayate's**, meaning '**Truth Alone Triumphs**', were adopted to show the world that India is a peace loving country.

NATIONAL ANTHEM

Our National Anthem Jana Gana Mana.... was written by the great poet and writer Rabindranath Tagore. The song which Tagore wrote had 5 stanzas out of which only the first 13 lines were chosen as our National Anthem .



We should sing it within 52 seconds. It fills us with a strong sense of pride and unity.

NATIONAL ANIMAL – TIGER

The magnificent tiger is a combination of grace, strength, agility and enormous power. It has earned its pride of place as the national animal of India.



Out of eight races of the species known the Indian race, the Royal Bengal Tiger, is found throughout the country except in the north-western region

NATIONAL BIRD – PEACOCK

The Indian peacock is the National Bird of India. The male of the species with a glistening blue breast and neck and a spectacular bronze-green tail of around 200 elongated feathers is the National Bird. The elaborate courtship dance of the peacock, fanning out the tail and preening its feathers is a beautiful sight.



NATIONAL SONG



Our National Song **Vande Mataram** was composed by **Bankim Chandra Chatterji** in Sanskrit. It was a song that served as a motivation to the Indians during the freedom struggle.

NATIONAL FLOWER – LOTUS

Lotus is the National Flower of India. It is a sacred flower and occupies a unique position in the art and mythology of ancient India. It has been an auspicious symbol of Indian culture since time immemorial.



NATIONAL TREE – BANYAN



The National Tree of India is the Banyan tree. It is a huge tree with deep roots .It symbolises the country's **unity**. This tree is considered immortal and is an integral part of the myths and legends of India. Even today, the banyan tree is the focal point of village life .

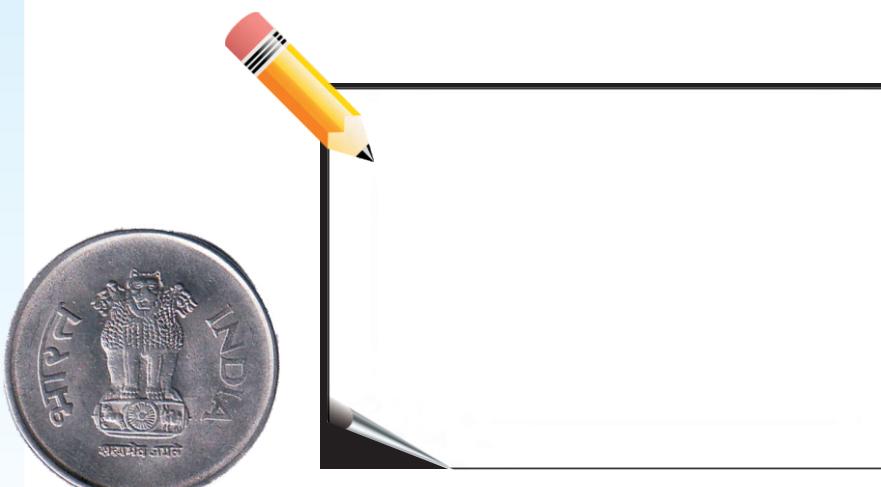


NATIONAL FRUIT – MANGO

Our National Fruit is Mango. Mango is called the **Food of the Gods**.The word mango originated from the Tamil word "mangai"

Our National Symbols depict our rich culture and tradition. We as Indians should know the values behind these symbols and respect them.

Trace the emblem using a coin here



EXERCISE

I. FILL IN THE BLANKS

1. The _____ symbols represent the spirit, values and ideals of our nation.
2. The design of the National Flag was adopted on _____
3. Our National Anthem was written by _____
4. There are _____ spokes in the wheel of our National Flag.
5. _____ is our National Song.

II. MATCH THE FOLLOWING

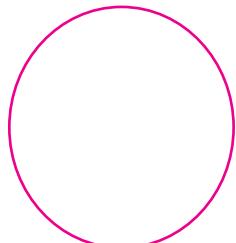
- | | |
|--------------------|----------------------|
| 1. National Emblem | - Peacock |
| 2. National Animal | - Lotus |
| 3. National Flower | - Tiger |
| 4. National Anthem | - Sarnath |
| 5. National Bird | - Jana – gana – mana |

III. ANSWER THE FOLLOWING QUESTIONS

1. What do the three colours of our National Flag stand for?
2. What is written at the base of our National Emblem?
3. When do we hoist the National Flag in our schools?
4. What is the duration of time to sing the National Anthem?

