



**GOVERNMENT OF TAMILNADU**

# **SOCIAL SCIENCE**

**STANDARD - VI**

**Untouchability  
Inhuman - Crime**

**Department of School Education**

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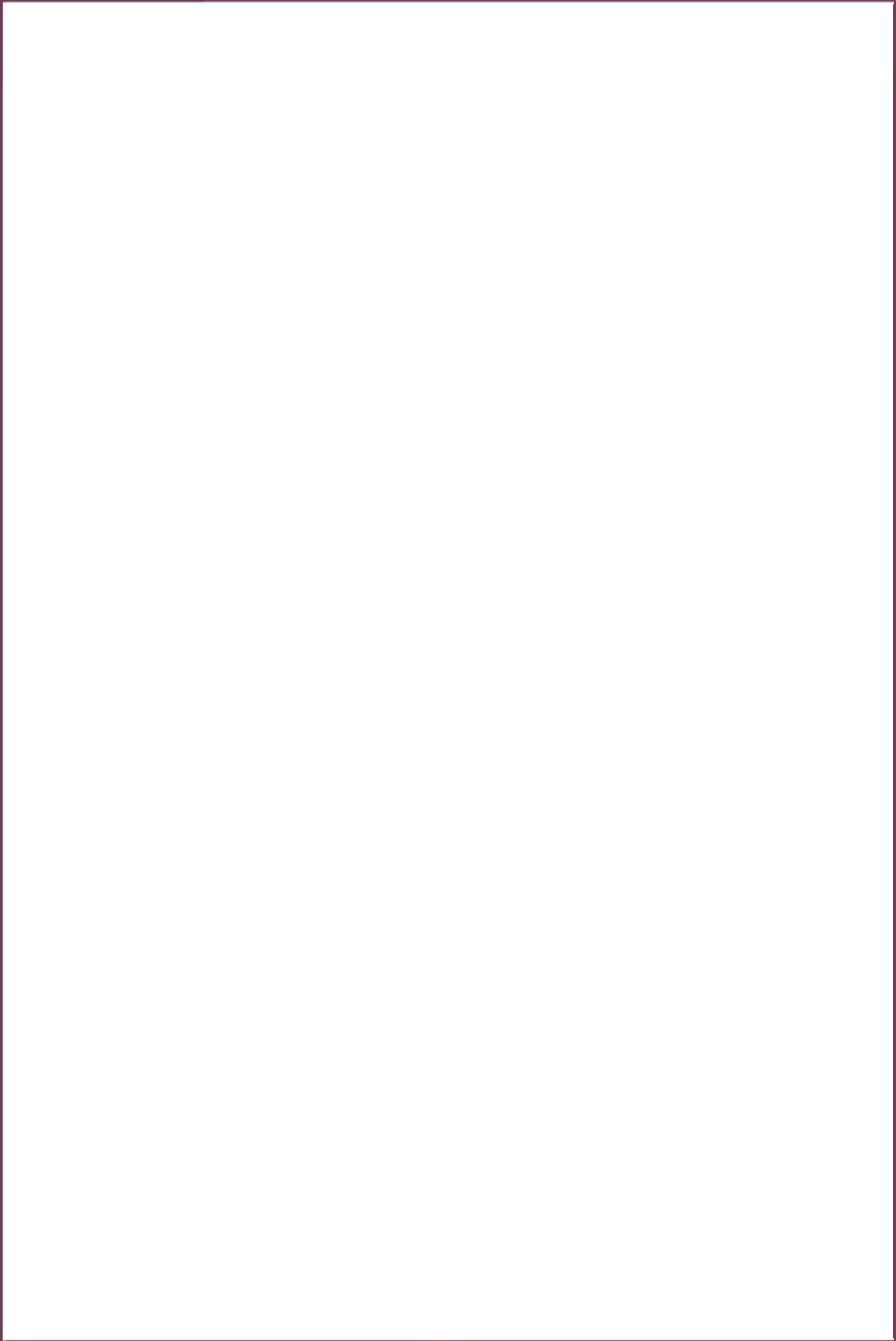
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## CIVICS

# 1. FAMILY AND SOCIETY

### Family

We live in houses. Who are the members living in our home?

We live with our mother, father, brothers and sisters. The number of members in each house differs from family to family. Some families consist of father, mother and a child, while other families consist of father, mother and two or three children.

Every house does not have the same number of members in the family. Some families consist of grandparents while other families consist of either grandfather or grandmother. It differs from family to family. While other families consist of father and son or mother and daughter. Some families consist of either sisters or brothers or children without parents.



### Society

Each and every person mutually depends on each other, according to their needs in a society. One group depends on another group and one community with another community. When various communities depend on each other and live together it is called a **Society**.

Families engaged in agriculture and weaving join as one, living and working together. People belonging to occupations like these live together.

Our relatives, neighbours, classmates and playmates co-exist as one in a society.

Our society enlarges from street, ward, town, taluk, district, state and country. The workers, manufacturers and employees throughout the country form part of the community.

In our house, our parents prepare our food and look after our needs. In several ways we socialize with our neighbours.

We help each other and because of this love and friendship develop.

Brothers and sisters from our neighbour's house visit, talk and play

with us. We also visit their house, talk and play with them. Our parents also do the same. They mingle with the neighbours.

A group of people who share emotions like joys and sorrows with each other is called a society. Feelings like joy, sorrow and prestige are the most important in the society.

### Community

A **community** consists of a group of people who live together for the common well being and purpose. They frame their rights and duties. In one society many communities may co-exist. Unity, duty, right, participation, security and development are the very soul of the community.

Society and community are interdependent and are interlinked.

We need to learn to live together and share in the work. We need to understand the feelings of others. We need to voice our opinion for the rights of people. People should come forward to participate and work together joyfully. Just as we thrive to

fulfill our needs, we should also participate and work for the public welfare. Family is the foundation for a joyful life. Society paves way for a peaceful life and the community helps to give security, rights, duties and prosperity.

Ellārum ōr kulam ellārum ōr inam  
 Ellārum Indhiya makka!  
 Ellārum ōr nirai ellārum ōr vilai  
 Ellārum in nāttu mannar! - nām  
 Ellārum in nāttu mannar - ām  
 Ellārum in nāttu mannar!  
 - Subramania Bharathiyar.



Living in one house and sharing meals cooked under the same roof is called family.

Analyse the following and differentiate- Production, work and service help to promote ones well being. (Educational institutions, books, equipments, travel, shirt, sugar,dhal, computer, jewellery, provisions, medicines, chairs, tea, coffee, thread, fruits, vegetables, milk, meat and police)

S.No.	Producer	Employee	Service

## Evaluation:

### I. Choose the correct answer:

1. Which information is correct for the development of the society?
  - a) Society → family → individual → community
  - b) Individual → family → community → society
  - c) Family → society → individual → community
2. The occupation which unites the society.
  - a) agriculture
  - b) carpentry
  - c) business

### II. Fill in the blanks:

1. People \_\_\_\_\_ on each other.
2. Living in one house and sharing meals cooked under the same roof is called \_\_\_\_\_.
3. We need to \_\_\_\_\_ each others feelings.

### III. Match the following:

- |                                |   |                               |
|--------------------------------|---|-------------------------------|
| 1. The number of members       | - | join as one and work together |
| 2. We need to raise our voice  | - | to lead a peaceful life       |
| 3. Families engaged in weaving | - | each other                    |
| 4. Society helps               | - | differ from family to family  |
| 5. We depend on                | - | for the rights of people      |

### IV. Answer the following:

1. What is meant by 'living together'?
2. What is meant by the term 'community'?
3. What is meant by the term 'society'?

## 2. SOCIETY AND SCHOOL

The society works hard to achieve its objectives everyday. The society tries to fulfil the aspirations and aims of the individuals by satisfying the needs of the people. Such as economic progress, improving the opportunities and facilities, provision of healthy life, security, hygienic and nutritious food, drinking water and fair distribution.

Education is the basic investment which paves way for the allround development of the society. Therefore the society aspires to achieve its aim by guaranteeing basic education for all children in the society.

To achieve this the government is implementing **free and compulsory education for all**.

The progress and the bright future of the society totally depends on the basic education facilitated to young children.

The school is one of the social institutions. It paves the way for development of education in the society. Children are the future citizens. The school imparts discipline, responsibility and self control to the youth. All the activities of the school thrive for the fulfilment of the expectation of the society.



### Activity:

Fill in the blanks from the options given below:

[owner, society, teacher, faith, apply, participates, interlinked, land, donations, requirements]

1. The society was the first to \_\_\_\_\_ for schools.
2. The society provides the necessary \_\_\_\_\_ to establish schools.
3. Schools are established to fulfill the necessary \_\_\_\_\_ in the society.
4. The society sends its children to schools because they have \_\_\_\_\_ in the school.

5. The society is the \_\_\_\_\_ of the school.
6. The society gives \_\_\_\_\_ to schools.
7. The society actively \_\_\_\_\_ in all the school functions.
8. Schools thrive well because they are \_\_\_\_\_ with the society.
9. It is the responsibility of the \_\_\_\_\_ to link the society and the school.
10. If the school develops the \_\_\_\_\_ also develops.

The school is the stepping stone for the progress of the society. Therefore the society provides all the necessities to the school immediately. The society is the first beneficiary of the school service. The society is waiting to provide the school with the necessary requirements in order to secure the bright future of its children.

The parents with the help of the school instills in the students human values like discipline, self-control, equality, co-operation, community living, helping tendency and unity. Teachers are in par with God in the society.

The family, community and society should help the student to strictly adhere the moral values imparted by the school. Teachers and parents should help to create an environment conducive for children. The good values acquired by the students in school should be followed and developed further. School should serve as a miniature society.

The quality of primary education is the joint venture of parents and

teachers. The students will ultimately be affected if either of them fail to do their duty.

At school, the students should learn discipline and follow it accordingly. The students should follow the rules and regulations of the school such as being punctual, having regular attendance, self discipline, being attentive in class and showing interest in studies, being friendly with the students, not wasting drinking water, being on time and maintaining silence during prayer assembly.

When the students involve themselves in the activities of the society, it is called student-community, adolescent community or youth community. Students should learn the code of conduct to be adopted in the society. There should be no variation between what they learn and what they practice. Students in their growing stage should learn good manners, citizenship and leadership. The school should inculcate leadership qualities among students.

Match the following :

### Student- Community

1. Students need
2. Lessons taught in school
3. Bathe daily
4. In school and outside
5. Teachers' instructions
6. Do not waste water
7. School cleanliness
8. Among students
9. Parents and elders
10. Outside the school
11. Midday meals
12. Behave well

### Duties

- wear clean uniforms
- practice clean habits
- should be followed by students
- should be maintained
- do not fight but be friendly
- should be respected
- be safe and united
- will be praised
- revised by the students everyday
- be punctual in school
- use when required
- wash hands and do not waste food

Mangoes that we get from a branch of the same tree will not have the same size, weight and appearance even though it has the same fragrance, taste, colour and quality. Similarly even though two people look alike having the same colour and physical appearance they have different feelings and views naturally.

Differences are there even among twins. Therefore these differences are quite natural.

These differences should not be considered in the society. Though there are differences in caste, colour, language and religion we are Indians. This has been illustrated in the following poem by Subramaniya Bharathiyar.



Vellai nirathoru pūnai – engal  
Veetil valaruthu kandēr!  
Pillaigal petrathap pūnai – avai  
Peruk korunira māgum!

Sāmbal niramoru kutti – karunj  
Sāndhu niramoru kutti!  
Pāmbin niramoru kutti-vellaip  
Pālin niramoru kutti!

Enda Niramirun thalum – avai  
Yāvum orethara mandro?  
Intha Niramamsri dhendrum - ihdu  
Eatramen runcholla lamo?

- Subramania Bharathiyar

In the world, there are no two people who are all alike. All are unique. There are no two articles which are same and equal. Even though there are differences between various breeds of cows all of them are termed as cattle. Difference is a natural phenomena. It is human nature to find unity among these.

Differences are essential. To differ is not a sin. Those who differ in opinion are not enemies. They are our friends even when they have different views. Today we may deny certain things and tomorrow we may accept them. This is quite human. Differences add enchantment and spice to our lives.

Various shapes and curves go together to complete a picture. Various colours give beauty to the portrait. When these colours and shapes come together they give beauty to the scenery. The variety among people

help to unite the society. It is our greatness to find meaning among these differences. We need to understand the character in different people in order to live together.

We cannot avoid these differences in the society. This is the law of nature. Teachers should help students to recognize the reason for these differences and help them to live a harmonious life.

Differences should be understood with their background to appreciate their naturality.

**“There are many fruit flakes in a jackfruit yet it is considered as a single fruit. Likewise many flowers are used to make a garland.”**

Though there are various differences like caste, creed, language, religion and surroundings in our country yet we are Indians. We should create an awareness among the students that though there are differences yet we belong to one country. There are also strengthening forces which unite us such as the National flag, the National emblem, our Constitution and culture.

The values imparted to the students by the teachers should be carefully carried out with the help of the parents, community and society. The effect of the school should be reflected in the family.

The family life is continued in school. Students should be trained to follow the goals and aspiration of the

society. Student should get themselves accustomed for a successful social life.

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## Evaluation

### I. Fill in the blanks :

1. School is a \_\_\_\_\_ institution.
2. \_\_\_\_\_ paves way for the development of the society.
3. The \_\_\_\_\_ unites the society and the school.
4. Differences are \_\_\_\_\_.
5. \_\_\_\_\_ are given equal importance to God.

### III. Match the following:

- |                                |   |                              |
|--------------------------------|---|------------------------------|
| 1. Society                     | - | helps the society to grow    |
| 2. Do not waste drinking water | - | student - society            |
| 3. Students who join together  | - | should praise the students   |
| 4. Parents and elders          | - | good quality of the students |
| 5. School                      | - | owner of the school          |

### IV. Answer the following:

1. By whom are schools established?
2. What does the development of the society depend on?
3. Why is it necessary to have differences?
4. What are the moral values to be instilled in the students?
5. List the principles, the student should follow in school.
6. List the aims of the society.

### V. Answer the following in details:

1. Difference is the 'law of nature'. -Explain.
2. 'The students of today are the future citizens of tomorrow'. - Explain.



### 3. VILLAGES AND CITIES

These days people prefer to migrate from villages to towns and cities. Those who migrate from the villages find it difficult to live in cities.

Cities with large population are called Corporations. Some of them are Chennai, Madurai, Coimbatore, Trichy, Salem and Tirunelveli. Corporations have broad four way roads, flyovers, skyscrapers, parks, private and public offices, industries, educational and technological institutions. Residential apartments are increasing in the suburban areas.

Villages are located more or less twenty five kms. away from the cities. These are called as suburban areas. The main occupation of the people living in these areas are agriculture, weaving, handicrafts, brick klin and rice mills. They even engage themselves in fishing. These days we find many differences between cities and suburban areas.

The basic requirements like food, clothing, shelter, education, medical facilities, transport facilities, employment opportunities and social security should be provided.

There are more employment opportunities available in cities. People working in Government offices and technical industries receive monthly income. Permanent employees, people

who work in the cine field, television and journalist also receive regular income. These people are able to satisfy their basic requirements easily.

But at the same time people living in villages are entirely different. Most of the people are agriculturists or farmers.

As agriculture is well developed, it provides job opportunities to agricultural labourers. In recent years the pastural lands have been reduced in size and cattle rearing has also decreased. Most of the agricultural lands have been converted into residential flats.



This was a death blow to agriculture. Therefore agricultural labourers started migrating to towns and cities. People who have migrated from villages and towns are employed in the laying of roads, construction of flyovers and multi-storeyed buildings.



### Difference between the life in villages and cities:

Village life	City life
1. Fresh air and ventilated residential areas	Polluted environment and crowded residential areas
2. Dependent on each other	Independent life
3. Hereditary occupations	Changes according to the time
4. Simple and natural food	Fast food and expensive food varieties
5. Less transport facilities	Different modes of transport
6. Less medical facilities	Expensive modern medical facilities
7. Availability of Primary, Middle and High School Education. Less opportunities for higher education	Higher educational facilities are available in all fields

Do you agree with the above mentioned differences? Form small groups and discuss. Prepare a list regarding the life in villages and cities.



The various government welfare schemes help to reduce the gap between villages and cities.



- To increase employment opportunities the government has introduced “Velay Uruthiyalippu Thittam”.



- Transport facilities in villages

- Fair price shops supply goods of good quality to the consumer at reasonable price. By adopting these methods, the government has made efforts to control the migration of people from villages to cities.



The Government has introduced the “**Sarva Shiksha Abhiyan (SSA)**”. In order to help these students to continue their Secondary Education, the Government has implemented the “**Rashtriya Madyamik Shiksha Abhiyan (RMSA)**”. It imparts education to the children of the economically backward industrial labourers. As a result of these programmes the number of dropouts from schools have been reduced.



## Evaluation :

### I. Fill in the blanks:

1. The main occupation of the people in the village is \_\_\_\_\_.
2. Transport facilities are available in \_\_\_\_\_.
3. Agricultural workers migrate from villages to \_\_\_\_\_.

### II. Answer the following :

1. What are the basic requirements of man?
2. Give reasons for the migration of agricultural workers to cities.
3. How can corporations be identified?
4. List the infrastructure facilities found in cities.
5. Enumerate five differences between village life and city life.

### III. Think and answer :

1. List out the reasons for the differences between villages and cities.
2. Give suggestions to remove the differences found in villages and cities.

## 4. DEMOCRACY

In the previous lesson we have learnt about the steps taken by the Government to minimize the differences found in villages and towns. In this lesson we will learn 'What is meant by Government?'

In olden days, our country was ruled by kings and chieftains. Tamil Nadu was ruled by the Cheras, Cholas and Pandyas. Kalabhras, Pallavas, Nayaks, Marathas and others conquered and ruled various parts of Tamil Nadu.

The Europeans like the English, Portuguese, French and Dutch came to India for trade. In India there were frequent wars among the rulers. Taking advantage of this situation the English subdued the Indians and ruled over the country for more than two hundred years. During this period the Zamindari system emerged. Most of the land was under the control of the Zamindars.



The Indians were eager to free themselves from the British rule. They did not want the British to rule over them. They wanted the Indians to rule the country. At the same time they decided to remove the inequality in the society. The Indians joined together and revolted against the British rule. As a result of this India got independence on 15<sup>th</sup> August 1947.

In independent India there was a discussion regarding the type of government to be formed. They were in favour of a democratic government. According to their desire, after independence a democratic government was established.

Democracy means, 'Government of the people, by the people and for the people'. People who have attained eighteen years of age are eligible to cast their vote and elect their representatives. This is called democracy. This type of administrative set up is called a Republic. India is a Republic. We have framed our own Laws and our Constitution.





## Our Government

Only elected representatives of the Parliament and the Assembly can make decisions, frame the laws and implement various plans.

Our representatives are elected through elections. Those who have completed the stipulated years of age are eligible to contest in the elections. There is no discrimination in caste, creed, religion, language, gender and economic status to contest in the election.

The Constitution assures Justice, Liberty, Equality and Fraternity. The Supreme Court is the guardian of our Constitution. People can approach the court with their grievances and get justice. All are equal before law. Those who are talented and interested can become lawyers or judges with proper educational qualifications.

Administrative officers provide the daily requirements like drinking water, electricity, food supply and transport. The administrative officers are in the various stages. They are Village Administrative Officer, Revenue Inspector, Thasildar, Revenue Divisional Officer and District Revenue Officer.

The District Collector receives orders from the State Government and implements them through these officers.

The Collector along with the subordinate officers help to implement the development programmes.

If we find any disparities in the basic services, we have to approach the concerned officers and mention our grievances. Every Monday is observed as 'Grievance day'. People residing in that area can approach the officers with their grievances. Apart from this once a month officers from the District Collector to the Village Administrative officers have to camp in remote villages. Those who do not have the facility to visit the District Collector's office can utilize this opportunity and approach the Collector directly and hand over their petitions. In the same camp all the grievances are solved by the Public Relationship Programmes. (Makkal Thodarbu Thitta Naal)

Maintaining law and order and the prevention of crimes is the duty of the Police department. The duties of the Defence force is to protect our country's border from foreign invasion. In times of natural calamities they help the Civil Administrators.

The head of the Indian Government is the Prime Minister. Each state is ruled by the Ministers under the leadership of the Chief Minister. Lok Sabha, Rajya Sabha and State Assembly representatives are elected according to the Indian Constitution.

When we play cricket or football we frame rules and regulations. In the same way we have rules and regulations for our Government. This is called as Our Constitution.

### Activity

There are more employment opportunities available in cities. People working in Government offices and technical industries receive monthly income.

1. Visit the camp organized by the Collector for 'Public Relationship Programme' and 'Grievance day'. Form small groups with the assistance of the teacher. Observe how the officers find solution to the problems and discuss in class.
2. Visit a police station, court near your village / city with your teacher. Observe how they function. Discuss with these officials and gather information. Explain and discuss in class.

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### Evaluation:

#### I. Fill in the blanks:

1. The type of Government followed in our country is \_\_\_\_\_
2. Law and order is maintained by \_\_\_\_\_
3. Officer from the Village Administrative Officer to the \_\_\_\_\_ participate in camps in remote villages once a month.

#### II. Answer the following :

1. Who ruled our country during the ancient period?
2. Where and when do they observe 'Grievance day'. How do they find solutions?
3. Who are representatives? How are they elected?.

## 5. LOCAL SELF-GOVERNMENT

Our Country, India comprises of a large landmass. It is densely populated. The people live in villages, towns and cities. India is a vast country with a large population therefore the Central and the State Government alone cannot provide the necessary requirements and solve the problems.

The Local Self-Government is formed in India to serve every nook and corner of the country. In this lesson we will learn about Local Self-Government.

### Activity:

What is the name of your village?  
How did your village get its name?  
What is its meaning and reason for it?  
Find out from your grandparents and elders of the village.

The speciality of Tamil Nadu is the fascinating and meaningful names of villages. Some of the names of places are mentioned in History.

'Gangaikondacholapuram'  
'Malaiyadikuruchi'  
'Cheranmadevi'  
'Sandrorpalayam'  
'Eapothumvendran'  
'Nallan pillai pettral',  
'Paal varthu vendran'  
'Thiruchitrabalam'  
'Malaiyandipattanam'

'Pan pozhil' – These are some of the names of the villages in Tamil Nadu. Find out how these places got their names with the help of your teacher. Form small groups and collect information.