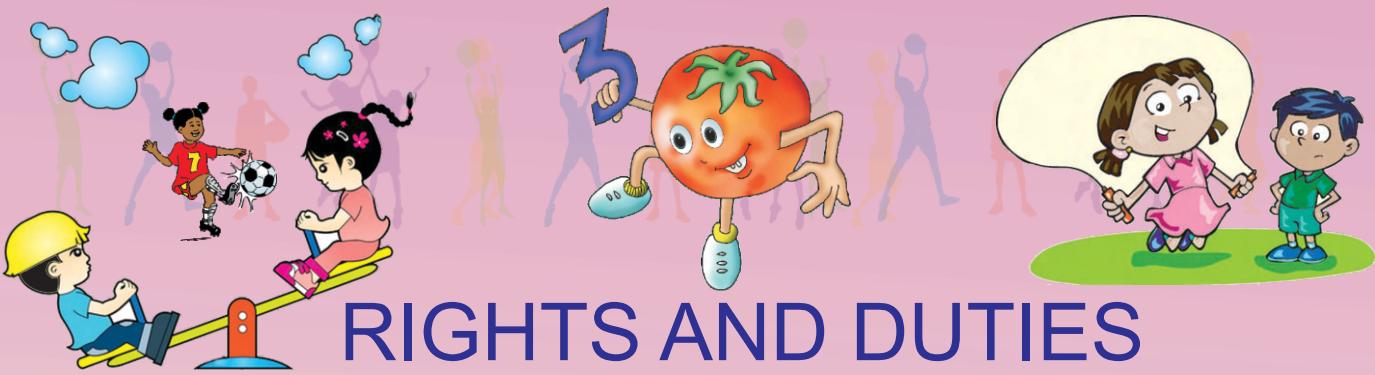
IV. ACTIVITY

1. Draw the National Flag and colour it.
2. Find out how the Flag looked before our independence.
How was it different from our present National Flag ?
3. Collect the national flags of different countries, paste it in your scrapbook.
4. Design a symbol and a motto for your school! What does it symbolise ?



SYMBOL

MOTTO



RIGHTS AND DUTIES

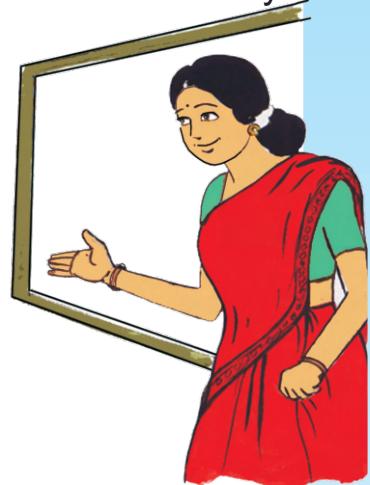
When Mrs.Kamala entered the class some of her students were engaged in serious discussion. The moment they saw their teacher they stopped and stood up.

Mrs. Kamala asked

"What was the argument about?".

Sita started slowly, "We were discussing about the government . Please tell us about our government." "India is an independent democratic country. It has a **written constitution,**" began the teacher.

"What is a Constitution?" asked Sakthi.



A Constitution is a legal document. It clearly states the powers and functions of the government and the rights of the people. These rights are called the **basic or fundamental rights.**

FUNDAMENTAL RIGHTS

"Basic or fundamental rights" are important for an individual to develop his or her personality.

THE SIX FUNDAMENTAL RIGHTS ARE

- ❖ Right to Equality
- ❖ Right to Freedom
- ❖ Right against Exploitation
- ❖ Right to freedom of Religion
- ❖ Cultural and Educational Right
- ❖ Right to Constitutional Remedies



"What do you mean by **Right to Equality**?" Saritha asked.

The teacher answered, "It means that all are equal before the eyes of law."

No one can be discriminated on the basis of caste, colour, religion, creed or sex. This right is applied in the matters of education and employment".



"But can we enjoy all these rights?" asked Vijay.

"Oh, yes!" the teacher explained, "In India we enjoy a lot of freedom. All citizens have the right to express themselves freely, to practise any religion, to move freely within the country, to live anywhere in India and to take up any job or practise any profession."



But we should remember to respect the freedom of others while enjoying ours".

"Are these rights and freedom meant for children also?" Kumaravel asked. "Yes, of course. These are meant for all the citizens of India", the teacher answered.

Then why do we see children selling things on the roadside?

"It is really sad that such things happen now. They should be given opportunities to get education. Poverty should not be a hindrance to their development. **The Right against Exploitation** is included in our Constitution. To protect children, women and the poor, our Constitution says that children below the age of 14 years should not be forced to work.

Right of Children to Free and Compulsory Education Act, 2009. This Act makes education a fundamental right of every child between the age of 6 to 14."

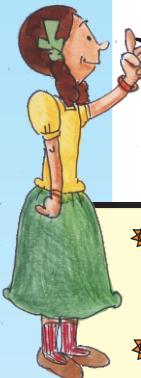




"What do you mean by the **right to constitutional remedies**?"

"It means, the citizens of India have the right to go to the court of law for justice if any of their fundamental rights is violated".

Our Constitution hints at certain **fundamental duties** for the citizens. We should observe all those duties. Rights and duties are like two sides of the same coin. While exercising our rights we should also remember that we have certain duties to perform.

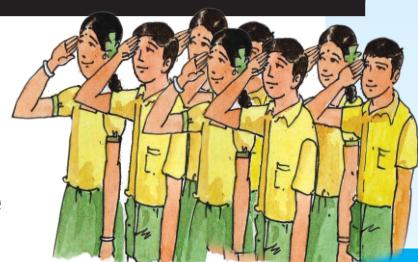


"What are they?" asked Lithisha.

The teacher listed the duties,

- ★ Every citizen should respect the constitution of India, National flag and National Anthem.
- ★ We should follow the principles for which our leaders fought.
- ★ We should be willing to help our country when needed.
- ★ We should remain united.
- ★ We should take care of public property.
- ★ We should take care of forests, rivers, lakes and wild life which form our natural environment.
- ★ We must get rid of all superstitions and learn constantly to reach excellence.

But these rights and duties are meant for adults. How about children like us? asked Balamurugan. Anand asked, "Is there any law that protects the interest of children?"



"All children have a right to live, to have a name and nationality, to have a good quality health care, to be protected from violence and neglect and to say what they think", the Teacher concluded with these words.

ACTIVITIES

1. LIST THE RIGHT THINGS TO DO IN THE CLASS.



2. WRITE A "CLASSROOM CONSTITUTION"

Ask students to suggest rules to conduct the classroom smoothly .

As each rule is proposed, have the class vote on whether it should be included or not in the document . If majority in the class vote for it, the rule becomes part of the constitution.

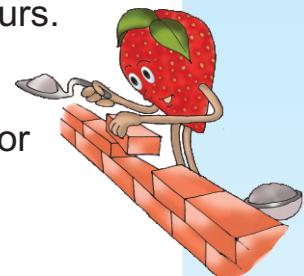


EXERCISE

I. WHICH OF THE FUNDAMENTAL RIGHTS AND DUTIES CAN BE APPLIED UNDER THE FOLLOWING SITUATIONS?

1. Ramu's father is a gardener. They are poor and so he doesn't go to school.
2. My neighbour Sankar is leaving for Delhi as his father has got a job there.
3. Our class is going to clean the near by temple this week end.
4. Poonam is 8 years old. She works in a factory for long hours.

II. COMPLETE THE FOLLOWING SENTENCES.

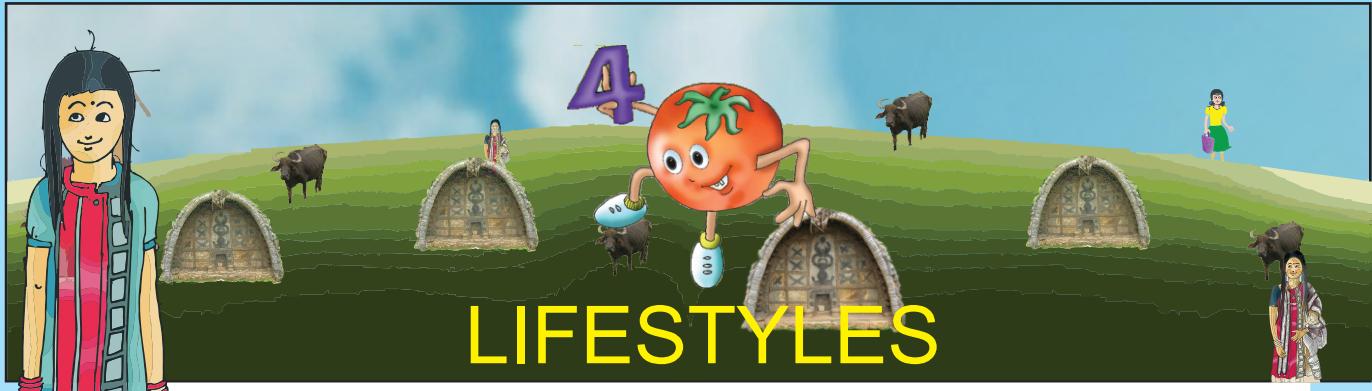


1. _____ are essential for an individual to develop his or her personality to lead a decent life.
2. All are equal before the eyes of _____.
3. Right _____ is included in the constitution specially to protect children, women and the poor.
4. We should follow the _____ for which our leaders fought.
5. Rights and duties are like two sides of the same _____.

III. ANSWER THE FOLLOWING

1. What are fundamental rights?
2. List any three fundamental rights?
3. Explain the following?
 - a) Free and compulsory education 2009.
 - b) Right to Constitutional Remedies.





LIFESTYLES

The lifestyle of people depends on the work they do, the way they spend their free time and money and the values on which they have based on their lives. In other words, it is their needs and wants which are influenced by their family and cultural background.



Every Indian city has people of different types of cultures and customs adapting to the new situation and living together with the locals peacefully. These people are the image of our nation and the example of unity in diversity. This lesson is a narration of people who have adapted themselves to a new way of life out of necessity.

Through them we can understand the changes and the ability of people to adapt to new lifestyles.