You would have seen a Panchayat Union Office in your village. The names of the Panchayat President, Vice President and the Ward members are written on the same board.

In the same way the Town Panchayat and the District Panchayat also have members.

This system is called as 'Local Administration'. 'Lord Ripon' introduced Local Self-Government in India. Local Self-Government was in existence even before independence.

### The functions of the Village Panchayat:

- Laying village roads
- Digging wells
- Laying drainage system
- Maintaining street lights
- Construction of small bridges
- Sanctioning the construction of houses
- Maintaining village libraries
- Construction of group houses
- Maintaining and establishing recreation centres and playgrounds.



**To whom would you complain to solve the following problems :**

Street lights that are not in working condition, damaged roads, non availability of drinking water, block in the drainage.

To solve the above mentioned problems we need funds. Who will provide these funds? We the people give it in the form of house tax, professional tax, property tax etc. and with that tax the above mentioned works are done.

**Revenue :**

- House tax, professional tax, tax from shops.
- Fee for drinking water connection and water tax.
- A share of the land revenue.
- One part of the share from the land registration fee, these funds are utilized for the development of villages.

Since this is not sufficient the Central and State Governments provide financial assistance in the form of funds, subsidies and grants through the District Rural Development Authority.

**Village Council:**

There is a Village Council in every village. Those who reside within the limits of the Panchayat are its

members. The village development programmes and annual budget plans can be implemented only after the beneficiaries of the programmes get approval from the Village Council.



**Activity:**

Have you seen the Village Council in progress? Witness with your parents. Collect information regarding the functioning of the Village Council. The Panchayat Union consists of several village panchayats.

Through elections they elect the panchayat union members in the ratio of 1:5,000. Among them one will be selected as the Panchayat Union Chairperson.

For programmes like the complete health care scheme

the Central and State Governments provide funds and subsidies to the panchayats.

Find out from one of the members working in the panchayat about 'tax'.

The Village Council meets four times a year:

- January 26<sup>th</sup> - Republic day
- May 1<sup>st</sup> - Labour day
- August 15<sup>th</sup> - Independence day
- October 2<sup>nd</sup> - Mahatma Gandhi's birthday

These four days are public holidays. It is convenient to conduct the Village Council on these days. The Village Councils can be conducted on other days apart from these specified days. Special councils are conducted to get permission in times of emergency or special programmes.

#### Functions of the Panchayat Union:

- Maintenance of the Panchayat Union roads
- Providing drinking water
- Establishment of primary health centres
- Maintenance of primary school buildings
- Monitoring maternity homes
- Establishing village markets
- Distributing agricultural implements and fertilizers
- Developing and extending social forests.
- Establishing veterinary dispensaries.

#### Activity:

With the help of your teacher interview the Chairman of the Panchayat Union. Note down their duties and future plans. Discuss with your teachers in class.

The Panchayat Unions are supervised by the District Rural Development Agencies which are under the control of the district administration. All the plans are implemented with the help of the District Collector, Programme Officer and the Block Development Officers.

#### District Panchayat:

Each district is provided with a District Panchayat. The members of the District Panchayat are elected by the people through elections in the ratio of 1:50,000. These members elect one member among them as the District Panchayat President. They remain in office for five years.

#### Functions of the District Panchayat:

The important functions of the District Panchayat involve giving suggestions to the Government regarding the development work and the improvement of roads and transport carried out by the Village Panchayats and the Panchayat Unions within the district. It also supervises the various development work carried out in the district.

#### Activity:

Form small groups and collect the names of the Panchayat Unions and Municipalities. List them.

## Let us learn:

### District Planning Committee:

The District Panchayat President also acts as the President of the District Planning Committee. The important functions of the committee is to draft a Development Plan for the whole district. The Draft plan is submitted to the State Planning Commission. The elected representatives of the local bodies elect the members of the District Planning Committee. The members of the Legislative Assembly and also the members of the Parliament of India belonging to each district are included as members of this committee.

### Town Panchayat:

Villages which have a population of more than 10,000 are upgraded into Town Panchayats. Through elections they directly elect the President and representatives. The Executive Officer supervises the administration of the Town Panchayats.

### Municipality:

An area which has a population of more than one lakh, is termed as a Municipality. The people directly elect their Chairperson and the Ward representatives through elections. They hold office for a period of five years. The administrative officer is the Municipal Commissioner.

### Corporation:

A city which has a large population, big infrastructure and important government offices is called as a Corporation. The chairperson of the Corporation is called the 'Mayor'. The Mayor holds office for a period of five years. The Administrative officer of the Corporation is the Commissioner.



Corporation of Chennai

## Evaluation :

### I. Choose the correct answer:

1. Local self government was introduced by -----
  - a. Lord Ripon
  - b. Gandhiji
  - c. Indira Gandhi
  
2. Panchayat Union Chairperson is elected by -----
  - a. Ward members
  - b. People
  - c. Union President

### II. Fill in the blanks:

1. The term of office for the Mayor is -----
2. Every district has a -----panchayat.

### III. Answer the following:

1. Why is Local self-government necessary?
2. What are the duties of the Village Council? How many times in a year and when does the Village Council meet?
3. List out the four important functions of the Village Council.
4. How does the Village Council get its revenue?
5. How is the Panchayat Union formed?

## 6. DEMOCRACY, HUMAN RESOURCE AND WOMEN EMPOWERMENT

Representatives are elected by the citizens of our Country. This is called Democracy. The Government governed by the people is called as Democratic Republic.

Citizens enjoy equal rights in a Republic. Those who complete the age of eighteen are eligible to vote.

The citizens in our country enjoy equal opportunities. Women who constitute half of the Indian population have been denied these opportunities and have been left behind. This can weaken the democratic set up of our country. If equal opportunities are given to women, their participation will surely help to strengthen the democracy.

Disparities in the society emerge through various means. These disparities that have emerged are by birth, high class and low class, untouchability, rich and poor, employer and employee, master and servant, educated and uneducated, landlord and peasant.

The people have missed out many opportunities to lead a better life, due to the prevailing disparities in the society. By providing them with the opportunities which they had missed, they have been enabled to lead a complete life. Thus these disparities can be eradicated and equality can be

established in the society. Thereby 'social justice' prevails.

By nature we find a division in gender – male and female. For many years people have blindly believed that men are superior and women are inferior. This blind belief is a hindrance for the development of human resource in the society.

Because of the characteristic features of women we cannot say that women are inferior in knowledge to men. In general men are physically strong and women are mentally strong. Physical and mental strength differs from person to person. This difference is not due to gender. It is due to the hereditary practices. Men get the opportunity to be educated, receive salary for their work and right to property. Due to of this misconception that prevailed in the society, men have been given the opportunity to rule and obtain high government posts.

Women were made to stay at home because of child birth, take care of the children as well as the family. From the earlier days the misconception was that men were suitable to run errands and do physical labour.

Women always depend on male companions like father, husband, brother and son to lead life.



Many concepts have been evolved and have been handed down from generation to generation. The same concept prevails in the minds of the students in the society.

We know the ability and capability of women through their work from early times.

- Managing the house and cooking
- Rearing and maintaining cattle,
- Weaving mats, basket making and making thatched roofs out of dry coconut leaves
- Medical or health workers, sanitary workers, prevention of diseases, home remedies
- Maternity, child care, helping children to grow
- House gardening, vegetables, fruits, flowers, roots, production and sale of milk
- Economic budget, maintaining relationships with relatives
- Agricultural labour, gathering and storing grains

Through the ages they have been engaged in intellectual, patient, technological excellence and working long hours. Because of the educational development women have engaged themselves as teachers, nurses, typists, stenographers and

police. Mostly women are doctors, engineers, lecturers, advocates, judges, press reporters and work in the field of cinema. Some are government employees, car drivers, bus drivers, lorry drivers, pilots and travel by space rockets. They also do research work. Some are bank managers, collectors and police commissioners.



In these ways women engage themselves in various occupations. Is it right to say that only these occupations can be done by women? Many women become modern women as envisioned by the great poet Subramania Bharathiyar.

“Mādhara thammai izhivu cheiyum  
Madamai iakko luthuvōm;  
Vaia vāzhvu thanni lenthā  
Vaigaie lumna makkulae  
Thatha rendra nilaimai mari  
Anga lōdu pengalum  
Sarini garsa māna māga  
Vazhva mintha nātilae!”

These are the famous lines sung by the famous **national poet Subramania Bharathiyar**. These lines depict that in all fields women are not in anyway inferior to men.

### **A noble woman- Dr. Muthulakshmi**

A multifaceted personality, Dr.Muthulakshmi was one of the outstanding Indian women of her time.

She was born on 30<sup>th</sup> July 1886 in the princely state of Pudukkottai. She was an outstanding student. A crop which is about to yield bumper harvest can be identified at the seedling stage. Likewise her versatile talents were visible even when she was a child.

According to her community she was not allowed to attend school. So she was tutored at home and passed her



**Dr. Muthulakshmi**

examination from home. She was the first woman to study in the men's college in Pudukkottai. She had a multifaceted personality. By nature she was just and compassionate. She was interested in human welfare and was a woman of exemplary character.

She was the first Indian woman to obtain a medical degree from Madras Medical College in 1912. She was nominated to the Madras legislative as a member of the Legislative Council and became the first woman member during the British rule. She was elected as the Deputy Chairperson of the Legislative Council. She fought for the rights of women. Like men, women should also be given the right to property and to vote.

She was the first woman President of the All India Women's Association and the first woman to be elected as Alder-man of the Madras (now Chennai) Corporation. She respected the Indian freedom fighters. Therefore she was familiar with the poet Subramania Bharathiyar.

She was concerned with the plight of women. As they were suppressed for many generations.

She wanted to wipe the tears of the women. She fought for the betterment of women right to women's education, equal rights for women, emancipation of women and protection of the girl child.

She took an interest in cancer studies and pursued it at the Royal Cancer Hospital in London for the benefit of the women cancer patients. She was instrumental in starting the Cancer Institute in Adyar, Chennai. The Institute stands as a testimony of her fame and name.

With the help of the government aid for the orphan children, widows and destitute women, she established a home at Tambaram.

The social evil of child marriage prevailed throughout the country. She rose in revolt against child marriage and with the help of the government a Bill was passed.

In earlier days it was a custom to dedicate girls to the deity to be of service in the temple under the 'Devadasi' system. Thousands of women's lives were destroyed throughout the country because of this.

In those days it was believed that to become a devadasi, is a way of offering oneself to the service of God. But this was a social sin inflicted on women folk. Dr. Muthulakshmi fought against this social evil and took measures to eradicate this by suitable enactments. Many conservative rationalists and religious fanatics opposed the amendment of the bill.

Dr. Muthulakshmi with the help and guidance of E.V.R. Periyar, leader of the Self- Respect movement strived to eradicate the devadasi system. A bill was passed in the Legislature.

In those days E.V.R. Periyar, Tamil Thendral, Thiru.Vi.Ka and Moovalur Ramamirtham Ammaiyar supported the bill. They explained about its importance and got the support of the public. This shows the social life of the people.

Dr. Muthulakshmi has worked for various social causes. She started orphanages. She opened free dispensaries for the slum dwellers. She got help from the institutions and helped the downtrodden. In 1930 she founded the Avvai Home at Adyar for the benefit of destitute women.

She introduced a free education scheme for girls up to class eight.

Dr. Muthulakshmi was a pioneering social reformer. She was awarded the **Padma Bhushan** in 1956 for her meritorious service. She dedicated her life for the upliftment of women.

In order to highlight Dr. Muthulakshmi's name and fame,

has implemented a welfare scheme namely Dr. Muthulakshmi Maternity Stipendary Scheme. An amount of one thousand rupees per month for three prenatal care months and three postnatal care months. Thus a whole sum of six thousand rupees for all the mothers in Tamil Nadu to get a nutritious diet.



## Evaluation :

### I. Choose the correct answer

1. In a Republic, citizens
  - a. have equal investments
  - b. own equal property
  - c. have equal rights
  
2. The first Indian woman doctor
  - a. Muthulakshmi Ammaiyar
  - b. Vijayalakshmi Pandit
  - c. Kalpana Chawla
  
3. Occupations in which women are not involved
  - a. cricket
  - b. pilot
  - c. none of the above
  
4. Avvai home
  - a. home for the destitutes and widows
  - b. orphanage for girls
  - c. home for the unemployed women.

### II. Fill in the blanks:

1. .... creates an equal society.
2. Age at which men and women can vote is .....
3. "Mādhara thammai izhivu seyyum  
Madamai eykko luthuvom" these lines were sung by .....

### III. Match the following:

- |   |   |
|---|---|
| 1. To eradicate the inequality in the society | – beliefs passed through the generation.    |
| 2. Men alone are suitable for all positions   | – it proclaims the fame of Dr.Muthulakshmi. |
| 3. Women depend on male companions            | – wrong attitude.                           |
| 4. To stop the custom of child marriage       | – social justice.                           |
| 5. Cancer Institute at Adyar                  | – prohibition act.                          |

### IV. Answer the following:

1. What is the hindrance for human resource development ?
2. Mention eight services where women require mental and physical abilities.
3. Mention the scheme introduced in Tamil Nadu for the welfare of the mother and child.
4. Mention the first achievement of Dr. Muthulakshmi in India.
5. Name the award awarded by the Central Government to Dr. Muthulakshmi.
6. How does the society deny women, their rights?

# GEOGRAPHY

## 1. The Earth and the Solar System

The bright and beautiful evening gradually faded away. The setting **Sun** soon sank into the western horizon and went out of sight. Slowly darkness began to envelope the sky, as night was setting in **stars** began to appear like little lamps in the sky. Soon in the total darkness of night, millions of stars appeared twinkling like diamond studded in the canopy of deep blue. What a glorious sight!

A keen observation of the enchanting night sky would reveal amazing truths.

It appears that the Sun rises in the east and sets in the west. When the Sun rises, the stars become invisible. But when the Sun sets in the west stars shine brightly.

Among thousands of twinkling stars in the night sky, it is the **moon** that instantly captures our attention. We come to know a lot of amazing information if we observe the moon.

First, the shape of the moon keeps changing everyday. The shape of the moon waxes from the **new moon** to the **full moon** and wanes from the full moon to the new moon.

We can calculate the duration between one new moon to the next new moon or one full moon to the next full moon which is a month, thus appearing in many forms.

The moon appears with different heavenly bodies everyday.

Besides the stars, planets are also seen in the night sky. **Planets** also appear like light stars. Then how can we differentiate the planets from the star?

### Activity

Take a paper and prick small and big holes on it with a needle. Fix a torch in the centre of the paper with its front portion touching the paper.

Switch off all lights and make the room dark. Now flash the torch light on the wall. You will see numerous dots of light on the wall. We assume that they are the stars that shine in the sky.

Switch on all the lights in the room. This light can be compared to the sun. All dots of light (stars) will become almost invisible. Similarly stars are invisible during the day because of the bright light emitted by the Sun.



First, if you look closely, you will notice that the stars twinkle. The planets glow without any flicker.

Secondly planets do not remain in the same position. If you see a planet with a particular star today, you might see the same planet with another star after a certain period of time.

Thus the various positions of planets can be seen against the backdrop of stars.

Without the help of the telescope, you will be able to see five planets namely **Mercury, Uranus, Mars, Jupiter** and **Saturn** with the naked eye.

But **Neptune and Uranus** can be seen only through a telescope.

Before sunrise or sunset you can see Mercury and Venus for few hours. These two planets appear only at the horizon.

Venus rises a few hours before sunrise and therefore it is called as 'The **morning star**'.

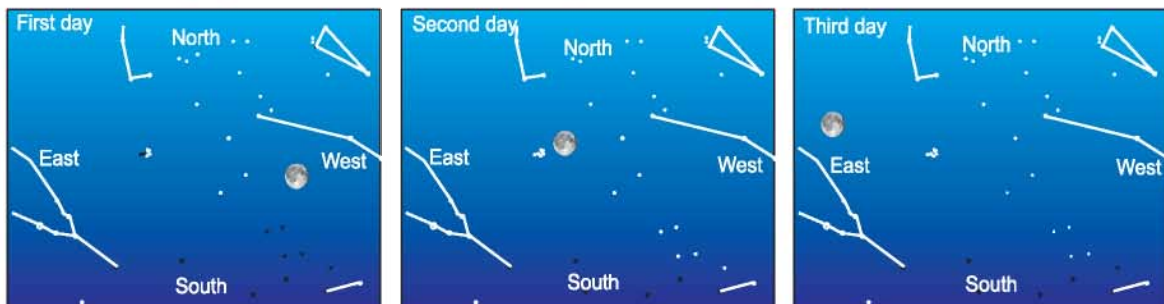
**Mars, Jupiter** and **Saturn** are visible with the naked eye during the night either in the east or overhead or in the west.

Thus we can see only five planets with the naked eye. In Tamil the days of the week are named after these five planets, the **moon** and the **Sun**.

We know that "seeing is not believing" is a scientific outlook. It appears to us that the Sun and the stars rises in the east and sets in the west.

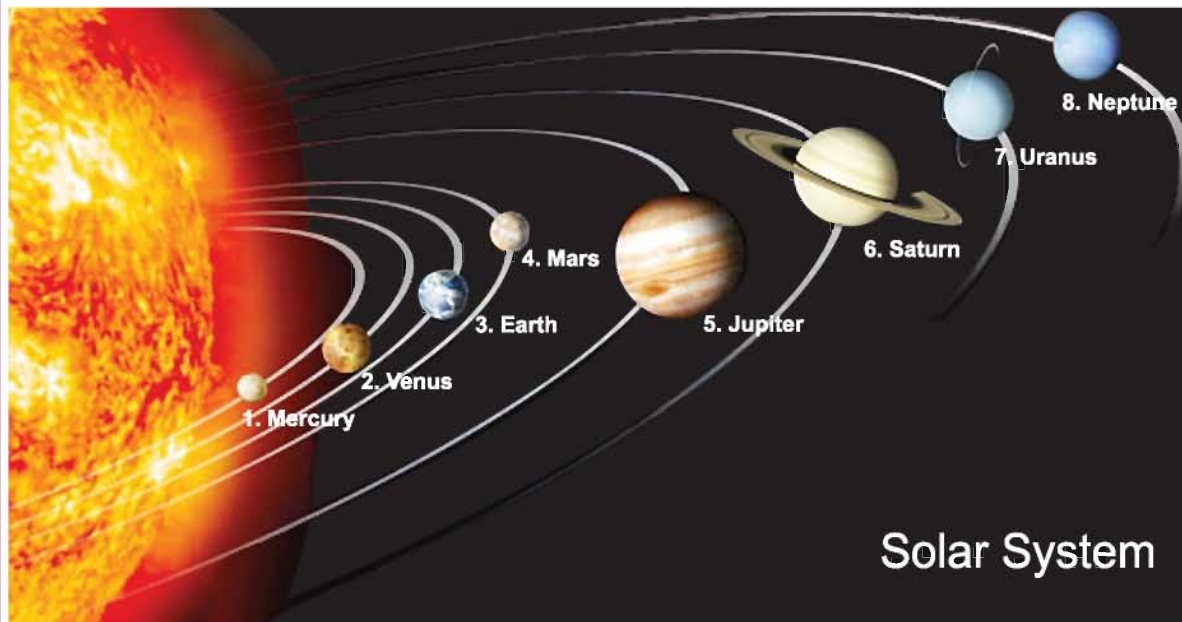
But in fact it is only the earth that spins on its axis everyday. It appears to us that all the celestial bodies including the Sun and the stars move from east to west because the earth spins from the west to the east.

**The moon moves from the west to the east for three consecutive days, with the stars as a back drop. (which can be seen in the picture below)**

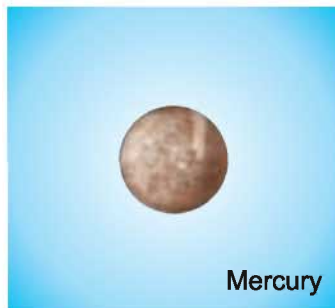


Usually the upper part of the map indicates the north, the lower part indicates the south. The right side shows the east while the left side indicates the west. But in the map showing night sky, the right side indicates the west, and the left side indicates the east. Directions are located accurately if the map is held overhead in a higher position.

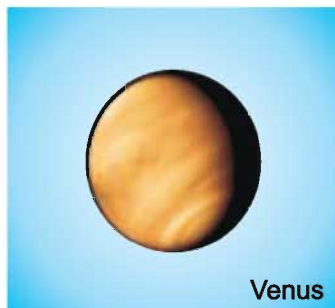




Solar System



Mercury



Venus



Earth

It is not only because of the rotation of the earth, but also due to the rotation of the moon and other planets, we are able to observe their movements.

The moon revolves around the earth, similarly the planets revolve around the Sun. Thus it appears that all the planets move, with the stars as a backdrop.

### The Solar System

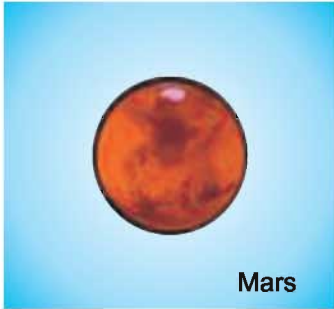
We can see the sun, moon and the five planets mentioned before with naked eyes.

With the help of the telescope we can observe other celestial bodies like **Uranus, Neptune, Comets, Meteoroids, Asteroids, Galaxies, dwarf planets** billions of stars and other gaseous objects.

**The Sun has eight planets.** All planets revolve around the sun.

The earth is also a planet. Different kinds of life including human beings are found on earth because the **earth's atmosphere has oxygen.**

The eight planets have been classified into solid planets and gaseous planets. **Mercury, Venus, Earth, and Mars** are called as **Solid planets**, while Jupiter, Saturn Uranus and Neptune are gaseous planets.



Mars



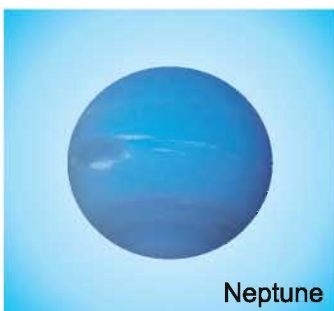
Jupiter



Saturn



Uranus



Neptune

Other than the Earth, all other planets have no oxygen and large amount of other gases in their respective atmosphere. Hence life is not found in these planets.

All planets appear to move in an anti-clockwise direction if you take a bird's eye view from the north pole of the Sun. Even though they all revolve in the same direction, the duration of their revolution around the Sun differs from one another.