VASAMALLI-TODA GIRL

My name is Vasamalli. I am 9 years old. I live in **Kodap mund** **Udagamandalam** or **Ooty** as it is popularly known. I belong to a hill tribe called **Toda**. Our Toda settlements are called **Mund**. My father's name is Korattas and he works in a tea estate .

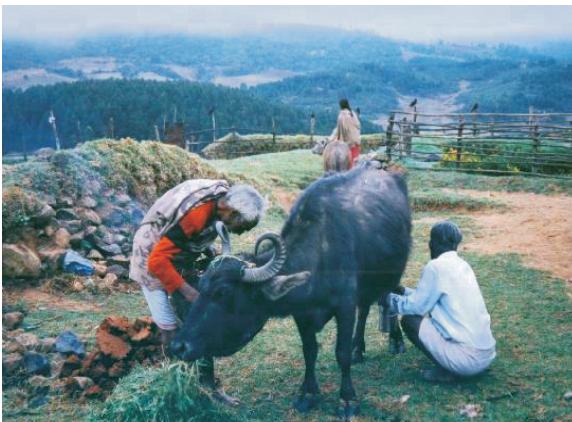
My mother's name is Pudumallisin. She is a teacher in a local school. I study in class IV in the same school. We walk quite a distance to reach school. I get up early in the morning and help my mother. After school, in the evening I hardly get an hour to play, as it gets cold very early in the evening. Whenever my mother gets time she tells me about her childhood.



VASAMALLI

She said that she had to struggle hard to escape child marriage and get educated, as education was not common especially for girls. I was surprised when she said that my grand father was very eager to increase the number of buffaloes he had, as the person with largest number of buffaloes was considered the wealthiest in the Mund.

The old ideas are changing slowly because of our contact with people in the town. We do not live in the Toda hut which is built with bamboo, dried grass and loose stones piled one on top of the other, with a low entrance. Earlier this protected them from the cold and wild animals.



Now we live in well-built houses. We wear the traditional two piece white cloth (one around the hip and the other over the shoulder) during the religious ceremony **Kona Shastra** and on special occasions like marriage.

The piece worn over the shoulder is embroidered with black and red threads. We comb and plait our hair and do not curl it using butter like my grand mother. Our elders were pure vegetarians eating only the dairy products and vegetables. But now, we have learnt many things from others. So, our food habits have also changed. Though our life style has changed to a great extent; we still go to our traditional temple to worship the Goddess **Teikirshy** and follow the customs during birth and death.

How does your dress differ from that of the todas?

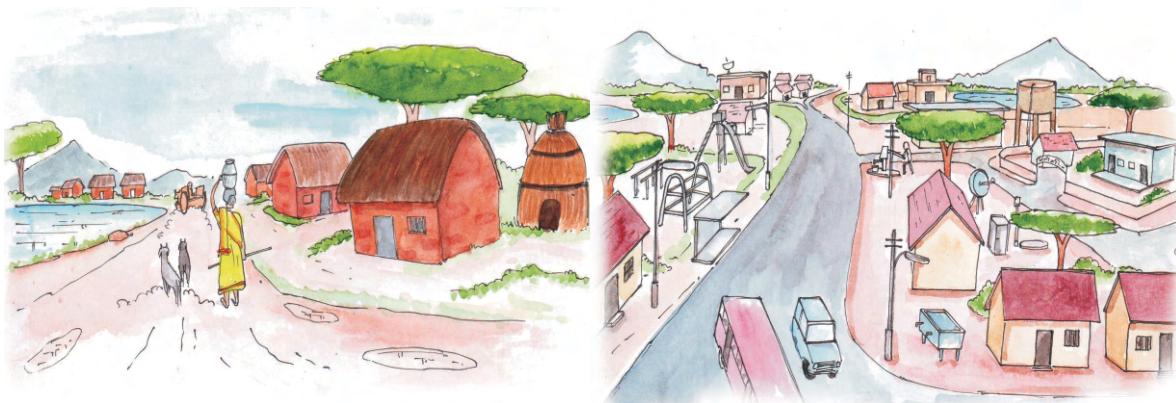
MANI-A FARMER FROM TANJORE

My name is Mani. I live in Alathur, Thanjavur district. I was born and brought up here. I am a farmer and I own a small piece of land.



The **alluvial soil**, bright sun and the river **Cauvery** have made this district suitable for agriculture. Rice is the chief crop. Our district is called as the **Rice bowl** of Tamil Nadu. The north east monsoon generally gives plenty of water. So, I cultivate rice and banana. I learnt about cultivation from my grandfather and father. Years back when I was young, things were different.

I could not continue my studies after school as there were no proper bus facilities to go to the college in the town. So, I started helping my father. Life was very tough then, as we dependent on the north east monsoon. When it failed we had to go through a lot of hardship.



There was no proper road and transport to move our produce to the market. Now things have changed. We have schools and colleges for our children, well laid roads, supply of electricity and water to our lands and homes. Many new centres of entertainment have come. When we have a good harvest, we enjoy life like any body else in the big cities. But at times the untimely rains and cyclones shatter our life. Causing heavy loss some farmers are not able to manage the situation.