The planets which revolve around the Sun, do not deviate from their respective paths. All planets revolve around the Sun in an **elliptical path**, approximately at the same plane. The path that the planet takes to revolve around the Sun is called 'Orbit'.

### Sun

The **Sun** is the head of the **Solar family**. It is at the centre of the Solar system. It is a large gaseous ball of fire. The gravity of the Sun holds the Solar system together.

The Sun is the source of heat and light for the entire Solar family. The earth is **approximately 150 million km** away from the Sun.

The Sun is very hot but the earth receives only moderate heat from the Sun. The Sun is the only celestial body that **emits light** in the Solar system.

### THE RINGS OF SATURN

The rings of Saturn is visible through a telescope. These rings consist of small stones, dust and ice particles. Though only the rings of Saturn are magnificent, **Jupiter, Uranus and Neptune** also have rings.

### DWARF PLANETS

**Pluto, Charon, Ceres, Eris** were newly grouped as 'Dwarf Planets' in the year 2006. They also revolve around the Sun. They are very small in size. Their size is smaller than our moon. So they are called Dwarf planets.



No planet has the capacity to emit light because they do not have light of their own. They reflect the light of the Sun.

**The time taken for the rotation and revolution of the planets around the Sun.**

Planets	Duration of revolution	Distance from the Sun	Duration of Rotation
MERCURY	87.97 days	5.79 Crore Km	58.6 days
VENUS	224.7 days	10.82 Crore Km	(-)243 days
EARTH	365.4 days	15 Crore Km	23 hours 56 min
MARS	687 days	22.79 Crore Km	24 hours 37 min
JUPITER	11 years 9 months	77.83 Crore Km	9 hours 55 min
SATURN	29 years 5 months	142.7 Crore Km	10 hours 40 min
URANUS	84 years	287.1 Crore Km	(-)17 hours 39 min
NEPTUNE	164 years 9 months	449.7 Crore Km	16 hours

Venus and Uranus marked with the (-) sign rotate from east to west. But all other planets rotate from the west to the east.

Source – NASA, USA

**ASTEROIDS**

Thousands of asteroids are found between Mars and Jupiter. Asteroids are clusters of celestial bodies which includes tiny stones and big rocks which can measure upto 300 to 400 km in diameter.

Some of them have Indian names such as **Vynu Pappu** the astronomer, **Sarabai** the Father of Atomic energy and **Ramanujam** the Mathematician.

**MOON**

The Moon is called by **different names in Tamil**. The Moon is not a planet.

Planets	No. of Satellites that revolve around the planets
Mercury	0
Venus	0
Earth	1
Mars	2
Jupiter	63
Saturn	60
Uranus	27
Neptune	13



**THE REAL APPEARANCE OF THE MOON'S SURFACE**

Moon does not revolve around the Sun directly. It revolves around the Earth. Hence it is called a **satellite**.

The moon is the satellite of the Earth. With the help of telescope and space research, it is proved that like the Earth; Mars, Jupiter, Saturn, Uranus and Neptune also have a number of satellites.

The moon is a sphere which measures a quarter of the Earth's diameter. It appears very large to us because it is very close to the Earth. It revolves around the earth **approximately** at a distance of **3,84,401 Km**.

It takes about **27.3** days for the moon to revolve around the earth and **27.3** days for the moon to rotate on its axis.

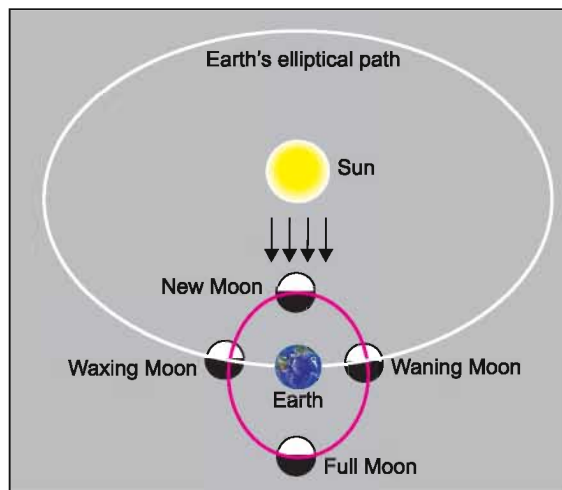
Hence from the Earth we are able to see only one side of the moon. In the year **1959** the satellite **Lunar 3** photographed the other side of the moon.

The moon does not have an **atmosphere** like the earth. Water is not found in the liquid form but moisture is present.

Landforms such as mountains, plateaus and valleys that are found on the earth's surface are also found on the moon.

**Craters** are another special feature of the moon. This can be viewed through a telescope. These craters are formed due to the meteorites which fall very often on the moon's landscape. Few craters are formed due to volcanic eruption.

Where does the Moon go on a **new moon** day?



The Sun is the only illuminating celestial body in our solar system. Though the moon shines brightly during the night, it actually reflects the light of the Sun.

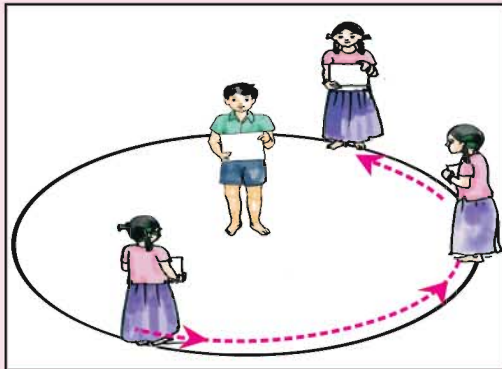
Like the Earth, the moon is also almost a sphere, therefore the side that faces the Sun, shines brightly while the other side is dark.

During the revolution of the moon around the earth, the dark side of the moon that faces the earth is called the 'new moon'. The side of the moon that shines brightly on the earth is called 'full moon'.

On a new moon day, the moon comes between the earth and the Sun and on a full moon day, the moon is opposite to the Sun.



Why are we not able to see the other side of the moon?



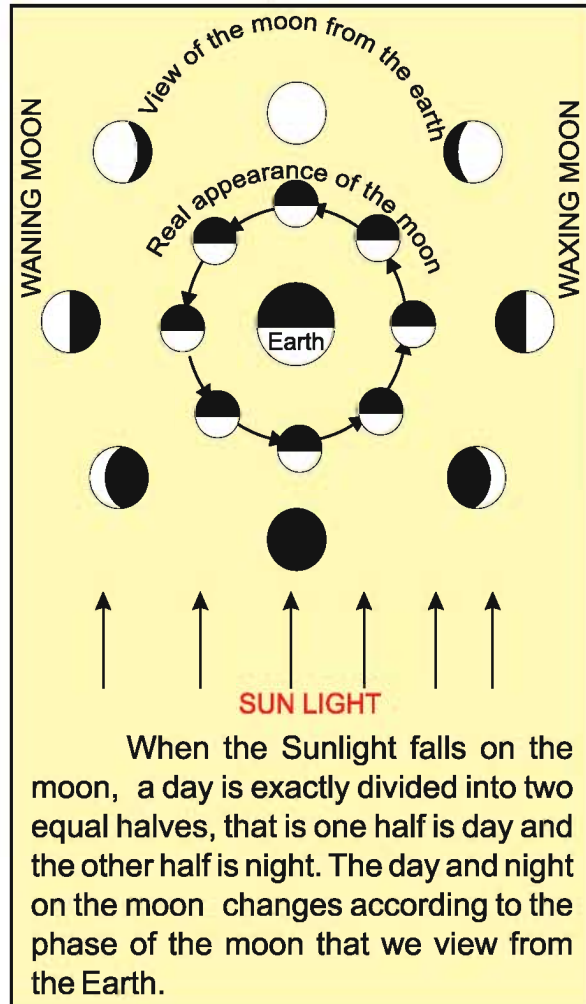
Ask a student to stand in one place. Draw a circle around him / her with a radius of two metres. Ask another student to stand on the circle. The student who stands at the centre of the circle is the Earth. Give him / her a card denoting the name "Earth".

The student who stands on the circle is the Moon. Give her / him a card denoting the name "Moon". Now, the student who represents moon should revolve around the earth facing only the earth.

The moon is revolving around the earth. But, does the moon rotate on its axis - Discuss.

Note the direction of the face of the student who represents the moon. The direction of the face of the moon changes on all sides when it revolves around the Earth. This is called rotation.

Hence the moon rotates on its axis. The duration of rotation and revolution of the moon around the Earth is the same.



When the Sunlight falls on the moon, a day is exactly divided into two equal halves, that is one half is day and the other half is night. The day and night on the moon changes according to the phase of the moon that we view from the Earth.

## METEORIODS

The sudden streaks of light seen on a starry night is called as **Meteoroids**. This can be seen when the remains of the rocky parts of the comets strike the Earth's atmosphere and streaks of light are generated. They are not stars that fall down.

What happens when you rub your palms together? Do you feel the warmth?

Similarly when fragments of rocks and comets from space strike the earth's atmosphere, heat is generated. So it burns and shrinks. This phenomena appears as a bright streak of light.



## COMET

It is exciting to see a comet in the night sky. A comet is not a star. It is a rock made of dust and ice. The long tail is seen because, as the comet comes near the Sun, the ice melts and reflects the light of the Sun.

The tail of the comet is seen in the opposite direction of the Sun. The tail of the comet appears because minute particles from the sun strike the gaseous part emitted from the comet.

Now it is clear that the Solar family consists of the Sun, its eight planets, the satellites like the moon that revolve around the planets, dwarf planets, thousands of asteroids, meteoroids and comets.

## UNIVERSE

Millions of constellations of stars seen in the sky is called a galaxy. Thousands of galaxies form the universe. The Universe is vast and ever expanding. Research and experiments are still being carried out.

Milky way galaxy is one among the many galaxies.

## MILKY WAY GALAXY

The twinkling stars that are seen on a starry night are actually like the sun, but are far away.

Many of these stars are hundreds and thousand times bigger than our Sun.

They are seen only as a small spot of light because they are very, very far away. Scientists have found that planets revolve around these stars.

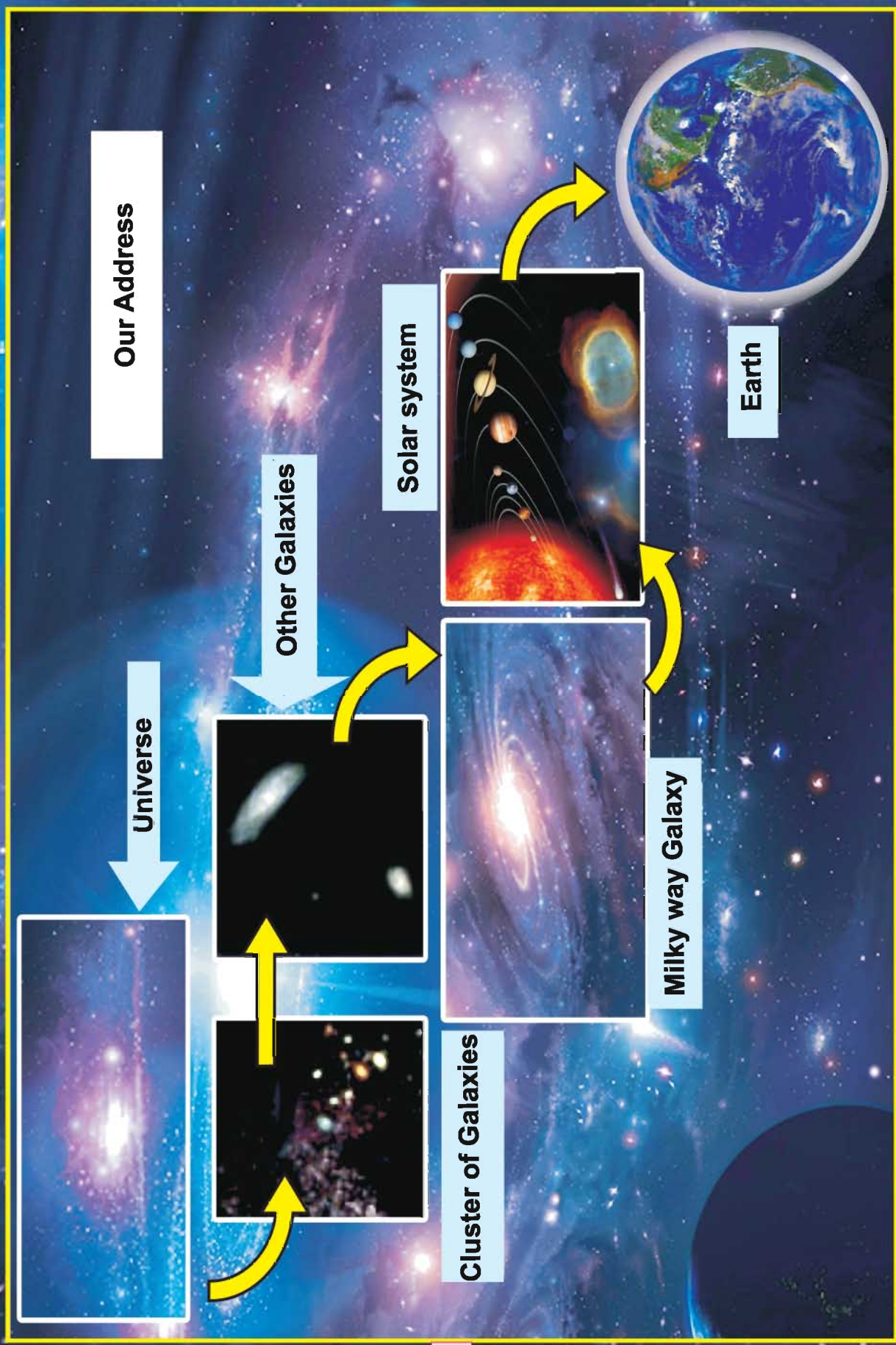
Millions of stars, including the Sun and other celestial bodies which can be viewed with our eyes belongs to the Milky way galaxy.



A white streak of light can be seen on a clear night for few days. Our ancestors called this as the Milky Way galaxy. In India it is named as "Akash Ganga".

Milky way galaxy is a dense cluster of stars. They appear as a tiny dot of light because they are far away. We live in the earth which is part of the solar system in the Milky way galaxy.







## OUR ADDRESS

- We live in Tamil Nadu.
- Tamil Nadu is a state in India.
- India is one of the many countries on Earth.
- Earth is a planet in the Solar system.
- Solar system is a member of the Milky Way galaxy.
- Our Universe is made of many galaxies like the Milky Way galaxy.

Think : Where do we live in the Universe?

## EARTH IS A LIVING PLANET

Earth is the third planet from the Sun. Mercury and Venus are very hot planets. Mars, Jupiter, Saturn, Uranus and Neptune are very cold because they are far away from the Sun.

Land, water, air and heat are available in the optimum amount only on earth. Therefore different kinds of life develop and increase only on earth.

In our Solar system there is life only on earth. There is no life on other planets. Earth is called as 'Living Planet' because life is found in abundance only on earth.

## Evaluation

### I. Choose the correct answer :

1. The planet that can be viewed only through a telescope is .....  
(a) Mercury (b) Uranus (c) Mars
2. All the planets revolve around the Sun in an ..... path  
(a) circular (b) elliptical (c) square
3. Asteroids are found between .....  
(a) Earth and Mars (b) Mars and Jupiter (c) Jupiter and Saturn

### II. Answer the following:

1. How will you differentiate stars and planets in the night sky?
2. What does the term 'Solar system' mean?
3. Why are we not able to see the other side of the moon from the earth?

## Project

The period between the full moon and new moon is called as waning of the moon. The period between the new moon and full moon is called as the waxing of the moon. With the help of a calendar find out and tabulate the full moon and new moon days for this year. Calculate the exact duration taken for one cycle of waxing and waning of the moon.

## 2. Rotation and Revolution of the Earth

The Earth is always in motion. It has many movements. **Rotation** on its own axis and **Revolution** around the Sun are the two important movements of the earth.

### Rotation

The Earth takes **approximately 23 hours and 56 minutes** for one rotation on its axis. This movement is called as rotation, this movement causes day and night.

All parts of the Earth **do not experience day and night at the same time**. The part of the Earth's surface which faces the Sun experiences day. The part of the Earth's surface which does not face the Sun experiences night.

So when it is **day in India, America** which is on the other side of the Earth has **night**.

Take a ball and keep it on the floor of a dark room. Focus the light from a torch on one part of the ball in the dark room. What do you see?

The light of the torch is seen only on the front portion of the ball. The other side of the ball is dark because light does not fall on it. It is assumed that the torch is the Sun, and the ball is the Earth.

Similarly the surface of the Earth that faces the Sun has day and the surface of the Earth which does not face the Sun has night.

In ancient times, it was believed that day and night was caused due to the rotation of the Sun around the earth.

**Aryabhatta** lived about 1500 years ago. He was one among the ancient Indian astronomers. He explained scientifically that the Earth rotates on its own axis.

When you travel on a boat down the river the banks of the river appear to move in the opposite direction.

Similarly he said that the Sun remains in the same position, but because the Earth rotates on its own axis, it appears that the Sun moves around the Earth.

In olden days, a day was calculated from the rising of the Sun on the first day to the rising of the Sun on the next day. Now, a day begins from **12 o'clock midnight to 12 o'clock midnight the next day**.

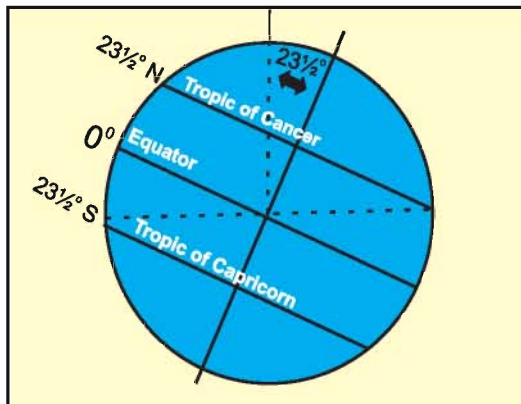
The Earth not only rotates on its axis but it also revolves around the Sun in an elliptical orbit.



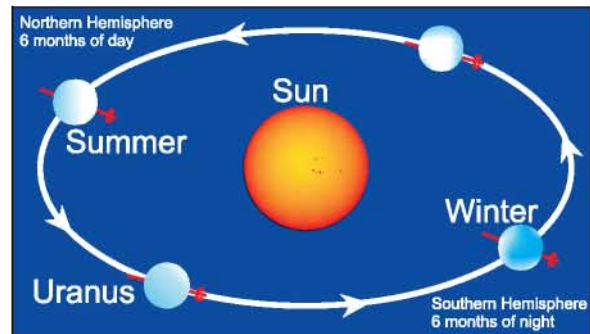
The duration taken by the Earth to complete one revolution is called a year. A year consists of 365.24 days .

How many times in a year does the Earth rotate? Calculate, discuss and check the answer with your teacher.

The Earth's axis is not a real axis drawn around the ground. Some imagine it to be real. It is only an imaginary line that connects the North Pole with the South Pole. Does this axis pass through the centre of the Earth or not? Debate it with your teacher and check your answer.



The Earth is inclined at an angle of  $23\frac{1}{2}^\circ$  from its central axis. This inclination causes seasonal changes. (see the picture)

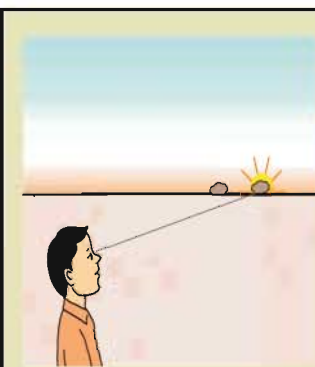


What would happen if the Earth's axis were not inclined at  $23\frac{1}{2}^\circ$  but were flat?

If the Earth's axis were also flat then there would be six months of day and six months of night on earth for one revolution around the Sun.

This situation prevails in Uranus, which can be seen in the picture above.

A wheel spins on its axis. This axis is the centre. Similarly when the Earth rotates, it rotates around the line that connects the North pole and the South pole. This imaginary line is called as its axis. Where is the Earth's axis located? Think – Discuss with your classmate.



Do the experiment and enjoy: Select a place facing the East, where the Sun rises in the morning. Select the place that exactly faces the Sun and place a stone on the wall which faces the Sun. Keep new stones every day regularly in a straight line. You will notice that the point at which the Sun rises shifts daily towards the North east or South east.

### Leap Year (A year with an extra day)

The Earth does not exactly take 365 days to complete one revolution around the Sun. It takes approximately 365  $\frac{1}{4}$  days to complete one revolution.

For the sake of convenience we consider only 365 days for one year. The remaining  $\frac{1}{4}$  day is added as one whole day to every fourth year. When this is added to the fourth year that year has one extra day which is called as leap year. During a leap year the extra day is added to the month of February. So in a leap year the month of February has 29 days. ie. Divide any given year by four. If you get a remainder it is not a leap year, if the remainder is zero then it is a leap year.

Even if we consider every fourth year to be a leap year, a small mistake can happen. To avoid this mistake Pope Gregory in the 16<sup>th</sup> century made a small correction. According to this correction, it is not enough if we divide the years 1800, 1900, 2000 by four, but it should also be divided by four hundred.

Thus 2000 B.C. was a leap year, but 2100 will not be a leap year, even though it is divided by four, because it will leave a remainder, when it is divided by four hundred.

### Revolution of the Earth

Day and Night are the systematic changes that takes place everyday.

Similarly there are seasonal changes every year. If you observe carefully you will notice this. The four seasons are **Summer, Spring, Winter and Autumn**. Why do seasonal changes occur?

The path which the Earth takes to revolve around the Sun is elliptical in shape.

Hence at one position the Earth is close to the Sun and at another position it is far away from the Sun.

It was wrongly believed that seasonal changes take place due to this.

Generally during July the Earth is far away from the Sun. In January it is very close to the Sun.

If seasons are caused because of this, then it should be winter in July and summer in January.

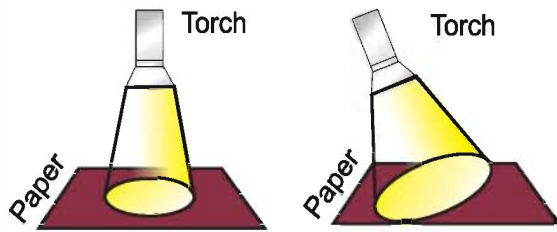
During December Tamil Nadu which is in the northern hemisphere experience severe winter whereas Australia which is in the southern hemisphere has summer.