The government helps the farmers in many ways. It has brought water even to the interior parts through irrigation projects and canals. We have community halls where television sets and radio are kept for public use. All new technological developments in farming are made known to us either through mass media or through special officers. Now small farmers can come together and form **co-operative farms**.

They have co-operative stores and banks which provide assistance in all matters of farming. I utilise my free time to find new ways to improve my yield. At present I am experimenting on **vermiculture** and **organic manure**. I enjoy being a farmer.

RANBIR - A COOLIE

My name is Ranbir. I am 30 years old. I belong to **Kandivli** (Kandivali) a suburb near **Mumbai**. My parents work in a stone quarry there. They wanted me to take up a job in one of the stone quarries, but I did not like the idea. I studied only up to 8th Class. I came to Tamilnadu hoping to get some job. Accidentally I became a coolie.



The life of a coolie may look easy but actually I struggle a lot. From the time I get up in the morning my worries start. You will understand only if I tell you about my work conditions. I am a licensed coolie. All the licensed coolies are given serial numbers. We take turns to carry luggage. According to the system, every coolie gets a turn once in 2 or 3 hours. Inspite of the system, misunderstandings and quarrels are common. I should survive those moments.

I work for 10 to 12 hours a day. I charge travellers from Rs.50 to Rs. 300 depending on the luggage that I have to carry. I earn around Rs.200 a day. We are four in the family. With the rising prices I find it difficult to make both the ends meet.



When my children ask me to buy something, I borrow money from my friends; but it becomes a struggle while returning it.

Nowadays most of the passengers are not hiring coolies. They travel with less luggage and use trolleys and wheeled bags. So my earnings have come down. In all these years as a coolie, the only thing that makes me happy is that I have learnt many languages. I can speak English, Telugu, Malayalam and Tamil. I am now learning to drive a car.



SANTHOSH-OWNER OF A FASTFOOD SHOP

My name is Santhosh. I am 25 years old. I was born and brought up in Thirunelveli. My father works in a textile shop there. I studied up to 8th Standard. I was not interested in studies. I came to Chennai in search of a job. I was struck with wonder to see the buzzing traffic, the crowd and the high buildings. One day, after eating in a roadside shop I was sitting near by. The shop owner enquired about me. I told him my story. ob. He gave me food, a place to stay and paid me a small amount as monthly salary.



In the beginning I helped him clean plates and utensils, clean the shop and sometimes even in cooking. I worked with him for three years. I was keen to start a fast food shop of my own and the shop owner helped me to setup a road side shop.

By 5 o' clock in the evening I was there in the beach with my food items. Within a short period, my business picked up.

How do you spend your free time ?



Things have changed a lot in the last few years! Earlier, very few people bought food from the road side shops. I prepare chaat items, vada pav and some typical Thirunelveli sweets and dishes. Whatever I prepare gets sold. The demand from the people has made me creative. I try out some innovative dishes too.

Now people have become health conscious and very particular about cleanliness. People from all walks of life come with their family to enjoy the evening, eat at my shop and go home relaxed. I am earning enough money. The number of fast food shops have increased and that worries me a lot.

There are times when I miss the lush green paddy fields, the early morning fresh air, a walk along the bank of **Thamirabarani River** and my mother's affectionate calls.

Put the following in the correct columns.

Chips,Ragi malt,Sprout grains,Samosa,Vegetable Salad,Baked Bean,Fresh Juices,Packed Juices



HEALTHY FOOD	JUNK FOOD

FACTS

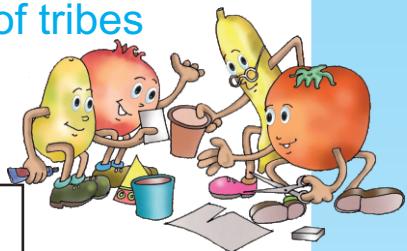
1. The Todas are a small pastoral community.
2. Worship of God is an important part of the daily life of Indian people.
3. Respecting elders is a common trait among Indians.
4. Namaste is the traditional Indian style of greeting.
5. 'Athithi Devo Bhava' - A guest is always treated as God.

I.ACTIVITIES

1. Discuss with your teacher how the lifestyle of tribes differ from others.

- 2 List the professions in your locality.

--



3. GROUP DISCUSSION

- a. A farmer in the Nilgiris
- b. Latest developments in the field of agriculture.
- c. The fastfood culture
- d. The tribes of India

Divide the whole class into four groups and ask them to prepare a writing on the given headings and have a debate.