When **we sweat out** during April and May due to summer, **Australia shivers with cold**.

Therefore it is clear that the **seasons are not the same everywhere** on the earth. If it is summer in the northern hemisphere, it is winter in the southern hemisphere and if it is winter in northern hemisphere, it is summer in the southern hemisphere. Hence there is **reversal of seasons**. We cannot say that the seasons are caused because of the earth's elliptical orbit.

**Then why do seasonal changes occur?**

Seasons are caused because the earth's axis is inclined. Let us do an experiment to illustrate this.



Let us take a torch. Spread a sheet of paper on the floor. Hold the torch exactly on top of the paper and with the help of a red colour pencil draw how much of light it spreads on the paper. (diagram)

Now hold the torch at a slanting position over the paper. Even now light spreads on the paper. With the help of a blue colour pencil, mark how much light is spread on the paper .

The area covered by the light that spread on the paper when the torch was held straight was less and the area covered by the light that spread on the paper when the torch was slanting was more. Hence when light falls in a slanting position the area covered is more. You will notice that the brightness of the light that falls also varies. The light that spreads on the paper varies from point to point and becomes less.

The sunlight that falls on the North pole and South pole varies, because the axis of the earth is inclined.

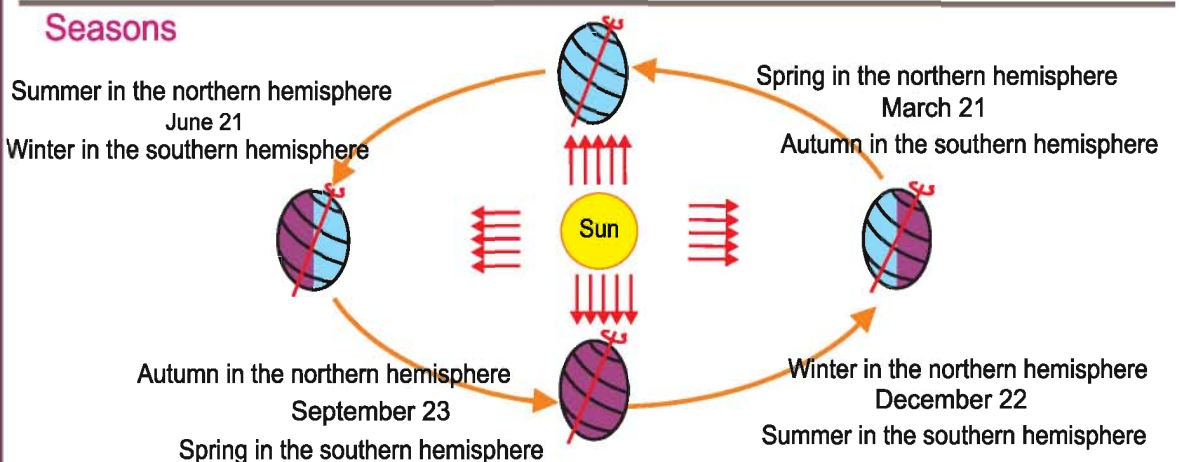
When asked where does the Sun rise? We immediately answer that the Sun rises in the east.

But the truth is the Sun does not exactly rise in the east everyday. In Tamil Nadu, during most of the days of the year the Sun rises either in the south east or north east.

On December 22<sup>nd</sup> the Sun which rises mainly in the south east, now starts moving towards the north. This is called **Northern movement** (Uthrayan) From then on the point from which the Sun rises moves towards the north east and on June 21<sup>st</sup> it reaches its maximum.

After which the points at which the Sun rises moves towards the south and this is called as **Southern movement** (Dakshinayan). Between these points, on two days the Sun rises exactly in the east.

These are equal days and equal nights. March 21<sup>st</sup> and September 23<sup>rd</sup> are called as **equinox**, because on these two days, it is **exactly 12 hours of day, and 12 hours of night. ie. equal day and equal night.**





The northern hemisphere is exposed to the Sun's light during the month of June, for six months, because the earth's axis is inclined.

After six months the southern hemisphere is exposed to the Sun's light during the month of December. The Sun is overhead at the northern hemisphere and is exposed to the Sunlight. Hence the northern hemisphere receives the direct rays of the Sun. It is summer in this region.

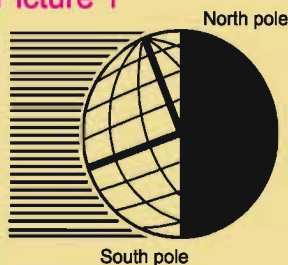
After six months when the southern hemisphere is exposed to the direct rays of the Sun, it is summer in the southern hemisphere.

During this time Northern hemisphere receives the slanting rays of the Sun. Hence it is winter in the Northern hemisphere.

In December, India and England celebrate Christmas as a winter festival, whereas in Australia it is summer, so Christmas is celebrated as a summer festival in Australia.

### Day and night at the poles

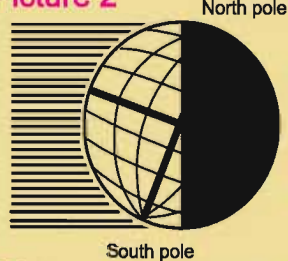
Picture 1



Picture 1

You will notice in the picture that the northern hemisphere faces the Sun during the month of June. Also observe the day and night line. You have to understand that due to the earth's rotation day and night changes occur in the equatorial region but the North pole has continuous daylight. At the same time, notice that the southern pole has continuous night.

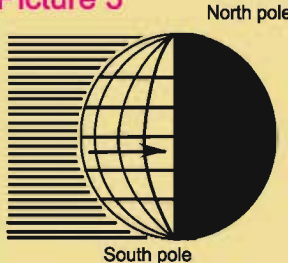
Picture 2



Picture 2

Look at the picture. When the South pole faces the Sun during December, the North pole is completely dark and the South pole has continuous daylight. The inclination of the Earth's axis not only causes seasonal changes but there is something amazing about it. At the poles there are six months of continuous daylight and six months of continuous darkness.

Picture 3



Picture 3

The Sunlight falls vertically on the earth's axis on March 21<sup>st</sup> and September 23<sup>rd</sup>. Hence on these two days, day and night is equal in both the hemispheres. The days are equal to the nights all over the Earth.

According to Tamil tradition there are six seasons, (for every two months there is one season) Ancient Tamil literature speaks about this. The six seasons are Khar, Kulir, Munpani, Pinpani, Ilavennil and Muthuvennil. But according to the international standard, only four seasons have been recognized. The four seasons are summer, winter, autumn and spring.

### What gets heated?

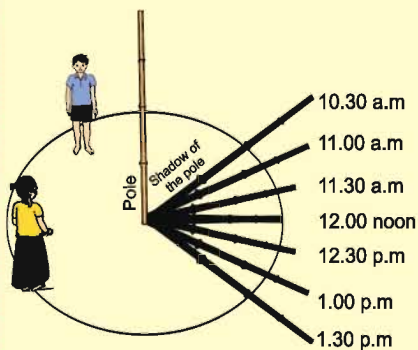
Take two black coloured papers and two thermometers. Fix the thermometer on the black coloured paper. Place one paper on the ground in a horizontal position and the other paper in a slanting position and make sure that the Sun is approximately overhead.

When the Sun is overhead the light falls vertically on the paper that is in a horizontal position. The paper that is in a slanting position receives the slanting rays of the Sun. Ensure that the shadow of the clouds and the students does not fall on both the papers.

The temperature increases in both the thermometers. After a certain increase in temperature, the temperature remains constant at one stage. It will take about ten minutes for this to happen. Then compare both the temperatures and find out which received more heat. Discuss and find out the relationship between this experiment and how the temperature changes according to seasons on earth. Summer is hot because the earth receives the direct rays of the Sun and winter is cold because the earth receives the slanting rays of the Sun.

### Shadow game

Fix a pole in an upright position in a playground. Get the help of your teacher to do it. The pole will cast a shadow in the morning. Mark accurately the end of the shadow with a stone. Measure the distance of the shadow and make a note of the time.



Discuss in the class where the shadow will be and how long will it be after 30 minutes. With the help of a stone, mark the end of the shadow which each student indicates. After 30 minutes find out where actually the shadow will be and measure the length of the shadow.

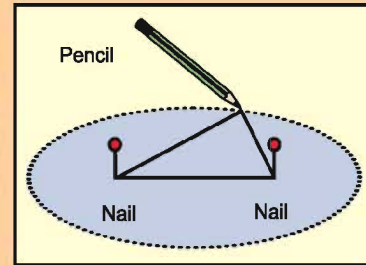
The Sun is exactly overhead during midday. The shadow is the shortest during midday. Not only that, the shadow of the pole will face the north. The shadow is the longest during the morning and in the evening. Notice the direction of the movement of the shadow in the clockwise direction.



### Let us draw an ellipse

Fix two nails on a board. Take a thin thread. Measure twice the distance between the two nails.

Make a knot by bringing the two ends of the thread together. Fix the thread on both the nails. Place a pencil somewhere at a point on the thread and pull it tightly. Draw a line by holding the pencil tightly. Now you will get an oval shape.



A circle has only one centre. But an ellipse has two convex centres other than the centre. The position of these two nails are the convex centres of the ellipse. We know that the Earth takes an elliptical path to revolve around the Sun.

The Sun is situated in one of the convex centre of the ellipse and not in the centre of the ellipse.

### Evaluation

#### I. Choose the correct answer :

- The earth is inclined at an angle of \_\_\_\_\_ degree.  
a)  $23\frac{1}{2}$       b)  $66\frac{1}{2}$       c) 90
- Rotation results in \_\_\_\_\_  
a) Seasonal changes      b) Day and night changes  
c) Northern and Southern movement
- In a leap year February has \_\_\_\_\_ days.  
a) 28      b) 29      c) 27

#### II. Answer the following questions :

- Why does day and night changes happen?
- When it is summer in the northern hemisphere, why is it winter in the southern hemisphere?
- Why do the poles have six months of day and six months of night?

#### III. Project :

- Identify the leap years between 1999 to 2011.
- What will be the result, if the Earth rotates in the same place?
- Find out which days of the year have the longest day and the longest night.
- With the help of a map or a globe find out what season will India experience if Australia has winter?

### 3. THE EARTH WE LIVE IN

Is there a mountain, a sea or a river in your place? Mountains, plateaus and plains are important landforms. Landforms with high peaks are called mountains.

A continuous stretch of mountains is called a **mountain range**. The highest mountain range in the world is the Himalayas.

Study the physical map of India and locate another mountain range.

The land that is higher than the surrounding region with a flattened top is called a **plateau**. The plateau of Tibet is the highest plateau in the world.

With the help of your teacher locate the plateau in South India.

A relatively flat and low lying land surface, with almost no difference between its highest and lowest points is a **plain**. The area where the River Ganges flows is one of the most important plains in the world.

Locate the plains in the banks of River Cauvery, River Tamiraparani and River Palar on a physical map.

Chennai, Madurai, Tirunelveli, Trichy, Ooty, Kodaikanal and Theni are parts of Tamil Nadu. **Tamil Nadu is a part of India.**

Find out : In which landform is Rameshwaram and Tiruchendur situated?

With the help of your teacher find out whether your native place is located on a plateau or plain or on a mountainous region?

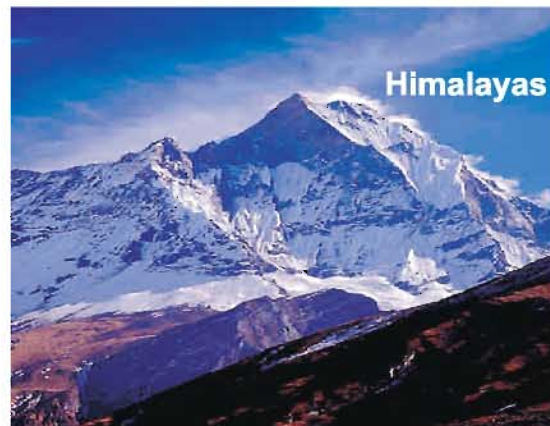
India is a part of the continent of Asia. Countries like India, China, Russia and Pakistan are situated in Asia. Countries like England, France and Germany are situated in the continent of Europe.

**There are seven continents** like Asia, Europe, North America, South America, Africa, Australia and Antarctica. **Large land masses** are called continents.

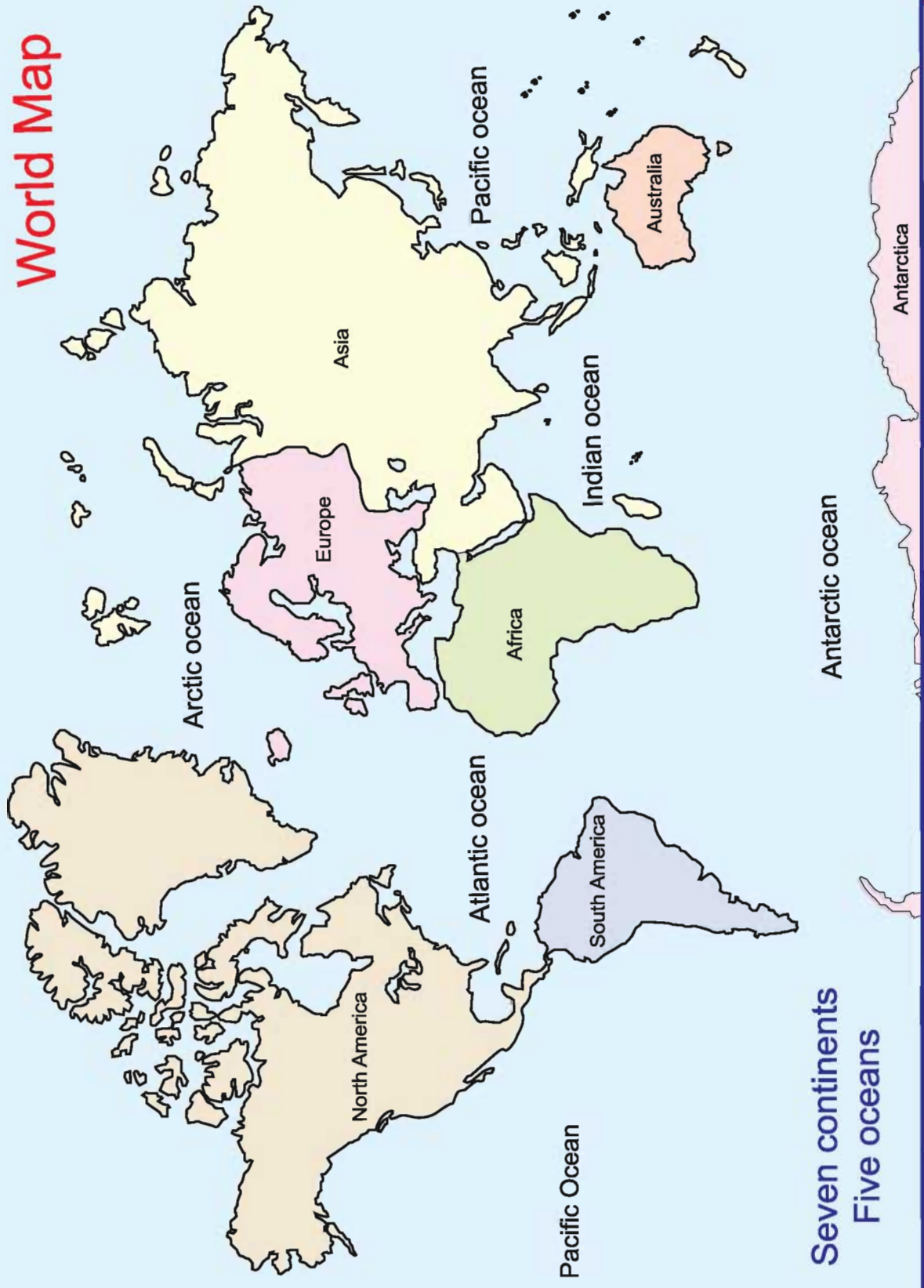
#### The seven continents:

1. Asia:- It is the largest continent. It is situated in the northern hemisphere. Our Country, **India is situated in Asia.**

The cold **Gobi desert** and the **Himalayan mountains** are located in this continent.



# World Map



Seven continents  
Five oceans



Africa-Sahara desert

## 2. Africa:-

It is the second largest continent in the world. This continent is situated in both, the northern and southern hemisphere. The equator divides the continent into two equal halves.

River Nile, (6,695kms) the longest river in the world and the Sahara, the largest desert in the world, is found in this continent. This continent is rich in mineral resources and has dense forests.

## 3. North America:-

This continent is surrounded by the Arctic ocean, Atlantic ocean and Pacific Ocean. The Rocky mountains, situated along the west coast is a very long chain of mountains.

## 4. South America:-

This continent lies almost entirely in the southern hemisphere. The Andes, the world's longest mountain range and River Amazon (6,586 kms) the world's largest river is situated in this continent.

## 5. Europe:-

This continent lies to the west of Asia. The Alps mountain range is situated in this continent.

## 6. Australia:-

Australia is referred to as 'Island continent', because it is surrounded by oceans on all the four sides. It consists of many islands like New Zealand and Fiji. Fiji islands, Papua and New Guinea are called oceanic islands. The Great Barrier Reef, the world's largest coral reef is situated off the east coast of Australia.

## 7. Antarctica:-

This continent is situated in the South Pole and is entirely covered with snow. It is a very cold place. Penguins, Seals and other living creatures live here.

Our Country has set up the Dakshin Gangotri and Maitri research stations. Throughout the year Indian scientists conduct many experiments in this continent.



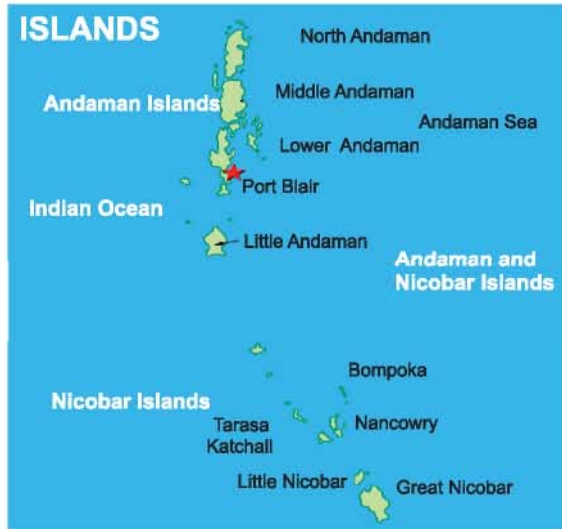
Antarctica - Maitri research stations

## Island:-

A piece of land surrounded by water on all sides is called an island. Sri Lanka is an island. A group of islands is called an archipelago.

Locate an island group belonging to India.





### Oceans:

71% (two third) of the earth's surface is covered by water. A large stretch of water covering a huge area is called an **Ocean**. Just like the mountains, plains and plateaus are part of the Earth, oceans are also a part of the earth.

There are **five oceans** on the Earth. They are the Pacific ocean, the Atlantic ocean, the Indian ocean, the Arctic ocean and the Antarctic ocean.

For our convenience oceans are divided into **seas**. The sea to the east of Tamil Nadu is called the **Bay of Bengal** and the sea to the west of Kerala is called **Arabian sea**.

Locate two other seas on the world map.

### 1. Pacific Ocean:

It is the deepest ocean in the world. The volcanic mountains surrounding the Pacific Ocean is called the **Pacific Ring of Fire**.

The deepest **Mariana Trench** is located in the Pacific Ocean. This trench is so deep that Mt. Everest is not enough to fill it.

### 2. Atlantic Ocean:

It is the second largest ocean in the world. **Hurricanes** are very common in this ocean.

### 3. Indian Ocean:

It is the third largest ocean in the world. India receives rainfall from the **monsoons** which originate in this ocean.

### 4. Antarctic Ocean:

The ocean surrounding the continent of Antarctica is called the Southern ocean or Antarctic Ocean.

### 5. Arctic Ocean:

This is the smallest ocean in the world. It surrounds the North Pole. This ocean has many **icebergs**.

### Land, Water, Air:-

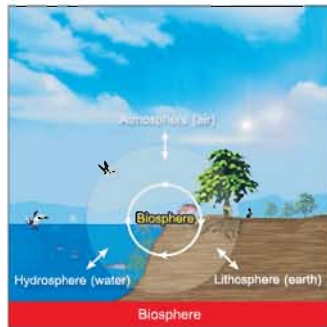
Apart from the seas, the rivers, lakes, ponds and tanks are the other water bodies. The peaks of the Himalayas, Arctic circle and Antarctic circle are **covered with snow** and not with water.

The atmosphere is filled with **water vapour**, cloud and moisture. The water on earth is found in **three forms namely solid, liquid and gas**. Apart from land and water, air is present in the earth.

Though we are always surrounded by **air**, we feel its **presence**, only when there is **wind and cyclones**.



The solid portion of the earth on which we live is called the **Lithosphere**. Water covers a large area of the earth's surface and this area is called **Hydrosphere**. The gaseous layer that surrounds the earth is called **Atmosphere**.



Apart from water, land and air, the life that exists here is unique to this planet. Plants, animals and millions of micro organisms are found on the land surface.

### Let us learn

The zone in which living organisms exist is called as **Biosphere**. Lithosphere, Hydrosphere and Atmosphere together forms Biosphere. Hence if any one of these is **polluted**, the living organisms are affected.

Trees, plants, creepers, worms, insects, birds, animals, micro organisms and other millions of living forms exist in the biosphere. The living organisms extend upto many kilometers in the atmosphere.

Apart from many kinds of fish, plankton which serves as food for the fish are also found in the ocean.

Living organisms are found at great depths where geysers are present. Worms and micro organisms are present deep in the soil. **Many species of plants and animals are present on land.**



Peninsula is a piece of land that is surrounded by water on three sides. India is a peninsula.



A gulf is a hollow carved out in the sea coast which lets the water reach deep inland. A bay is an inlet of the sea with a wider opening than a gulf. Examples of these are the Bay of Bengal and the Persian Gulf. Which are the gulf countries? Why are they called so? Refer a world map.



A strait is a narrow stretch of water that connects two large water bodies.

For example the Palk strait between India and Sri Lanka.



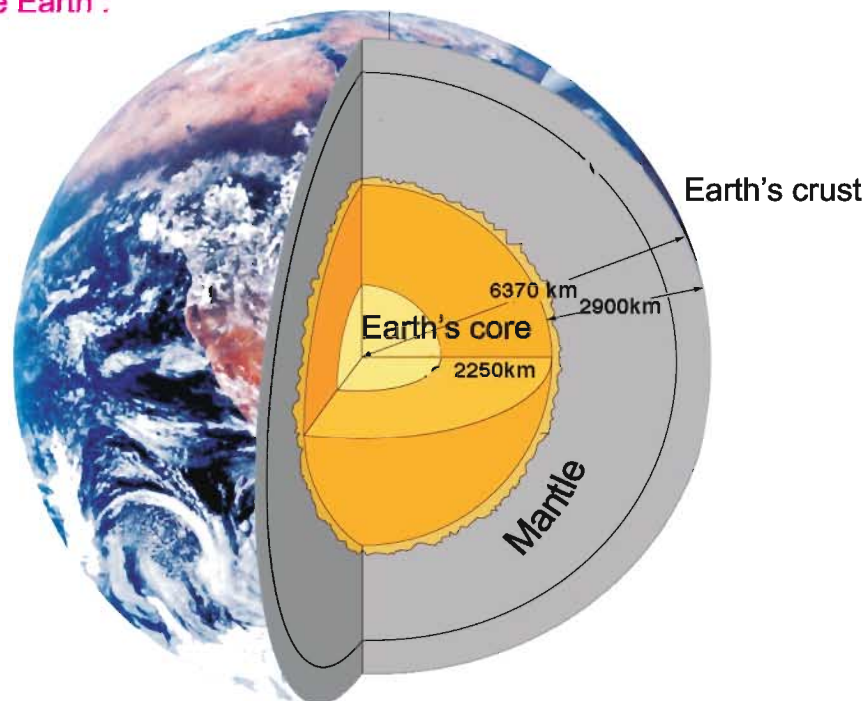
An isthmus is a narrow strip of land connecting two large land masses. The Isthmus of Panama connects North America with South America.

Lithosphere, hydrosphere and atmosphere do not exist separately. They are interdependent and interact with each other. For example sea water evaporates and forms water vapour. This mixes with the atmosphere. The surface of the Earth is heated by the sun's rays, as a result of this air on the land surface gets heated.

This hot air rises upward towards the cooler atmosphere. Therefore changes take place in the atmosphere. As a result of this, air moves and causes winds and breeze.

**Land, water and air together help the plants to grow.**

### Structure of the Earth :



When an apple is cut into two halves you can see the skin, flesh and seeds. Similarly what can you see if you cut the earth in to two halves?

The core is in the semi solid state. Nickel and iron is found in abundance in this layer. This is called as the inner core. Minerals are found in the molten stage around the core. Here the temperature is very high. It is approximately 5,000°C.

The core is surrounded by the Mantle. 85% of the Earth's minerals are found here. The entire layer consists of rocks in the solid and semi solid state. Like the skin of the apple, the Earth's outer crust is a thin layer.

The continents and oceans are found in this layer. The thickness of the Earth's crust below the oceans is 5-10 km. The thickness of the crust varies from 30 – 50 kms. on the continents.

## Evaluation

### I. Choose the correct answer :

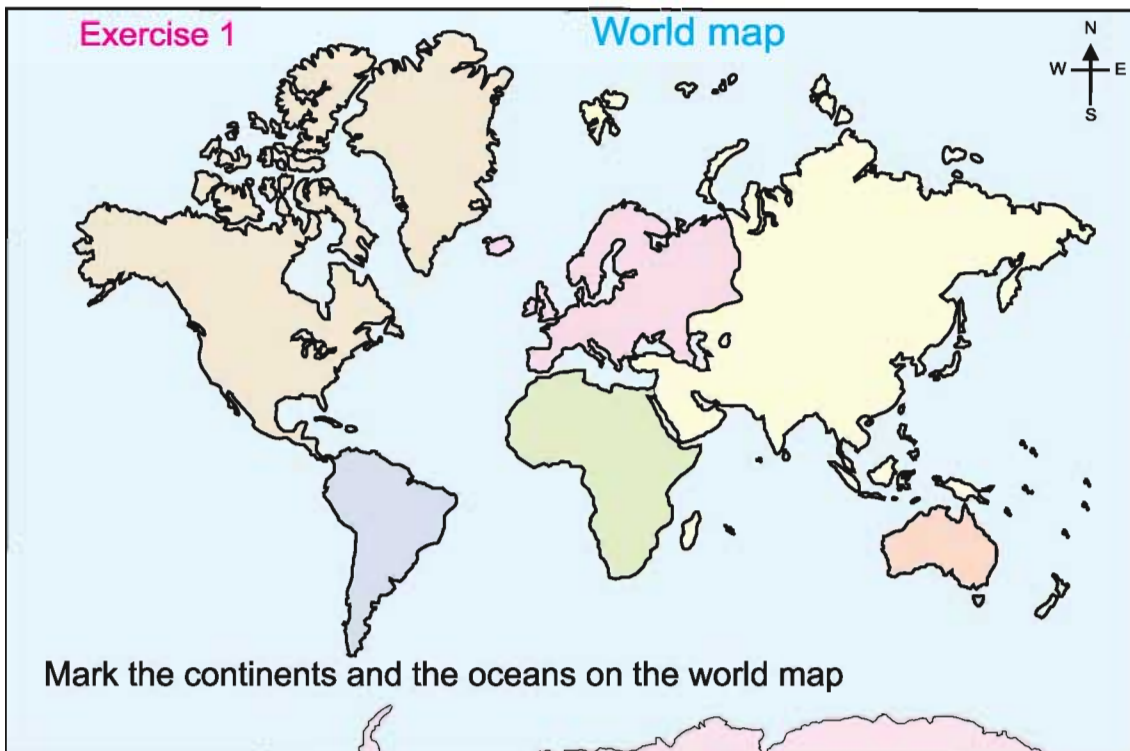
1. Land that is surrounded by water on all the four sides is called an \_\_\_\_\_.  
a) strait                      b) island                      c) peninsula
2. The world's deepest Mariana trench is located in the \_\_\_\_\_ Ocean.  
a) Pacific                      b) Atlantic                      c) Arctic
3. Sri Lanka is an \_\_\_\_\_.  
a) island                      b) peninsula                      c) strait

### II. Answer the following questions :

1. Distinguish between a plain and a plateau.
2. Define a peninsula. Give an example.
3. Why is the earth called a 'living planet'?

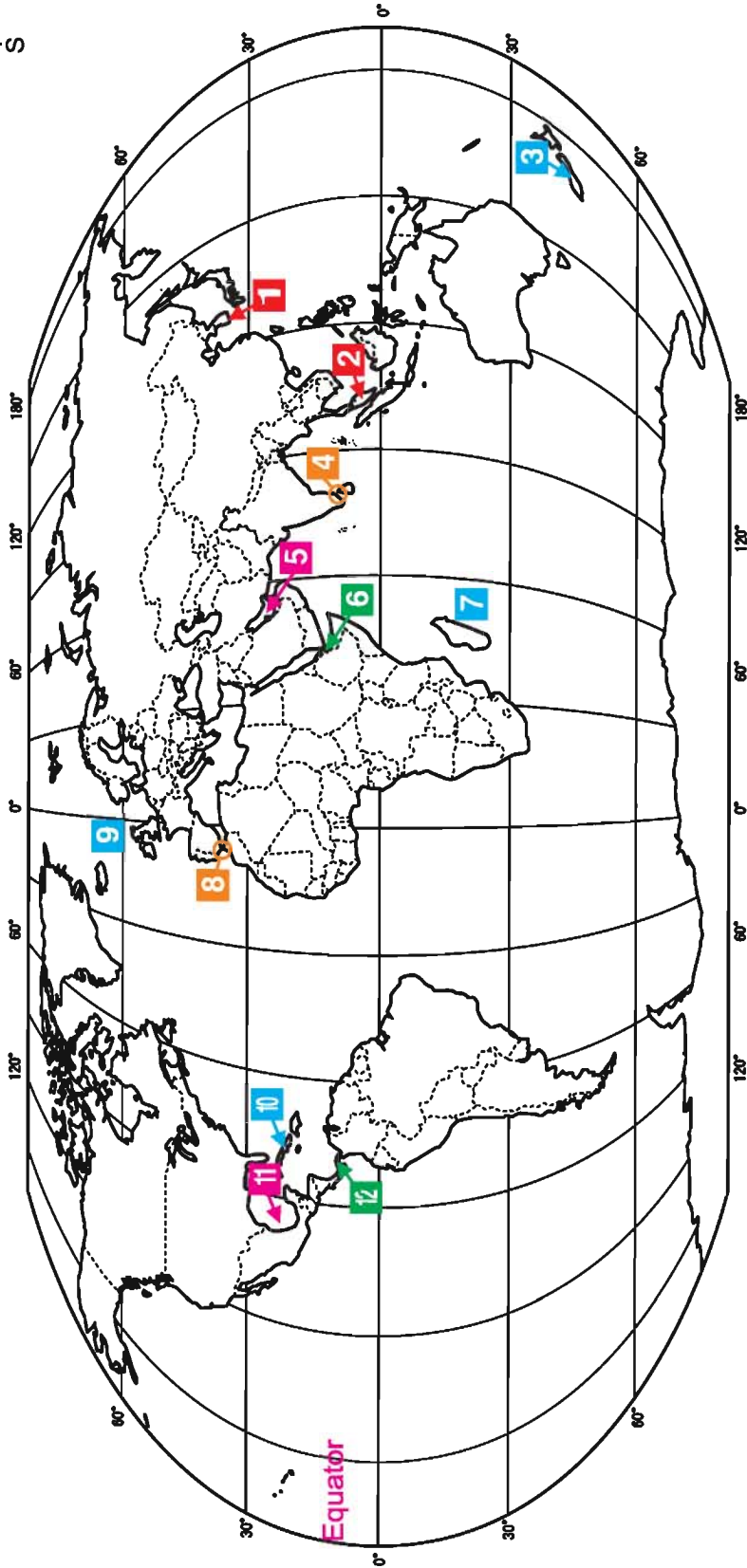
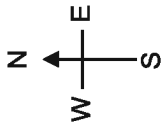
### III. Map skill :

1. Mark the continents and the oceans on a world map.
2. Mark a few peninsulas, bays, gulfs, straits, isthmus and islands on a world map.



Exercise 2

# World Map



Mark the following on the world map:

- |  |  |  |  |  |
|--|--|--|--|--|
| <span style="color: red;">■</span> Peninsula | <span style="color: pink;">■</span> Bay / Gulf | <span style="color: orange;">■</span> Strait | <span style="color: green;">■</span> Isthmus | <span style="color: blue;">■</span> Island |
| 1. ....                                      | 1. ....  | 1. ....                                      | 1. ....                                      | 1. ....                                    |
| 2. ....                                      | 2. ....  | 2. ....                                      | 2. ....                                      | 2. ....                                    |
| 3. ....                                      | 3. ....  | 3. ....                                      | 3. ....                                      | 3. ....                                    |
| 4. ....                                      | 4. ....  | 4. ....                                      | 4. ....                                      | 4. ....                                    |



## 4. MAPS AND GLOBE

What is the shape of the Earth in which we live? Is it in the shape of a ball? Is it in the shape of an orange? What is its true shape?



Until the late 17<sup>th</sup> century, people had many wrong ideas about the shape of the Earth because they did not know the shape of the Earth. We sent rockets and satellites into space and when the Earth was viewed from space, many old beliefs changed. Will you be able to see the complete shape of an object if you keep it very close to your eyes? If you keep your book very close to your nose, you will not be able to see its full view. Only if you keep it at a certain distance you will be able to see it fully.



The Earth is a big sphere. Our Earth is slightly bulged at the equator and slightly flattened at the poles. The shape of our Earth is unique. The shape of the Earth is called as a Geoid.

### MAPS

A map is a representation of the Earth or part of it and is drawn to scale on paper or on cloth.

What is meant by scale? Can we draw the map of our village or town on a sheet of paper? Even if we draw it on a large sheet of paper, will we be able to spread this paper and view the map?

Hence to represent one kilometre on land, we reduce it and draw it as one centimetre on the map. We draw the map of the entire place in the similar way and say that the map is drawn to a scale of 1 centimetre = 1 kilometre.

In earlier days, maps were not required because the people lived in one place. Then people started to move from place to place, either in search of food or due to the change in seasons.

Later, merchants travelled from one country to another country for trade and commerce. People used maps to travel in the correct route. Migration created the need for maps.

To prepare and understand maps we need training. If we want to go to a cinema hall in our neighbouring city, we may not know where it is. Our friend would say, "Don't you know it is in the street behind the bus stop which is opposite to the telephone booth"?

If you still don't understand, he will draw a route map on a paper. This is a map without a scale. This is called a **sketch map**.

An architect or a civil engineer will draw a plan of a building before construction. Have you seen that plan? (During an activity class, You can

bring such a plan to your classroom and the students can have a look at it.) It is called a blue print which is commonly called as a **plan**.

World maps and maps of different countries look better than these maps.

**Think: Will maps have only lines?**

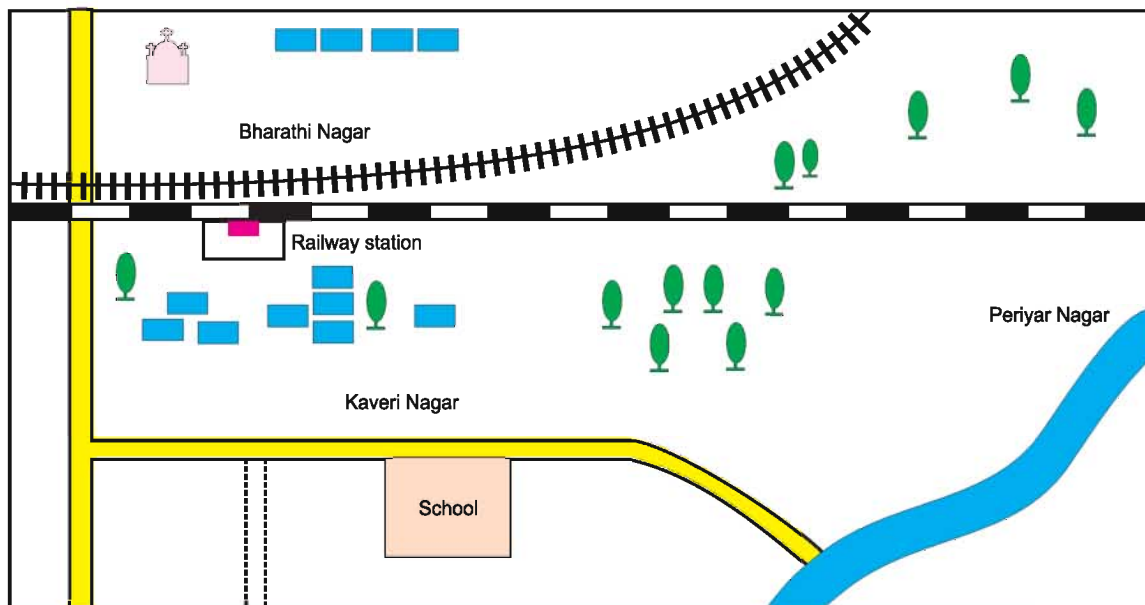
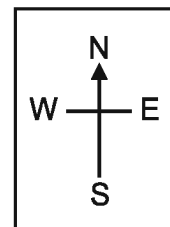
**Conventional Signs and Symbols** help us to understand directions and different features on a map.

The **direction** is indicated on the top right hand corner of every map like the one given below. This is the sign that shows the direction in a map.

### Let us do

Draw a sketch map to show the route from your home to school.

Sketch Map





We know which is the north and the south direction of the place where we live. We can easily understand the direction by unfolding the map and by **placing the north of the map in line with the north of our place.**

### Scale

Scale is indicated at the bottom of the map. **Scale is the distance between two points places on the map to the corresponding distance on the ground.**

### Conventional Signs and symbols

Can we draw on the map the mountains, forests, rivers, roads, bridges, buildings, railway lines and other land features of the Earth in the same size and shape?

We draw them with the help of certain symbols. These symbols are used within the map itself. The explanation for these symbols are given on the **right or left corner of the map.** It would be easy if the same symbols are used everywhere, hence standard, uniform **Conventional symbols** are used throughout the world.

### Conventional Signs and symbols

International boundaries	
State boundaries	
District boundaries	
Railway lines	
Railway station	
River	
Well	
Temple	
Mosque	
Church	

### Classification of maps

All the objects and the information about the earth cannot be shown on the same map. Hence maps can be classified into three types.

1. Physical features like mountains, plateaus, rivers and oceans are drawn on a **Physical map.** eg. Refer the Physical map of India which is given.

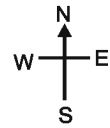
2. Countries, states, districts, cities, villages and other boundaries are drawn on a **Political map.** eg. Refer the Political map of India and District map of Tamil Nadu which are given.

3. Maps that show temperature, forest, and minerals resources are drawn based on a theme, hence they are called **Thematic map.** eg. the Transport map of India and the Industrial map of Tamil Nadu which are given.

### Uses of maps

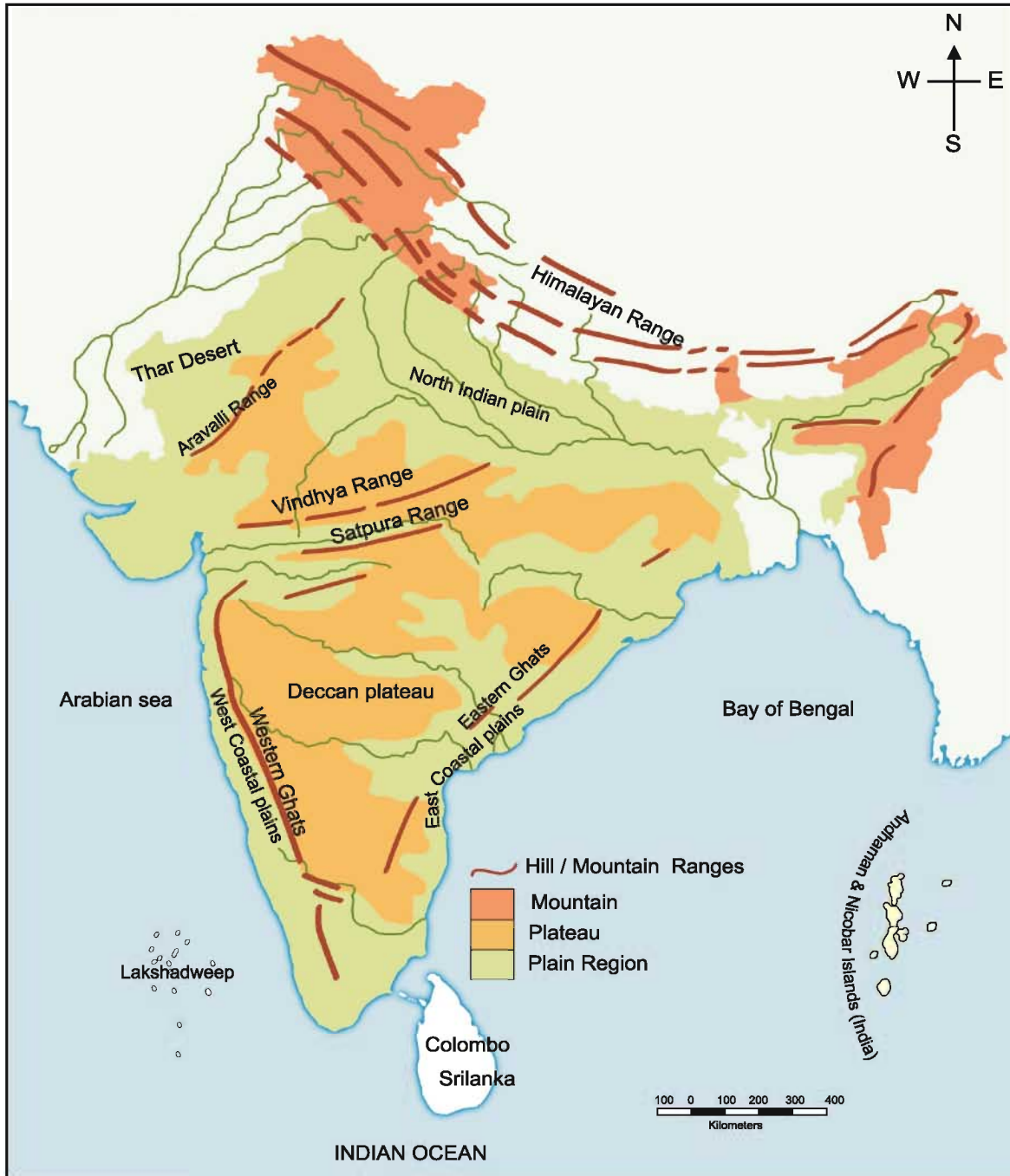
1. It is used to **locate places.**
2. It is used to **locate resources** that are found on the earth.
3. It helps the **military** to move its **troops.**
4. It helps in **planning.**
5. It helps us to know the **movement** of the **satellite** and **planets** in the sky.
6. It is used for teaching and learning in a class room.