4. GROUP THE FOLLOWING IN THE COLUMNS GIVEN.

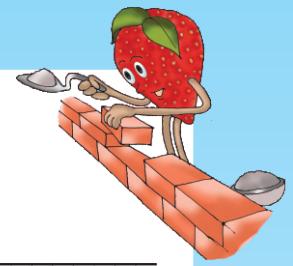
Mund,Noodles,luggage,farming,buffalo,fastfood,kona shastra, rice bowls,organic manure,railway station

THODAS	FARMERS	COOLIE	FAST FOOD SHOP

EXERCISE

I. FILL IN THE BLANKS

1. Earlier the huts of Todas were built with _____
2. Todas wear the traditional dress during _____
3. Mani is experimenting on _____
4. Ranbir is a _____ coolie.
5. Santhosh sells _____ and _____ at his roadside shop.



II. ANSWER THE FOLLOWING

1. Who are the best examples of unity in diversity?
2. What surprised Vasamalli?
3. Which monsoon gives plenty of rain to Thanjavur?
4. How long does Ranbir work in a day?
5. What makes Santhosh more creative?



III. GIVE REASONS.

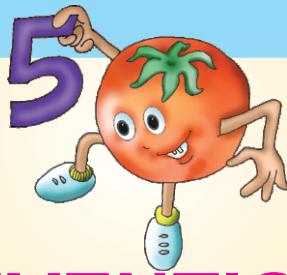
1. Vasamalli's grand father was keen on increasing the number of buffaloes he had.
2. Mani cultivates rice and banana.
3. Ranbir's earning has dropped down.



IV. COLLECT THE FOLLOWING INFORMATION ON THANJAVUR

Location	-
Climate	-
River	-
Monsoon	-
Crops grown	-
Important monuments	-

V. BRING OUT THE PLACES WHERE GEOGRAPHY IS LINKED WITH HISTORY IN THIS LESSON.



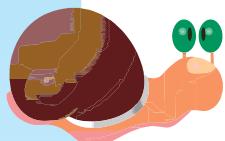
INVENTIONS

People say, "Necessity is the mother of invention", said the teacher.
Do you agree?

"No, I don't", said Malli. We can invent things for fun. "I have built a special house with just cardboard and cloth".

"I can take it with me wherever I go". "Wow!" said Mani.

"Where did you get the idea?" "From a snail", said Malli.



Have you invented anything just for fun? Name one!



"We can also invent games", said Kadir. Have you?

"Where did human invention come from?" asked the teacher.

"I am sure it is from nature", said Hemanth. "We can invent something if we are curious", said Ameen.

Now we have reached a stage where we cannot imagine a life without the electronic gadgets. Human life on earth has been a journey of inventions. Let us think about inventions of early human beings. Can you name one important invention?" asked the teacher.

"Fire", said Martin. He loved to invent new items to eat, in the kitchen.

"Right, let's talk about fire", said the teacher.

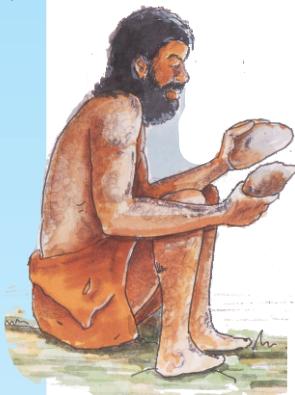
INVENTION OF FIRE

In the beginning man was scared of the forest fire and the lightning as he did not understand them. In course of time probably he saw bamboos causing fire while rubbing against each other and roots and meat tasting better when softened by fire. He also would have realised that bamboos could be bent to make various things.

"Could it be a girl or a woman who discovered these?" asked Menaka.

"Could be", smiled the teacher. "It could certainly have been a woman who discovered fire or it could even have been children who noticed and told their parents".

In course of time man understood that fire provides not only light and heat at night but also keeps the wild animals away.



As time passed by, man learnt to make fire by rubbing hard stones called **flint**. He also used stones as weapons to defend himself from enemies. With the discovery of fire the life of man changed. "Fire has always been sacred to man."

Now, with advancement in science and technology fire is used in thermal and nuclear plants, research centres and industries.

"Can you think of another important invention?" asked the teacher.
"Plough" said Shankar.

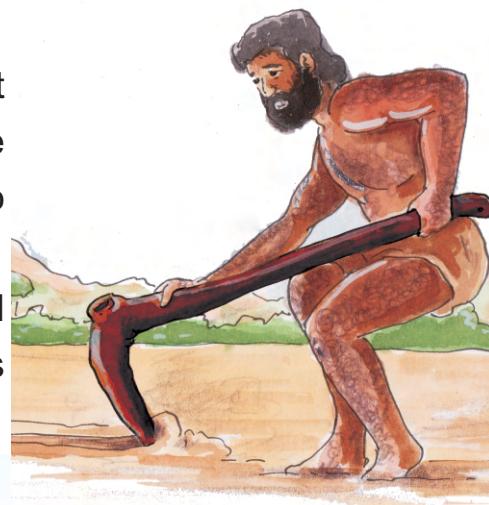
THE STORY OF THE PLOUGH

Agriculture is the backbone of any civilization. Early man observed that seeds produce plants. Man also understood that plants grow better in soil that had been loosened.