# INDIA - POLITICAL

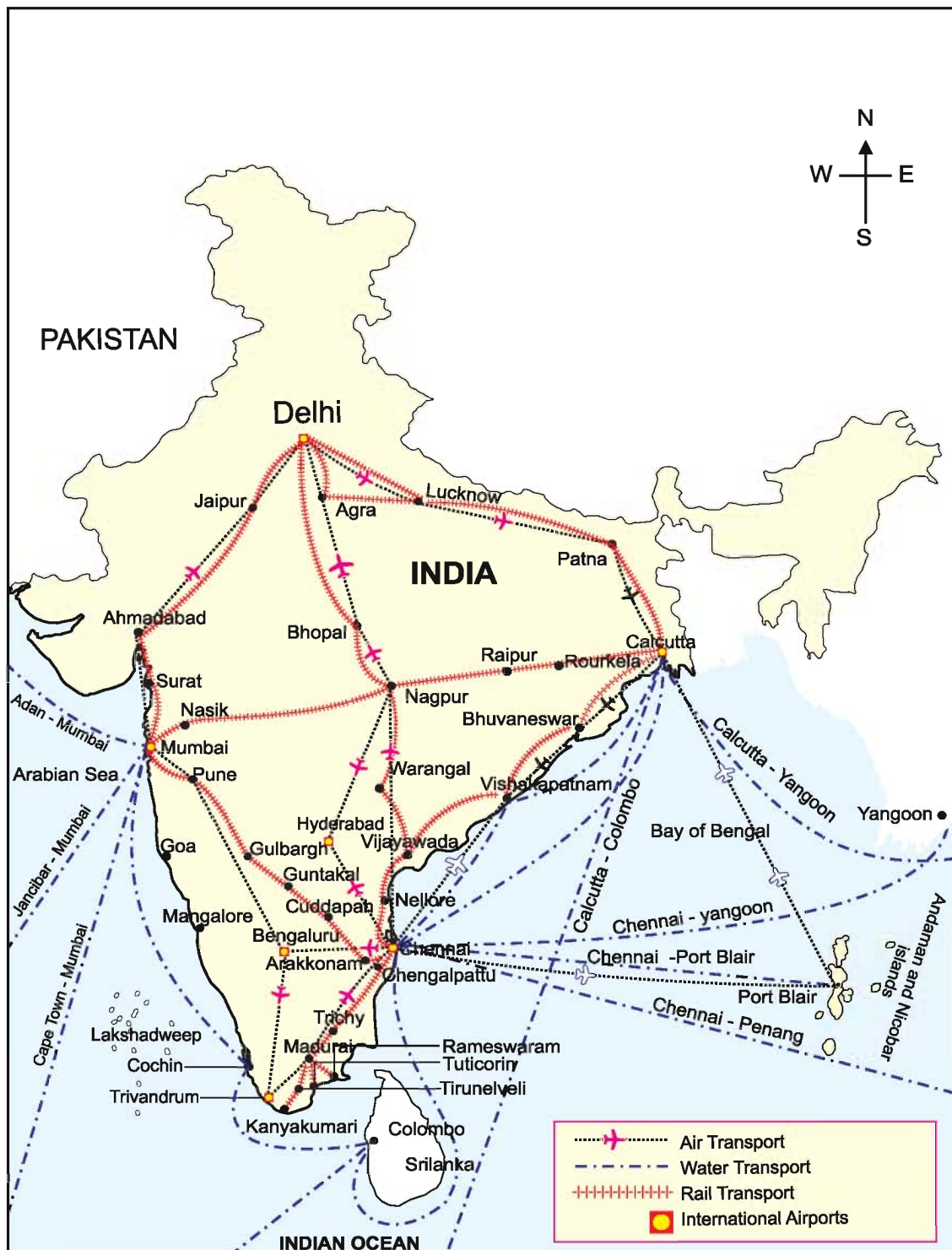




# INDIA - PHYSICAL

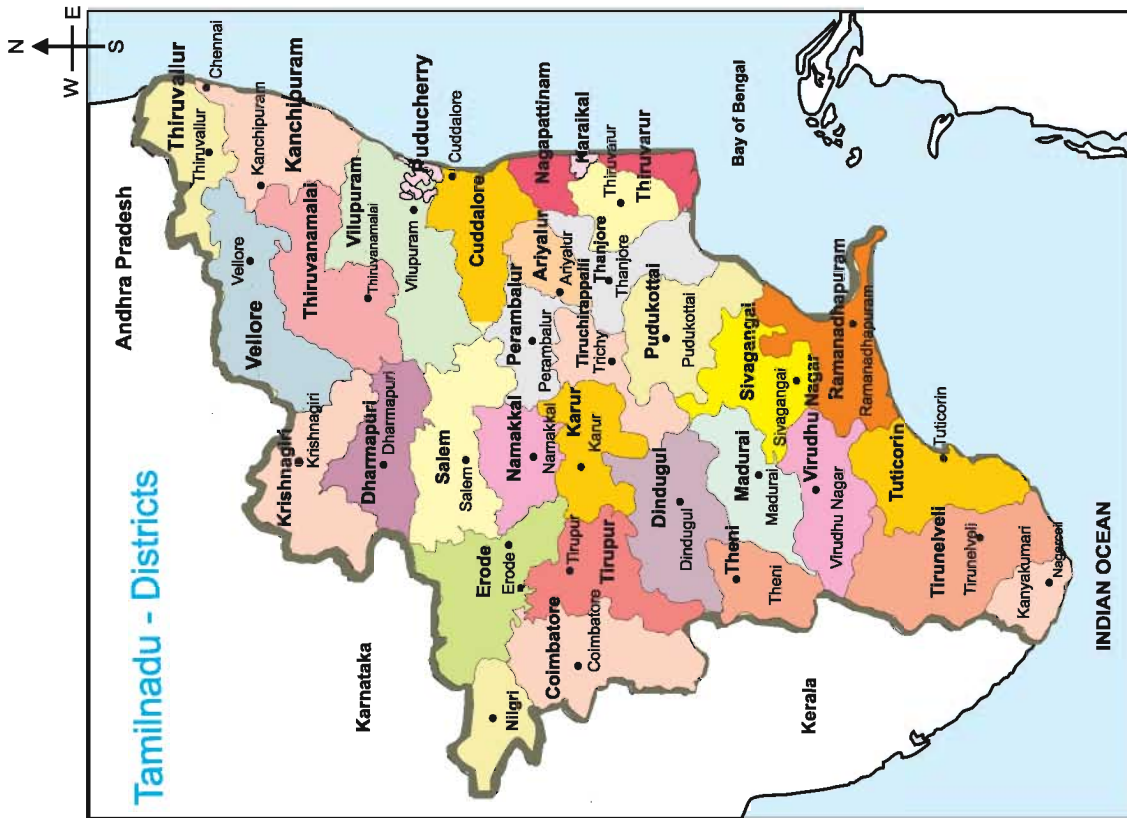


# INDIA - TRANSPORT





## Tamil Nadu - Industries





Globe

### Globe

We cannot see the complete shape of the Earth from the Earth. Globe is a model of the Earth, which helps us to locate continents, oceans, islands and other landforms with the help of the latitudes and longitudes on which they are located.

**A Globe is a small true model of the earth.** Globe is also made to an inclined axis like the rotating earth which is inclined at an angle of  $23\frac{1}{2}^{\circ}$  on its axis.

### The Lines on the Earth

When we travel from one place to another we enquire what is the distance between the two places. We erect milestones on roads to show the distance (kilometre). We say that the place is 15 km towards the east.

Where is a mountain located on the earth? Where is a country located on the earth? At which point exactly is the ship that sails on the sea? How can we accurately calculate these distances?

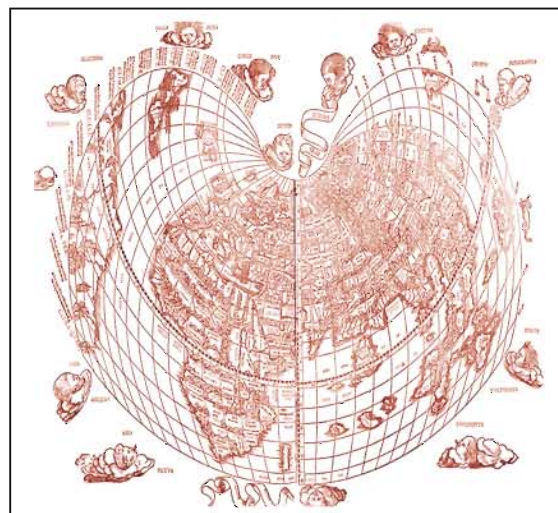
We draw few **imaginary lines** on the earth's surface. When we want to locate a place, we try to find out between which two lines this place is found.

**Latitudes** are imaginary lines that run from the **east to the west** on a globe. (on a map also)

**Longitudes** are imaginary lines that run vertically(or) from the **north to the south**.

The line that runs in the centre of the Earth from east to west is called as the **Equator**.

The Earth is a sphere and it consists of  $360^{\circ}$ . The **equator is the  $0^{\circ}$  latitude**. This is an important latitude. **Ptolemy** was the first man to draw latitudes and longitudes. He was a **Greek astronomer** who lived in the 2<sup>nd</sup> century B.C. (The world map that was drawn by him is given below). The Earth's surface to the north of the Equator ( $0^{\circ}$  latitude) is called as **Northern hemisphere**. The Earth's surface to the south of the equator is called as the **Southern hemisphere**.



Ptolemy's world map



Puvi, Boomi , Ulagam, Ulagu, Gnamam are some of the names given for the earth in Tamil.

A space observatory is located at Greenwich in London. The longitude that passes through **Greenwich is called as 0° longitude**. This is also called as the Greenwich longitude.

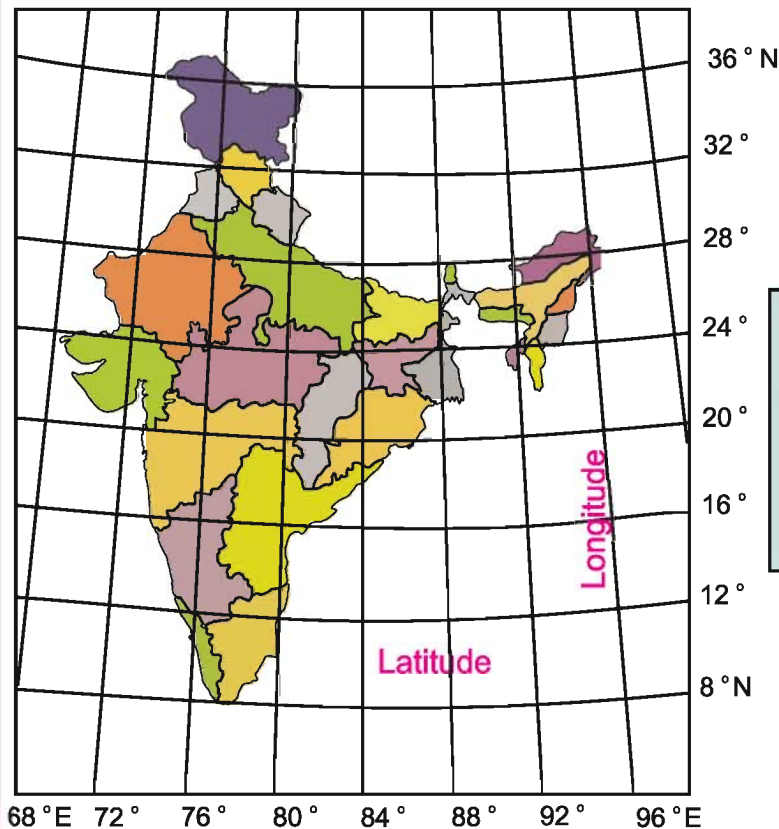
To identify a particular latitude we have to say how many degrees it is from

the north or south of the Equator. For eg. **10°N latitude is the 10<sup>th</sup> line north of the Equator and 10°S latitude is the 10<sup>th</sup> line south of Equator.**

Similarly it is indicated as 10°W and 10°E of the Greenwich meridian because the **Greenwich meridian** is considered as a central longitude. 'W' stands for places west of the Greenwich meridian and 'E' stands for the places east of Greenwich meridian.

How can we locate India?

### Location of India



We locate India between 8°N to 37°N latitude and 68°E to 97°E longitude.

Let us do :

With the help of a globe or a map find out the latitudinal and longitudinal extent of few countries and islands.

## Evaluation

### I. Choose the correct answer

1. The imaginary lines that are drawn from the east to the west on a globe is called \_\_\_\_\_.
  - a) Latitude
  - b) Earth's axis
  - c) Longitude
2. 0° Longitude is called as the \_\_\_\_\_.
  - a) Greenwich Meridian
  - b) Latitude
  - c) Earth's axis
3. Map that shows the continents, countries, capitals is called as \_\_\_\_\_ map.
  - a) Physical
  - b) Political
  - c) Thematic

### II. Answer the following questions :

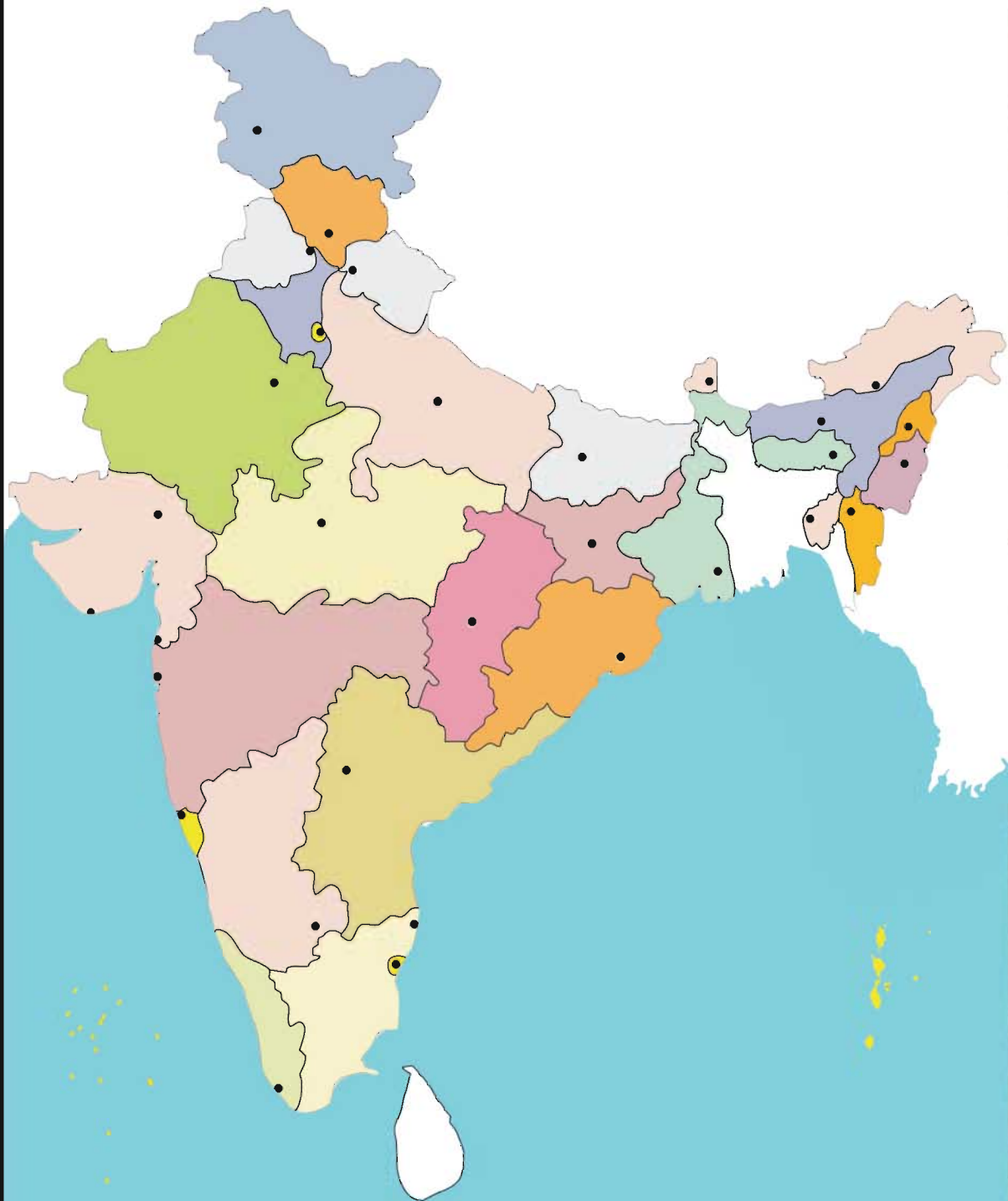
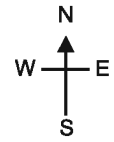
1. What is a map?
2. Explain thematic maps?
3. What is the latitudinal and longitudinal extent of India?

### III. Map skill :

1. Look at any physical, political and thematic map with the help of your teacher and answer the following questions:
  - a) What is the scale of the map?
  - b) What is the information given?
  - c) Tabulate the explanation given about conventional signs and symbols.
2. On a political map of India mark the states and its capitals.

Excercise

India - Political



Mark the states and its capitals on the map of India





## ECONOMICS

# ECONOMICS- AN INTRODUCTION

The basic needs of man are food, clothing and shelter. The food we eat like rice, wheat etc. are cultivated in the land. The farmers cultivate food grains. This is termed as agriculture. Agriculture is the first known occupation to man.

Man who lived in caves, to protect himself from rain, cold and heat later started to live in houses. Cities began to emerge and man's need started to increase.

To fulfill his needs, he started to manufacture garments, footwear, bi-cycles, cars, radios and television sets.

In our daily life we utilize many things. These things are sold in shops. To buy and sell commodities we use money. If we save money it is good for us and the country.



Food helps us to grow. Education is necessary to grow intellectually. Medical facilities protect us from diseases. Teachers impart education, and doctors treat patients. Along with them Government employees work for the welfare of the people.

Agriculturists, labourers and employees help to improve the economy of the country. This is called as **National income**. What an individual earns is termed as **Per Capita Income**.

Many people do not receive income, don't they? Should we provide them with food, clothing and shelter? The Government helps these people. Through this they receive their

basic requirements. This is called **distribution**.

1. Production
2. Consumption
3. Distribution

are the basic divisions in economics.

We have learnt about production. Discuss in the class and list the requirements of the food, textile production as well as the tools and implements used for the construction of buildings. Because of the farmers we are able to obtain food grains. The industrial workers manufacture commodities required for our country.



Now the production is complete. Will these products reach the people immediately? It is necessary for the buyers to purchase these products and transport them to the markets. Then only we can purchase the products needed. A **market** is a place where things are bought and sold. When people purchase commodities from the market to satisfy their requirements, it is called **consumption**.

The buying and selling of commodities is termed as **trade**. People who buy and sell things are called traders. Finished products are bought by traders and sold in the markets. People who buy and sell large quantities of commodities are called wholesale merchants. People who buy and sell small quantities are called retailers. When there is surplus of commodities there is a fall in price. When there is deficit of commodities there is a rise in price.



**Amartya Sen**  
**Scholar in Economics**

The Government supplies essential commodities like rice, dhal, sugar and oil through fair price shops. The Government has taken several steps to control price rise through the enforcement of laws. When there is a shortage of commodities the Government imports them from other countries and distributes it through fair price shops.

As the demand increases there is an increase in the production, consumption and distribution. This is termed as **Economic Development**.

What should be produced?

How does production take place? These are monitored by the Government. The Government helps in the stable development of the country's economy.

As you learn more about Economics you will learn new facts.



Those who study Economics becomes scholars. To prepare the Central and State Government annual budget , it is necessary to have a knowledge of Economics.

A sound knowledge of Economics will surely help in the developmental work in all fields. In our country **Amarthya Sen** received the Nobel Prize for Economics. From this you will learn about the importance of Economics.

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## Evaluation:

### I. Answer in one or two sentences

1. What are the basic needs of man?
2. What are the requirements for food production?
3. What are the three divisions of Economics?
4. Why is it necessary to study Economics?

### II. Fill in the blanks

1. To fulfill his needs, man started to \_\_\_\_\_
2. When there is surplus of commodities there is a \_\_\_\_\_ in price.
3. \_\_\_\_\_ of our country received the Nobel prize for Economics.
4. When there is deficit of commodities in the market there is a \_\_\_\_\_ in price

### III. Match the following

- |                                  |   |                                     |
|----------------------------------|---|-------------------------------------|
| 1. Economy of the country        | - | traders                             |
| 2. People who buy and sell goods | - | Knowledge of Economics is necessary |
| 3. To attain self sufficiency    | - | basic needs                         |
| 4. Food, clothing and shelter    | - | national income                     |

### Class activities:

1. Form students into groups of six. In these groups two act as producers, two as traders, and two as consumers.
2. Debate. Who is more important - producers or traders?
3. Calculate your family's annual income and expenditure. Discuss ways by which you can increase your savings.
4. Calculate the amount spent by your parents for your education during the academic year.

# HISTORY

## PRE-HISTORIC PERIOD

Inian, a student of standard six was reading the newspaper. He was astonished. An amazing discovery! An animal called Dinosaur lived many million years ago. The eggs of the Dinosaur were excavated near Ariyalur. They belonged to the pre-historic period. Then what is 'pre-historic period'?

Can you tell us the history of your family?

1. What is your father's name?
2. What is your grandfather's name?
3. What is your great grandfather's name?
4. What is your grandfather's grandfather's name?
5. What is your grandfather's grandfather's father's name?

You can answer the first two questions only. But we don't know the answers to questions such as the names of our grandfather's father and grandfather's grandfather. If this is the case, what are the evidences to find about the people who lived hundred, two hundred, five hundred and thousand years ago. The sources about these are known as History. What is History? History tells about the people who lived in the past with evidences according to the ages.



The Earlymen

From where do we get these old things? Who has discovered all these? Read this news and find out. The archaeological excavation is going on for hundred years in Athichanallur, which is in Tirunelveli District in Tamil Nadu. Recently in 2004, they excavated more than 160 burial urns in one place. This proved that people lived in that place long ago.

The written and archaeological evidences that tell us about the period in which people lived, events, food habits, customs, culture, forms of government and literature are known as historical evidences. History can be divided into pre-history and historical period. Historical period has written evidences and other evidences. The written evidences are literary work, historical notes, stone edicts, copper plates and palm leaves.



### Evidences to know about pre-historic period:

To know about the pre-historic period, there are evidences such as the things that belonged to that period, ruins, fossils, horns and bones of animals, tools made of stones, skulls and deposits (impressions) which are found in different places around the world as well as in India. With the help of all these we know about the pre-historic period of India.

### The Pre-historic period can be classified as:

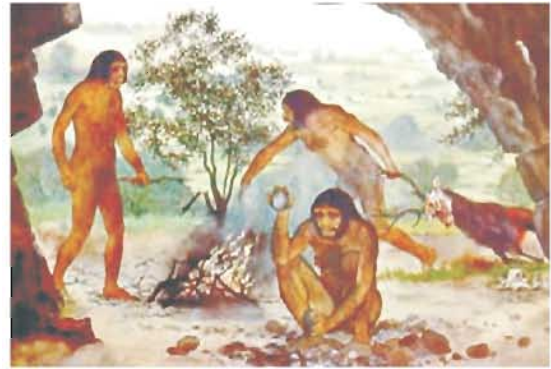
- Palaeolithic Age - Old Stone Age (BC 10000 years ago)
- Neolithic Age - New Stone Age (BC 10000 - BC 4000)
- Chalcolithic Age - Copper Stone Age (BC 3000 - BC 1500)
- Iron Age - Iron Age (BC 1500 - BC 600)

#### 1. Old Stone Age: ( Palaeolithic Age )

With the help of the tools used by early man, we can divide the stone age into Old stone age and New stone age. He was a nomad. He lived in the jungle. He took shelter on the branches of trees, in holes and caves. He discovered fire by using the flint stone. The primitive man was scared of thunder and lightning and worshipped them.

He had to protect himself from cold, Sun and rain. He wore dresses made out of leaves, skin of animals and barks of trees. He used stones, branches of trees, bones and horns of the animals as weapons.

He ate vegetables, fruits, roots and meat of animals which he gathered from the jungle. Since he could not find food in one place he went from place to place in search of food.



Earlymen - Making Tools

### Words giving the same meaning with little difference :

some years ago, many years ago, ancient, long long ago, from time immemorial, primitive.

### Era of some important events

- Beginning of the Earth - 4.6 Billion years ago
- Appearance of man - 4000 years ago (Homosepians)
- Beginning of agriculture - 8000 years ago
- Beginning of the cities - 4700 years ago

BC	- Before Christ
AD	- Anno Domini
CE	- Common Era
BCE	- Before Common Era
BC 31	- Birth of Thiruvalluvar
BT	- Before Thiruvalluvar
AT	- After Thiruvalluvar

- Did the primitive man store the food?
- Where and how did he store?
- Did he share?
- Why did he gather food?
- Did he preserve the food?
- Why should the food be preserved?
- Name the food items that we preserve and store nowadays.

When he did not find vegetables, fruits and roots, he hunted animals. He used stones, branches, bones, horns of animals etc. to hunt animals. In the beginning he hunted small animals all alone. Then they hunted in groups. Both men and women involved themselves in hunting.

In the Pimpet Ca cave in Madhya Pradesh we see a painting. This depicts a woman with her child tied to her waist throwing an arrow. From this we know that women were also involved in hunting.

What for the early man hunted the wild animals? Is it to protect himself from the wild animal or for food?

Why has the government amended laws to protect the wild animals?

### Places in India where the Old stone age tools were found:

Soan River bank at Madhya Pradesh, Pimpet Ca, Maheshwa (Madhya Pradesh), Luni Valley in Rajasthan, Pagalkhat, (Karnataka), Karnool caves, Renigunta (Andhra Pradesh), Vadamadurai, Athirambakkam, Pallavaram, Kanchipuram, Vellore, Thiruvallur (Tamil Nadu).

### 2. New Stone Age: (Neolithic Age)

Old stone age man went from place to place in search of food and hunting animals. Then he learnt to produce his food. He domesticated animals like goat, cow and hen.

The first animal he tamed was dog, which helped him in hunting. He reared goats and cows and had milk as his food. The next stage in the evolution of man is known as **New Stone Age**.



During this age, he used polished, carved, sharp stone weapons. In this period, he started to produce food. Wheel was invented. As a result of this, he was able to transport things from one place to another easily. With the help of wheels he made pots. He sharpened the crude weapons and attached them with handles made up of wood and bones. Metal was in use. Copper was the first metal used by him.

- They built mud houses with thatched roofs and began to live in groups in small villages.
- The houses were round or oval shaped. They were built below the ground level and thatched with wooden planks.
- Agriculture was their main occupation.
- They domesticated and reared animals.
- Axes, handles made out of bones, fishing hooks, needle and chopper were in use.
- New stone age weapons were found in Tirunelveli, Salem, Pudukottai, Tiruchirapalli.
- During the New stone age they had the practice of burying the dead. The dead were buried along with their tamed animals in the frontyard of their houses.

Places where New stone age weapons were found:



Tirunelveli, Thandikkudi, Pudukottai, Tiruchirapalli and Salem.

### 3. Copper Age: (Chalcolithic Age)

At the end of the New stone age, man came to know the use of copper. He made tools out of copper as well as small stones. So this age is known as Chalcolithic Age. They drew colourful pictures with geometrical patterns on

the pots they used. The Harappan culture belonged to this age. Let us learn in detail about this in the next lesson.

### Chalcolithic Age weapons



### 4. Iron Age:

The period when the tools were made up of iron was called Iron Age. Household articles and agricultural implements were made out of iron. They learnt to melt the metal and make weapons. They were creative. Vedic period belonged to the Iron Age.

List the tools made out of iron which are in use now. Compare them with the tools used before.

Places where the stone age weapons were found in Tamil Nadu:

- Old stone age weapons - Pallavaram, Kanchipuram, Vellore, Thiruvallur.
- New stone age weapons - Tirunelveli, Salem, Pudukottai, Tiruchirapalli, Thandikkudi (Hills of Kodaikanal)

Alloys:

Iron + Chromium = Silver  
 Copper + Lead = Bronze  
 Copper + Zinc = Brass  
 Iron + Manganese = Steel

### Important words from the lesson:

- Archaeology
- Primitive
- Copper Age
- Historical evidences
- Million
- Excavation
- Stone Age
- Iron Age
- Deposits
- Bronze



## Evaluation:

### I. Choose the correct answer :

1. Pre-history means
  - a) period of written evidences
  - b) period of no written evidences
  - c) period which have all the 3 evidences like time, place and events
2. Old stone age people
  - a) wore cotton clothes
  - b) wore leaves, barks of trees and skin of animals
  - c) wore woollen clothes
3. The first animal tamed by primitive man
  - a) cow
  - b) horse
  - c) dog

### II. Fill in the blanks :

1. The early man ----- depending on nature.
2. To know the truths of ancient period, we must read -----.
3. The Old stone age man used-----stones.
4. The primitive age is the age ----- the ancient period.
5. We must read ----- to know about the primitive age.
6. ----- was the first animal domesticated by the early man.
7. New stone age man used ----- to make pots.

### III. Match the following :

- |                   |   |               |
|-------------------|---|---------------|
| 1. Tamil Nadu     | - | Pagalkhat     |
| 2. Andra Pradesh  | - | Athirampakkam |
| 3. Madhya Pradesh | - | Karnool       |
| 4. Karnataka      | - | Pimpet Ca     |

**IV. Answer the following:**

1. What is history?
2. List the evidences to know about history.
3. What do you mean by pre-historic period?
4. What are the four classifications of the pre-historic period?
5. What were the dresses of the early man?
6. Draw and compare any four tools of Old stone age and New stone age.

Prepare a tabular column from the informations you have gathered from this lesson.

Period	Stages of man/occupation	Tools used
Old stone age	Primitive man – Gathering food, Hunting	Crude stones
New stone age	Stone age man – Rearing of animals, Agriculture	Polished and carved stones
Copper age		
Iron age		

**Write the names of your family members**

Write the name	Write the name
1. Father : .....	Mother : .....
2. Father's father : (Grandfather).....	Mother's father : (Grandfather).....
Father's mother : (Grandmother).....	Mother's mother: (Grandmother).....
3. Grand father's father : .....	Grandmother's mother : .....
(Great grandfather) : .....	Grandmother's father : .....
Grand father's mother : .....	
(Great grandmother).....	

## 2. INDUS VALLEY CIVILIZATION

Why do we call the modern age as Computer age? After the invention of electricity, computer is regarded as the most important one and so it is called Computer age.

In the previous lesson, we studied about the early man. The period when early man used stone was known as stone age. The first metal known to man was copper. So he used both copper and stone. That age was known as Copper Stone Age. During that period there existed an ancient civilization in India which was the Indus Valley Civilization. (Harappa)

This is the beginning of the Indian civilization.

### Harappa:

In 1856, when the British ruled India, they laid railway lines on the banks of River Ravi, a branch of Indus river. They found a mound of sand. There they saw well- burnt bricks and ruins.

They took those bricks and constructed the railway lines. So they destroyed many such walls of the buildings.

In 1921, archaeologists found out that it was the ancient city of India. Harappa in Sindhi means 'Buried City'. The cities discovered after the Indus Valley Civilization were named as Harappan Civilization.

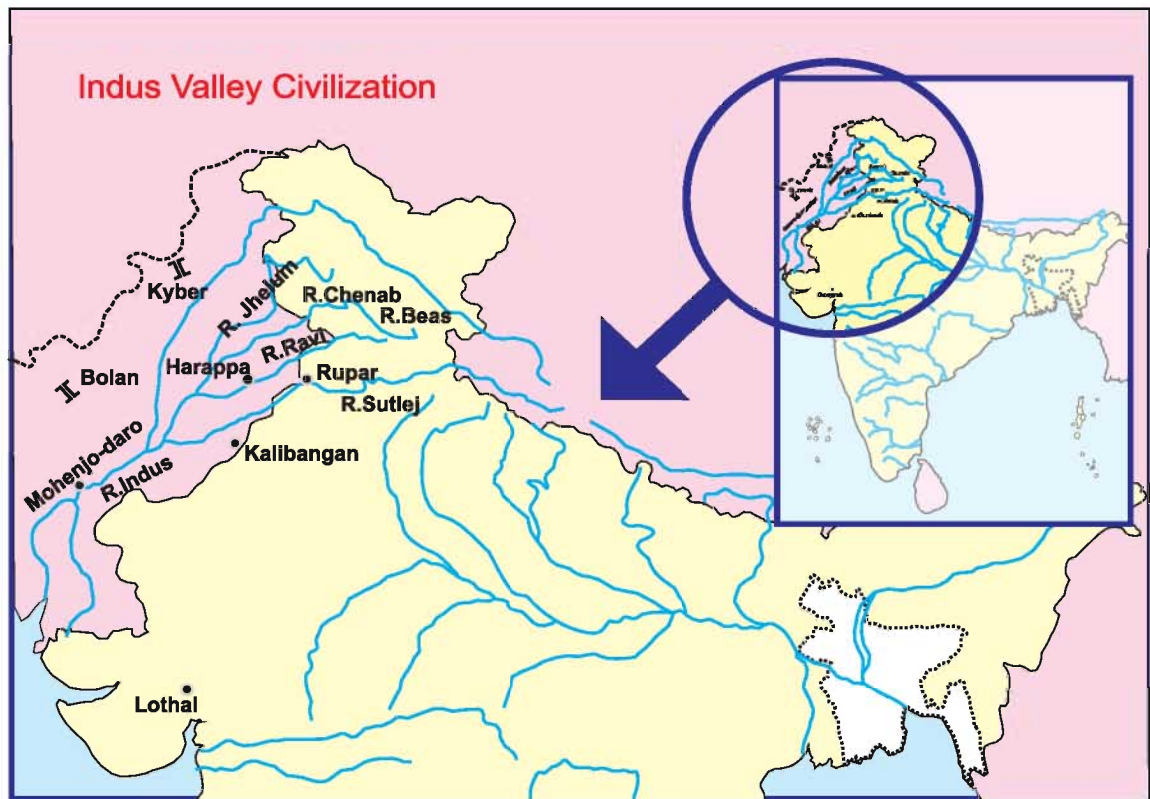
This civilization flourished in India about 4700 years ago. Likewise, the ruins of the cities were found in Mohenjo-daro, Chanhu-daro, Kalibangan and Lothal.

### The Great Bath:

The most important structure found in the citadel was the Great Bath. It was built of kiln-fired bricks and sealed with a lining of bitumen.







There were steps on both the sides of the pool. There were rooms on all the sides of the pool for changing clothes. It was fed by water from a well and the dirty water was emptied by a huge drain.

#### Buildings :

Houses were built in grid system. There were houses which had two rooms and multi storied houses, public hall, granary and public buildings built out of bricks. There were no windows in the houses. Every house had a well and a bathroom. There were dustbins in front of the houses.

#### Town planning :

The Indus valley cities were well planned. The northern part of the town was narrow and elevated. The excavators considered that those were constructed on security basis. The eastern side was broad and lowered. We get more information from this town planning.

Mohenjo – daro in Sindhi means 'Mound of Dead'

The town was built with experts who were well versed in the art of town planning.

There would have been an administrative committee in the city to administer it.

Houses were built on both the sides of the broad streets in systematic order.

The houses had flat roofs and were many storied.

#### Administration:

The public drainage system, the Great Bath, the public hall, street lights and the provision of dustbins show that the administrative system was well organized.

#### Drainage system:

The drains from the houses were covered. They ran along the sides of the streets which were connected to the street drains.

They had manholes at regular intervals for cleaning.

#### Applied Science:

The **science and technology** such as construction, selections of lands , measurement of plots, foundation, selection of quality building materials and geometrical figures were in use.



Drainage system - Mohenjo-daro

We have an idea about ancient man from the archaeological evidences. This is the place where you can write your ideas.

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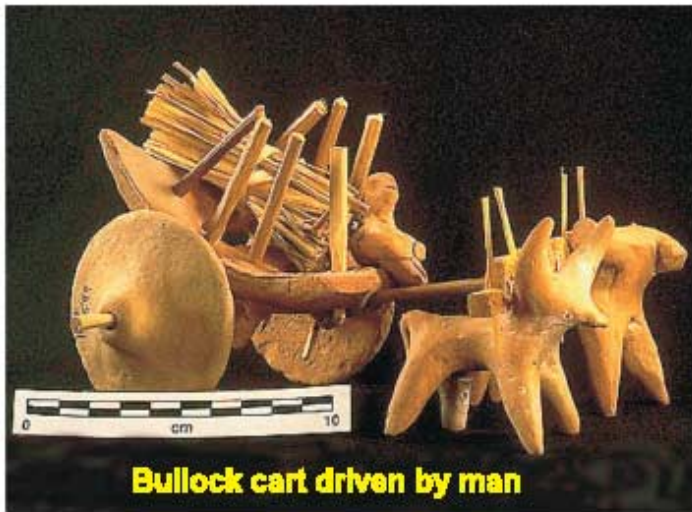
List out the similarities and the differences between the Great Bath of the Indus Valley and the ponds that are seen in the temples of Tamil Nadu. What types of machinery would they have used to fill the ponds?

#### Life style of Indus Valley people :

Row houses were built for the employers of town administration. People exported and imported things like metals, precious stones, ornaments and various useful products.



Statue of a man with beard made of limestone



**Bullock cart driven by man**



**Dancing girl**



**Pasupati**



**Pieces of broken pots excavated from Harappa**

**Pots:** They made pots with the help of potter's wheel. They were polished and coloured.



### Handicrafts:

There would have been workers like document writers, seal makers, carpenters, doll makers, masons and other artisans.

They also found out dolls made out of terracotta and other playing articles out of shells, brass, copper, silver and gold.

They used copper and bronze to make weapons, household articles and tools. Gold and silver were used to make ornaments. Weights were made out of a kind of stone.



Ornaments found in Harappa

### Terracotta seals:

Hundreds of rectangular seals were discovered here. Pictographic writings were written on them. The script had not been deciphered yet. On the terracotta seals, bulls, cart, dove, boats and a figure of a human meditating are seen.



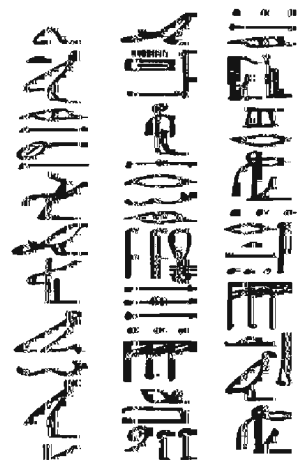
Seals

### Script:

The terracotta planks discovered here were engraved with letters. The figures that were engraved on the seals and the pictorial writing showed their skill of writing. They were pictographic writing.

Each picture depicts a specific meaning. Each page was written from right to left and left to right.

These writings are related with the ancient Tamil writings. There are varied opinions regarding this.



Pictorial writing

### Occupation :

In the Indus Valley there were agriculturists, artisans, traders, weavers, potters and blacksmiths. Agriculture was their main occupation, They cultivated wheat and barley. They stored the surplus grains in the granary.

1. List out the various occupations in your area.
2. Do we store grains? If yes, where and how?
3. Gather evidences to prove that Indus Valley people traded by sea.

### Dresses :

People wore cotton and woollen dresses. Men wore a garment similar to the 'dhoti' as lower garment and a shawl as upper garment.

### Ornaments :

To make ornaments they used gold, silver, ivory, and precious stones. Poor people wore ornaments made out of shells and copper. Both men and women wore many ornaments.

### Art:

They were experts in making pots out of terracotta. The figures of birds, animals, images of male and female, bullock cart driven by a man, pots and bowls were discovered.

### Sculpture:

The statue of a dancing girl made out of bronze found in Mohenjo-daro and the statue of a man with beard made out of limestone are examples of the excellent sculptures.

### Religion:

The articles excavated in Mohenjo-daro tell us about their religious principles and the love towards their religion. They worshipped Lord Shiva represented as Pasupathi, Mother Goddess, Lingam, Trident and trees.

They buried the dead in urns along with food and ornaments.

### Causes for the decline of the towns:

1. Wooden articles would have got destroyed by fire.
2. Rivalry because of the civil war.
3. Natural calamities and the change in the course of River Indus would have buried things.
4. The Aryans would have destroyed these towns in order to succeed.
5. The heap of bones discovered in Mohenjo-daro is evidence of the invasion of the foreigners.

## Evaluation:

### I. Choose the correct answer:

1. Which of these help you to know about Indus Valley Civilization?  
a. stone inscriptions      b. archaeological evidences  
c. copper plates
2. Mohenjo-daro means  
a. Garden city      b. Port city      c. Mound of Dead
3. Port Lothal of the Copper Stone Age is in  
a. Punjab      b. Sindu      c. Gujarat
4. Harappan Civilization was  
a. Civilization of village      b. Civilization of town      c. Civilization of corporation
5. The metal unknown to Indus Valley people  
a. gold      b. iron      c. copper
6. Harappa in Sindhi means -----  
a. Buried City      b. City of Fort      c. City of Rivers

### II. Fill in the blanks:

1. The main God of the Harappans was \_\_\_\_\_.
2. The excavation of the Indus Valley Civilization was done in \_\_\_\_\_.
3. The Great Bath is situated at \_\_\_\_\_.
4. \_\_\_\_\_ was the writing used by the Indus Valley people.

### III. Match the following:

- |               |                |
|---------------|----------------|
| 1. Great Bath | - pots         |
| 2. Excavation | - burnt clay   |
| 3. Wheel      | - Ravi         |
| 4. Terracotta | - Mohenjo-daro |
| 5. Punjab     | - 1921         |

### IV. Answer the following:

1. List out the occupation of the Harappans.
2. Write about the Great Bath.
3. What are the causes for the decline of the Indus Valley Civilization?
4. Explain the writings of the Indus Valley people.



### 3. Ancient Tamil Nadu

The land mass between the Himalayas and Cape Comorin is hailed as our Grand Old Country of Bharath by Bharathiyar in his "Ode to Child". (Pappa Pattu) Historians conclude that the land to the south of the Vindhyan Range is the most ancient in the world.

In the southern state there are people who speak different languages like Tamil, Telugu, Kannada, Malayalam and Tulu. The people who live in the south of Tirupathi speak Tamil.

Bavanandhi Munnivar, the author of Nannool describes Tamil Nadu as follows.

Venkata hills on the North, Cape Comorin on South and the land between these two is Tamil Nadu.

During the British rule, most of the parts of south India was called 'Madras Presidency'. After independence, the state which had Tamil as its language was separated. Arignar Anna, the then Chief Minister in 1967 named the state as Tamil Nadu.

The Tamil we speak can be appreciated as Senthamizh, Paeynthamizh and Muthamizh. The National poet Subramania Bharathiyar sang

"Senthmizh naadenum poothinilae-inba  
Thean vandhu paayuthu kathinelae-yengal  
Thanthaiyar naadenum poothinilae-oru  
Sakthi pirakuthu mouchinilae."

Tamil Nadu was ruled by the descendants of Chera, Chola and Pandya who were called Mooventhars during the ancient time. The southern part of south India was ruled by Pandyas, west by Cheras and north east by Cholas.

#### The Prehistoric Tamil Nadu :

Before prehistoric period, the Indian Ocean on the south of Cape Comorin was a land mass. It was called as 'Kumari Kandam'. The river Fahruli ran on this land mass which was eight to ten times bigger than South India. There were wide ranges of mountains. It was said that the land had sufficient rain, dense forest, civilized people and efficient kingdom. That kingdom would have been the ancient Pandyan Kingdom.

### Three Sangams :

The capital of Pandyas was Thenmadurai. Tamizhvalartha Thalai Sangam assembled there. The Pandyas ruled over the land with Kapadapuram as its capital. This place was left over after the tsunami in which Thenmadurai was taken away by the sea. In Kapadapuram the poets gathered and had the Second Sangam. That city also became a prey to tsunami later.

Then the Pandyas ruled with Madurai as their capital. The last Sangam was held in Madurai Muthoor. It was known as Kudal as the Pandya kings patronized the poets and held research on Tamil. It was believed that the First, Second and Third Sangam helped in the development of literature and Tamil flourished under the leadership of Pandyan Kings. These Sangams would have been for a long time.

### The Continent Lemuria :

The conditions were favourable for the growth of living organisms only at Cape Comorin which was submerged after the tsunami. Because of this the evolution of man would have taken place then. The language spoken by those people was the basic of Tamil language. The researchers believed that those were the ancient Tamilians. People who live on the southern part of the land mass are considered as the

ancestors of the people of Cape Comorin. There was a big land mass connecting Africa and Australia, which was called **Lemuria** after the name of the monkey Lemur.

It was believed that human beings evolved from the Lemurs. The language of the people was ancient Tamil. The land where their decedents lived was called Tamil Nadu.

### Historic period:

The historic period of Tamil Nadu began from the Sangam age. Sangam age is the period during which the poets of the Third Sangam joined together and did research on Tamil. This period lasted for 400 years from BT 200 – AT 200. Some consider that it was between BT 300 – AT 300.

**Note : BT – AT was calculated based on the birth year of Thiruvalluvar ie 31 B.C. According to the decision taken by Tamil scholars that time can be calculated considering that Thiruvalluvar was born 31 years before Christ. This was accepted and announced by the Government of Tamil Nadu.**

The Sangam literatures, what we got now are Ettuthogai and Pathupattu. The poem in these literature were written by Kapilar, Paranar, Avvayyar, Nakkeerar,

and hundreds of poets. With the help of these we can understand the civilization, customs, culture and political life of Tamilians.

Tolkappium which was a pride to Tamil literature originated before the Third Sangam. Tamil literature would have developed a few thousand years ago. It was a pride to Tamil, that Tirukkural, which was hailed by all the religions originated during the Sangam age. The national poet Bharathiyar says.

“Valluvan thanai ulakinukae thanthu  
Vanpugaz konda Tamil Nadu”

Our mother tongue Tamil which is adoptive to grammatical norms and is called Senthamizh. Scholars call Tamil a classical language, because it had developed without the help of other languages.