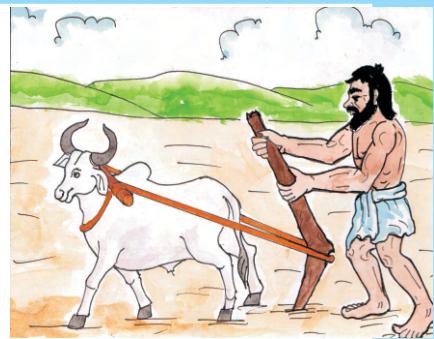
So he used sharp stones and bones to loosen the soil and learnt to produce his food.

People made the first **plough** about 8000 years ago. They used oxen to pull the plough. Thus the plough became a tool to prepare the soil for growing plants.

The first ploughs might have been used in the region which we call now as **Tamilnadu**.



Researchers say that the old word, 'nan gol' for plough means **nam**: oxen and **kol**: staff – The region which used it first is called as **Nanchilnadu**. Another Tamil word for plough is 'nanchil'! Nanchilnadu is famous for a variety of seeds. The original name of **Kanniyakumari** was **kazhi kudi** or the place of the plough.

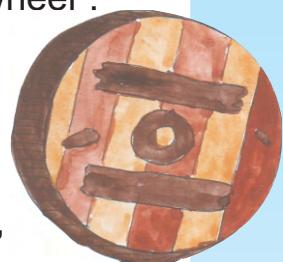


With the coming of plough, people settled in one place and built a consistent history. Tamilnadu has an ancient history of agriculture and a variety of seeds.

"The other important invention of the early man was the wheel". said the teacher.

"We learnt a little about it through Sembian's story in Class III", said Natasha.

"I am glad you remember what you learnt in the previous class", said the teacher.

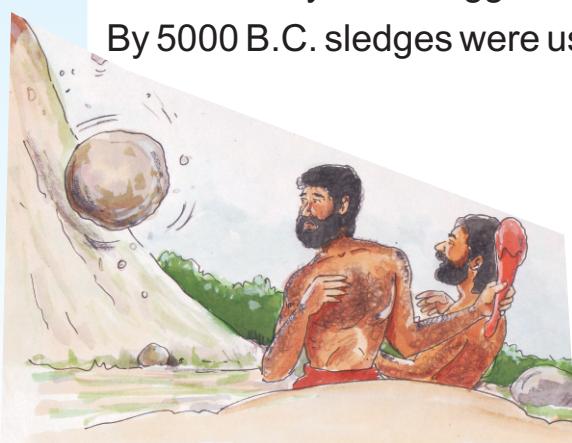


THE INVENTION OF WHEEL

It is not very clear as to when exactly the wheel was invented. But researchers say that it was probably 8000 years ago that man began using the wheel in **Asia**. The oldest wheel that exists today is from **Mesopotamia** [ancient civilization near Egypt], around 5000 years ago. It is believed that it was used in chariots drawn by horses. This is marked as one of the most important steps in the development of human civilization.

The most primitive vehicle must have been a hollowed out tree trunk in which early man dragged home things he collected in the forests.

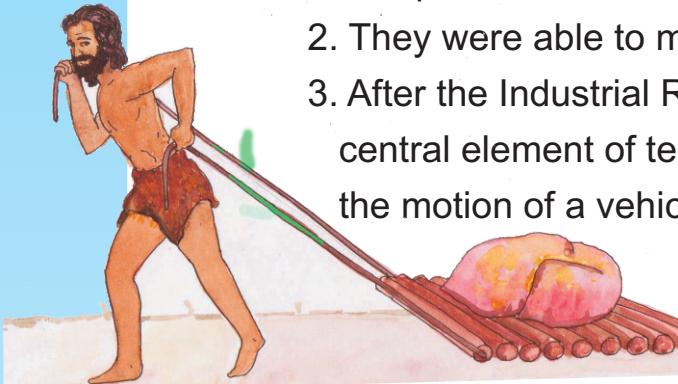
By 5000 B.C. sledges were used to move stone blocks.



Interesting facts on sledges: Egyptians used it when the pyramids were built. Eskimos used them pulled by dogs to carry cargo



IMPORTANCE OF THE INVENTION OF WHEEL



1. People could travel long distances.
2. They were able to move goods faster.
3. After the Industrial Revolution the wheel became the central element of technology - the wheel is used to facilitate the motion of a vehicle or a machine.

Most of the great inventions have been anonymous though humanity as a whole is benefited by them.

"Tell us about Indian scientists and inventors", asked Mary. "There have been many", said the teacher. "India has some very great women scientists as well". **Dr. Asima Chatterjee** evolved an Indian medicine for **epilepsy**! Some of the Indian scientists who made significant contribution to Science are:

	Evolution of stars	S. Chandrasekharan
	Atomic Energy	Dr. J. Bhabha
	Missile technology	A.P.J. Abdul kalam
	Structure & Function of the ribosome [cell]	V. Ramakrishnan

'Teacher, why are all inventions associated with men?' Purvi asked. The teacher smiled and answered, 'But women have contributed in their own way to the society. **Charles Babbage** was the designer of the modern computer. The first computer program was written by a lady, Ada Lovelace for Babbage's machine even before it was built.