Central Government had

announced Tamil as a classical language in 2004. From this we know the fame of Tamil.

The people who lived in the south which was surrounded by water on three sides were good sea traders before the Sangam age as per the proverb, “Tiraikadal oodiyum thiraviyam theddu”. The language Tamil is abundant with words like Navai, Kalam, Kappal, Thoni, Odam, Padagu, Theppam and Katamaram which are used to denote the mode of travel at sea.

This shows their interest in sea trade. There were many ports like Puhar, (Kaveripoompattinam), Korkai, Musiri, Thondi and Vanchi. They had trade contacts with Egypt, Yavanam, Rome, China and other eastern countries. They followed the barter system.

Mohenjo-daro and Harappa excavated in the Northern hemisphere were examples of town civilization.



Mohenjo-daro and Harappa excavated in the Northern hemisphere were examples of town civilization.

They examined thousands of things. It was proved that it had connection with the Southern Tamilians for more than four – five thousand years ago. This showed that in those days Tamilians were not only in the south but also in the north.

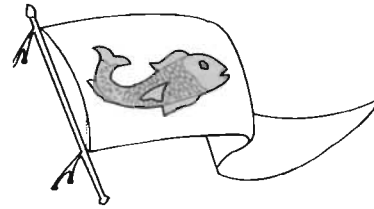
During the Sangam, the poets divided the lands into five physical divisions. The mountainous region was called Kurinchi, the forested region was referred as Mullai, the coastal area was Neidel and the sandy regions which suffered drought were called Palai. The occupation of the people depended on the region where they lived.

In those days, the most important duty of the kings on those days was protecting their subjects. Apart from the kings there were chieftains and patrons who ruled smaller regions. Conditions were favourable for the poets, pannar, koothar, viraliyar, traders, idayars, uzhavars, maravars to lead a comfortable life.

Agriculture was honored as it provided food to all. Next to agriculture weaving was given importance.

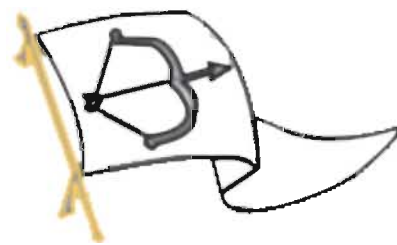
“Uzhuthundu vazhvarae vazhvar matrellam  
Thozhuthundu pinselbavar.”

### The Three Tamil kingdoms : The Pandyas :



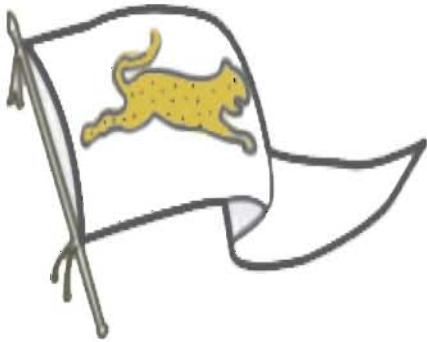
The Pandyan king Mudathirumaran and Thalaiyalanganathu Cheruvendra Neduncheziyan who defeated the combined forces of seven kings, lived in the Pandya kingdom. The one who played an important role in Sillapathigaram by saying, “Yano Arrasan; Yanae Kalvan” (I am not a king, I am the culprit) and established truth was also a renowned Pandya king.

### The Cheras :



The famous, Chera kings Imayavaramban Neduncheralathan and Sillambu Pugazh Cheran Senguttuvan reached the Himalayas and hoisted the Chera flag.

## The Cholas :



The famous Chola kings were Karikal Peruvallathan and Killivalavan.

Karikal who ruled over two thousand years ago conquered Eelam. He made the captives build the bank of river Cauvery. Kallanai which exists even today was built by him. This famous king was called as Karikal Peruvallathan.

The famous kings of the medieval period were Rajaraja Chola and Rajendra Chola. They conquered not only the North but also Java and Kadaram.

The seven chieftains were called as Kadaiyelu Vallalgal. The famous among them were Pari, Ori, Kari, Nalli, Elini, Pegan and Aay.

## Social Life :

“Pirrapokkum ella uirukkum -chirappova  
Cheithozhil vettrumai yan”

According to the Thirukkural mentioned above there was a society without any discrimination.

There were discrimination according to their occupations. There was sect system but they were not discriminated according to their birth. Untouchability was not in practice. In due course, caste discrimination and untouchability came into force.

Women had the privilege of choosing their life partners. Parents agreed to that. The rituals, raising of holy fire and chanting of mantras were not in vogue. Women were not treated as per the Vedas.

As building of temples was not in practice, the Sangam people worshipped the stones erected in memory of the dead soldiers which were known as Hero Stones or Nadukkal and their ancestors.

They celebrated harvest festival, Pongal festival and the festival of Spring season. In the capital they celebrated Indiravizha. They did not know about the festivals of the Puranas.

## Evaluation:

### I. Choose the correct answer :

1. The area that was considered as the most ancient one in the world
  - a) Ganges Valley
  - b) the area in the south of Vindhya
  - c) north west valley
  
2. The land mass on the South Kanyakumari during pre-historic period
  - a) Continent of Kumari
  - b) Continent of Bharath
  - c) Continent of Africa
  
3. The place where evolution of man began
  - a) Mediterranean countries
  - b) Asyria
  - c) Lemuria
  
4. Which year is considered as the birth year of Thiruvalluvar
  - a) AD 31
  - b) BC 31
  - c) AD 13
  
5. The city where the Second Sangam was held
  - a) Thenmadurai
  - b) Kapadapuram
  - c) Koodal Nagar

### II. Fill in the blanks:

1. \_\_\_\_\_ was the organisation where the Tamil poets assembled and did the literary research in Tamil.
2. The \_\_\_\_\_ were the ancestors of the people of Cape Comorin.
3. The historical period of the Tamil began from \_\_\_\_\_ age.
4. The Grammar book, \_\_\_\_\_ originated before the Third Sangam.
5. \_\_\_\_\_ was the most important occupation of the Sangam age.

**III. Match the following:**

- |                           |                              |
|---------------------------|------------------------------|
| 1. Tolkappiam             | - Yano Arrasan; Yanae Kalvan |
| 2. Mullai                 | - Hero Stones                |
| 3. Pandiyar Neduncheziyan | - Ravi                       |
| 4. Heroic death           | - coastal area               |
| 5. Kurinchi               | - book before Tamil Sangam   |
| 6. Neithel                | - forest area                |

**IV. Answer the following:**

1. Why is Tamil known as classical language?
2. Name the Tamil words which are used to denote the mode of travel at sea.
3. Why is Madurai known as Kudal?
4. What are the countries with whom the Tamilians had trade?
5. Mention the physical divisions of the land during the Sangam age.
6. Name the famous Pandya kings.
7. Name the important Chera kings.
8. Write notes on Karikal Peruvallathan.
9. Name the Kadaiyelu Vallalgal.
10. Mention the social status of women during the Sangam age.

**V. Answer in detail :**

1. Write the characteristic features of the ancient Tamil.
2. Describe the First, Second and Third Sangam.
3. Write about the sea trade of the Sangam Age.



## 4. THE VEDIC PERIOD

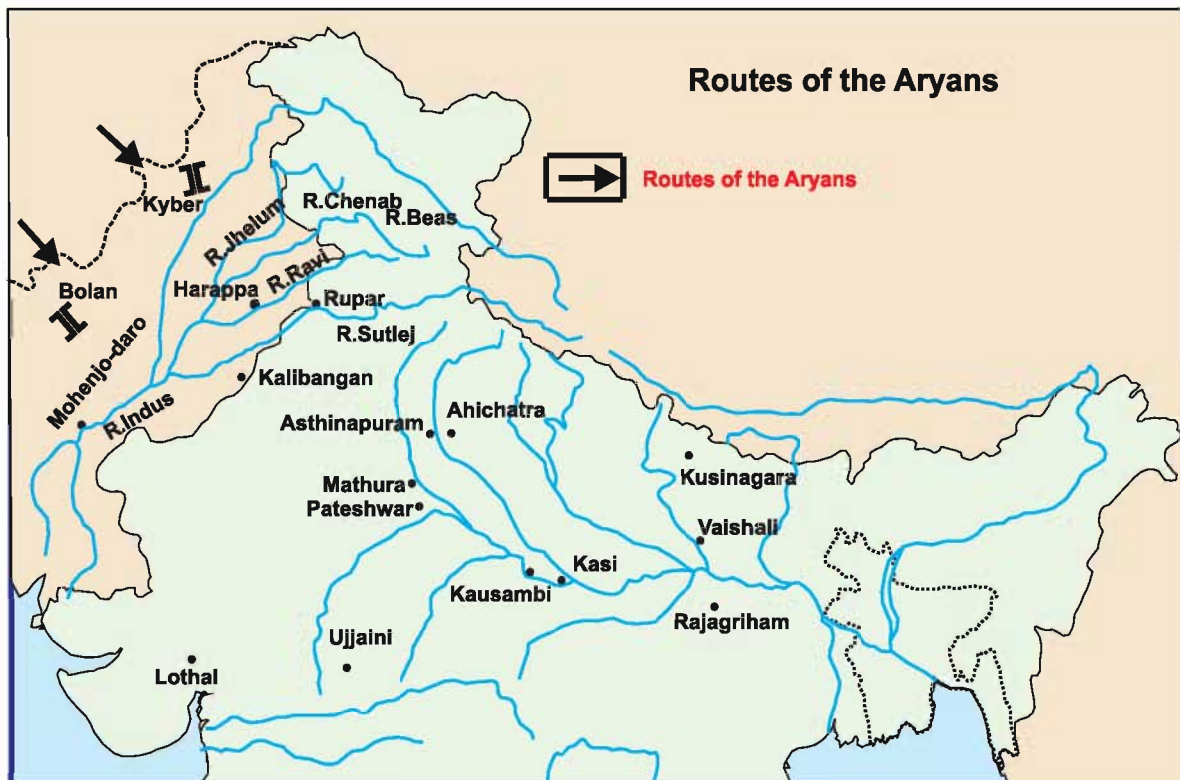
The Aryans migrated to India through the Khyber and Bolan passes from central Asia. Being shepherds, they moved in search of pastures for their cattle. They entered about 4000 years ago and settled in the entire north India.

The places where they settled in India was called **Arya Vardham**. Aryans made their livelihood by herding the cattle. They compiled the prayers of their ancestors as Vedas. In History, this was called the Vedic Age. The Vedic Age was classified into two. They were **Early Vedic Age and Later Vedic Age**.

**Early Vedic Age or Age of Rig Veda:**  
(BC 1500 – BC 1000)

When Rig Veda was compiled the Aryans lived in Sindhu, which is now in Pakistan. They settled in **Sapta Sindhu (The Land of Seven Rivers)** in Punjab. We come to know through the Rig Veda, the political and social conditions of the Aryans.

The Social life of Aryans  
Family → Village → Vis → Jana → Janapatha



## Political Life :

The basic unit of the society was family. Many families joined and formed the village which was headed by the Grahmini. Many villages formed Visu. (Vis) Vishwapathy was the head of the Visu. The next higher administrative unit was Jana. The head of Jana was Rajan (King). The one who had valour and strength became the Rajan. The people lived in the kingdom were the Prajas. The king was called Prajapathi. Kingship became hereditary. Many chieftains formed the Mahajanapadas.

### Find out:

Do you have a family name?

Ask and find out the family names of your neighbours.

Which God/Goddess do you worship?

The Raja (King) was assisted in his administration by officials called Prohit and Senai (Commander). There were two Assemblies called **Saba and Samiti**.

Saba – Group of Elders

Samiti – Representatives of People

### Duties of Raja (King):

- He protected his lands from different clans.
- He conducted religious duties according to the advise of the prohits.
- He protected his people from poverty, war and enmity.
- During the war he led the people and fought with the enemies.
- Justice and punishments were given after trial.
- He extended and strengthened the kingdom.

## Social Life:

The father was the head of the family. In the beginning women were on par with men in the field of education and religion. There were women poetess like Vishwawara, Abala, Kosa, and Lobamuthra. Caste system was not in existence. Monogamy and Polygamy were in practice. Widows' remarriage was permitted.

## Economic Life :

Cattle rearing and agriculture were the main occupations of the people during Rig Vedic Age. Iron was used to make tools and instruments. With the help of these tools they destroyed the forests and made them into cultivable lands. Carpentry and weaving were also their occupations.

They produced cotton and woollen clothes. Goldsmiths made ornaments and potters made pots for household use. Barter system was in practice. Rivers were used for transportation. Their unit of currency **Nishka, was made out of gold.**

### Mention the origin and growth of the following:

Carpentry, blacksmith, goldsmith, weaving, agriculture, cattle rearing and making weapons.

### Food:

They had wheat, barley, milk, curd, ghee, vegetables, fruits and meat as their food. They drank intoxicating drinks like 'Soma' and 'Sura'.

### Dresses and ornaments:

The Aryans used clothes made of cotton and wool. Men wore dhoti and shawl. They also wore turbans. Women wore upper garments and lower garments. Both men and women wore ornaments. They wore earrings, necklaces, bangles, anklets and wore bands on their foreheads.

### Religion:

The Aryans worshipped the forces of nature such as Sun, fire, air, sky and trees. They also worshipped Indira, Varna, Agni and Yaman. There was neither temple nor idol worship in the early vedic age. Religious sacrifices were practised. They wrote religious principles and their explanations. They offered milk, ghee, grains and silk. Yagas like Ashvamedha, Rajasuya and Vajapaya were conducted during poojas.

### Later Vedic Period: (BC 1000–BC 600)

The period of Sama Veda, Atharvana Veda, Yajur Veda are called the Later Vedic Period after the Rig Vedic Period. In this period the Aryans spread over the eastern side. (Pre Vedic Aryans spread from Kabul to Upper Ganges) During this period the kingdoms emerged. The ideas and explanations of Brahmanas, Upanishads and Aranyakas were written.

### Political Life:

The important administrative region was the Indus Valley. Kingdoms like Kosala, Videham, Kuru, Magadha, Kasi, Avanthi and Panchala emerged. Kingship became hereditary. The duty of the king was to defend his country from enemies and to maintain law and order. Since the kingdom expanded, he had more responsibility. Sacrifices such as Rajasuya and Ashvamedha were performed to establish his undisputed authority. Saba and Samithi declined.

### Economic Life:

The widely used metal was iron. Handicrafts improved because of this. New tools were made. They grew paddy, sugarcane, barley and wheat. Cow dung was used as manure. Cattle wealth developed. According to the number of cattle one had, his economic status was estimated.

Broken pots of the Aryan Period



There were weavers, tanners, carpenters and goldsmith. Gold and silver coins like Nishka, Swarna and Satamana were in use.

Caste system became rigid which was called Varna Dharma. Those who performed sacrifices and religious ceremonies were called Brahmanas. Those who waged war to protect and rule the country were known as Kshatriyas. The Vaishyas were the traders and farmers. The people who served the three upper caste and did all the menial works were called Sudras.

#### Status of Women:

During the Later Vedic Period there was no improvement in the status of the women. They were subordinate to men. They did not inherit property. They were deprived of administrative power. Child marriage was prevalent. Women who belonged to the royal family enjoyed some privileges. Sati, according to which the widow would throw herself into the funeral pyre of her husband was in practice.

#### Education:

According to the Aryan Dharma, the Brahmin students stayed in the Gurukul (house of the teacher) and learnt. There were highly educated women like Gargi and Maitreyi. In the Gurukul, they learnt philosophy, logic, religion, grammar, astrology, medicine, discipline, mathematics, Vedas, and Upanishads. The royal children alone were taught Danur Veda (military strategy).

#### Religion:

There were a lot of changes in the religion according to the Varna Dharma of the Brahmins. The pre-vedic Gods lost their importance. In this period, Brahma, Vishnu, Rudra (Siva) gained importance. Rituals and animal sacrifices gained importance. People believed on soul, fate and moksha. By the end of this period there was opposition for the rule of the priests, rituals and sacrifices. Against these meaningless rituals and costly sacrifices, Buddhism and Jainism originated.



## Qualities of Dravidians and Aryans

S.No.	Qualities of Dravidians	Qualities of Aryans
1.	Dark complexion, medium height, dark long hair.	Fair, tall and brown hair.
2.	Main occupation-Trade and agriculture.	Main occupation-Cattle rearing and war.
3.	Wore cotton clothes.	Wore woollen, cotton and dresses made out of skin of animals.
4.	Important animal bull. They worshipped bull.	Important animal cow. They worshipped cow.
5.	Built houses out of burnt bricks.	Built houses out of bamboo and clay.
6.	Worshipped idols, lingam, trident, sakthi and snake.	No idol worship and temples. Worshipped nature and performed yagas and rituals.
7.	Used copper. They did not know the use of iron.	Used iron.
8.	Tiger was known. Horse was unknown.	Tiger was unknown. Used horses.
9.	Agricultural civilization, towns.	Cattle rearing civilization, villages.

### Evaluation:

#### I. Choose the correct answer:

1. The period of Rig Veda  
 a. BC 1600-BC 1000    b. BC 1000 – BC 600    c. BC 1500-BC 1000
2. The unit of currency used during Rig Vedic period  
 a. Nishka    b. Rupee    c. Dollar
3. The woman who excelled in education in the Later Vedic Period.  
 a. Gargi    b. Abella    c. Kosa

## II. Fill in the blanks :

- 1) The head of the village was \_\_\_\_\_.
- 2) Widows' \_\_\_\_\_ was in practice during the Early Vedic Period..
- 3) Assembly that consisted of the Representatives of People was\_\_\_\_\_.
- 4) According to \_\_\_\_\_ , the widow would throw herself into the funeral pyre of her husband.

## III. True or False :

1. Sabta Sindhu is called the 'Land of Seven Rivers'.
2. The commander- in- chief was the Senai.
3. Widows' remarriage was not allowed in Rig Vedic Age.
4. The basic unit of the society was family.
5. Tiger was unknown to the Dravidians.

## IV. Match the following :

- |                 |                         |
|-----------------|-------------------------|
| 1. Satamana     | - Shiva                 |
| 2. Praja        | - Rajan                 |
| 3. Rudra        | - Vishwapathy           |
| 4. Head of Jana | - coins                 |
| 5. Head of Visu | - people of the kingdom |

## V. Answer the following:

- 1) List out the ornaments of the Rig Vedic people.
- 2) What did the Brahmin students learn during the Later Vedic Period?
- 3) Compare and contrast the qualities of the Aryan and the Dravidian Civilization.

## 5. JAINISM AND BUDDHISM

The 6<sup>th</sup> century was a period of intellectual awakening. During that period Jainism and Buddhism arose in India. These two religions existed to reform the socio-religious organizations. The aim of these religions is to remove the superstitious beliefs, unwanted religious rituals and the caste discrimination. **Vardhamana Mahavira was the founder of Jainism. Gautama Buddha was the founder of Buddhism.**

### JAINISM

In Jainism, 24 Thirthangaras were worshipped. The first Thirthangara was Adhinathar, who was known as Rishabadevar. **Vardhamana Mahavira** is the last Thirthangara. (24<sup>th</sup>) He gave a strong formation to Jainism.

Vardhamana Mahavira lived during B.C.534 – B.C.462. He was born in Kundagramam near Vaishali Nagar, which is now in Bihar. His father was Siddhartha and mother was Trisala. His wife was Yasodha and he had a daughter called Anoja Priyadarshana. At the age of 30, he gave up all the worldly pleasures and became an ascetic. He performed penance for 12 years, seeking answer for the problems during these days. He treated both joy and sorrow equally. He won in his search for truth. So he was called

“Jina” which means the “Conqueror”. People also called him as “Mahavira”. Mahavira went to many places preaching his principles for 30 years.



**Mahavira**

Why are people born? Why do they die? What are the causes for their sufferings? – These were the important questions that arose in him. He started thinking why people are troubling others and cheating each other. One set of people said that it was because of the sin they did in the previous birth. But Mahavira never accepted this. He thought that how people could not commit sin in this birth.

So he said that one should not harm others. Human beings are responsible for their own problems. We should not harm any living things. He preached a restricted life. He asked his followers to follow his principles of 'Ahimsa' or 'Non-Violence'. To attain the spiritual goal the Jains starved and subject themselves to all bodily hardships.

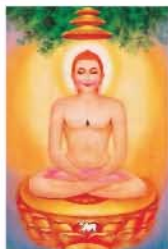
Jainism stressed that no one should kill any living creatures. They eliminated clothes. It insisted that they should not wage war or do agriculture. Trade and commerce was their occupation. The religion preached that they should lead a restricted life.

### Three Gems or Triratna:

Right Knowledge

Right Belief

Right Action



#### The Five Doctrines

1. Ahimsa (Non-Violence)
2. Satya (Truth)
3. Asatya (Non Stealing)
4. Aparigraha (Non-possession)
5. Brahmacharya (Celibacy)

His principles spread far and wide when superstitious beliefs, quarrels and fightings prevailed.

#### Kings who followed Jainism:

Chandragupta Maurya  
Kalingathu Karavelen  
Koon Pandian  
Mahendravarma Pallava I

#### Contribution of Jains to Tamil Literature:

The Jains contributed Epics such as Sillapathigaram, Chivagachinthamani, Vallayapathi, Chullamani, literature such as Yapperungalakarikai, Yapperungalaviruthi, Neminatham, Nannool, Agapporulvillakam, Tamilnigandu and religious literature such as Nalladiyar, Nanmanikadikai, Pazhamozhi, Thinaimalai Noorthiyampathu to Tamil literature.

#### Contribution of Jains to architecture:

Rajasthan - Dilwara temple at Mount Abu.  
Kajiraho - Chittoor, Ranakpur – Temples of Jains.



Dilwara

"Kollaana pulaalai marutthaanaikai kaikoopi  
Ella uyirum thozhum"

– Thirukkural



#### Sculpture:

- Udaiyagiri
- Hathigumpa
- Girnar
- Saravanabelagola
- Kazhugumalai

The statue of Gomatheswara at Saravanabelgola is at Karnataka.



## BUDDHISM

Gautama Buddha was the founder of Buddhism. His original name was Siddhartha. He lived during 563 B.C.- 483 B.C. He was born at Kapilavastu in Nepal. His father, Siddhodana belonged to the Sakya dynasty. His mother, Mayadevi died at the seventh day of his birth, so he was brought up by his step-mother. He got married at the age of 16. His wife was Yasodha and