Bessie Nesmith Mary Anderson	white correction fluid windshield wiper
Janaki Ammal	Ethnic botany

The teacher now talked to them about **Sir Jagadish Chandra Bose**.

One of the greatest scientists that modern India has produced is Sir. Jagadish Chandra Bose. He was a famous Physicist and Botanist. He was born on the 30th of November 1858 in East Pakistan now Bangladesh. His father's name was Bhagwan Chandra Bose, His mother's name was Abala Bose.



He graduated in Natural Science in 1884 and became a Professor of Physics at the Presidency College, Calcutta. He studied Plant Physiology and proved that plants have life by observing the pulse of the plant through experiments. He also designed an extremely sensitive automatic recorder to measure the growth of plants. He believed that all knowledge belonged to the world. He said, "A true student will not go after money or status – he will be committed to obtaining knowledge so that he can help humanity".

He founded the famous Bose Research Initiative in Calcutta for Physical, Biological sciences in 1917.

He was the first Indian to be honoured as a "Fellow of the Royal Society". He died on 23rd November , 1937 in Bihar.

To conclude the class the teacher said, "This planet of ours has undergone many changes in all respects whenever there was an invention".

Now it is for us to take care of this earth in all possible ways.

Write your favourite scientists' names here: _____

KNOWLEDGE UPDATE

INVENTIONS	INVENTORS
Electricity,Bulb,cinema etc	Thomas Alva Edison
Steam Engine	James Watt
Telephone	Alexander Graham Bell
Radio	Marconi
Television	J.L.Baird
Aeroplane	OrisIle Wright & Wilbur Wright
Pencil	N.J.Kando
Zip	J.Jatson
Tooth Brush	William Attis
Parachute	A.J.Camanin

ACTIVITIES

- 1.The names of the inventors are hidden in their own inventions along with an unwanted letters. If you remove it you will get the names of the inventors.
 - a) HALEHXAHNHDEHR GRAHAMBHEHLHL –Telephone
 - b) AWRAIGAHT ABROATHAERAS – Aeroplane
 - c) BEDIBSOBN- Bulb
- 2.Compare the lifestyle.

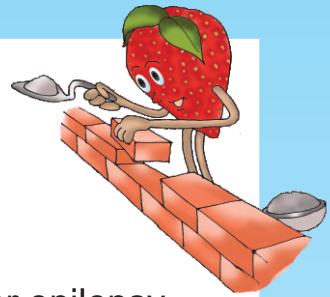
	Food	Dress	Dwelling place
Ancient Man			
Modern man			

- 3.Predict how the lifestyle will change in another 20 years?
-
-

EXERCISE

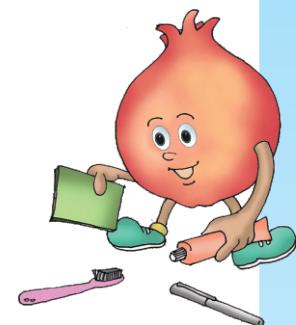
I. FILL IN THE BLANKS

1. _____ invented the modern pencil.
2. _____ discovered that plants had life.
3. _____ discovered an Indian medicine for epilepsy.



II. MATCH THE FOLLOWING

- | | |
|--------------------|----------------|
| 1. Edison | - Aeroplane |
| 2. Graham Bell | - Steam engine |
| 3. Marconi | - Telephone |
| 4. Wright Brothers | - Electricity |
| 5. James Watt | - Television |
| 6. J.L. Baird | - Radio |



III. IF YOU ARE GIVEN A CHANCE TO REDESIGN YOUR FAVOURITE THING.

(eg. car, camera, phone, pen, Television, dress etc.)

How would you do it?

Draw and show or make a model and explain.

IV. WHICH OF THE INVENTIONS IS THE MOST HELPFUL FOR MANKIND ACCORDING TO YOU? GIVE REASONS FOR YOUR ANSWER

V. TRY OUT A RAINBOW IN YOUR CLASSROOM

MATERIALS NEEDED:

CD/DVD, Torch Light, White Sheet

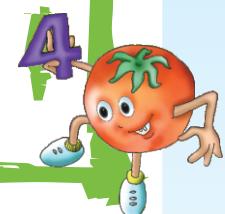
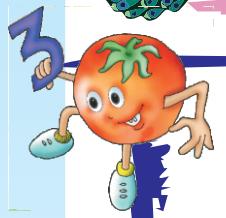


PROCEDURE:

Paste a sheet on the wall. Make the classroom dark. Now pass the light into the blank side of the CD/DVD and allow the light rays to fall on the white sheet. Now what do you see?
Have you ever seen something like that during a rainy day?

LET US RECALL

What comes to your mind when you think of each lesson?
Write in the space given.



'I can, I did'

Student's Activity Record

Subject:

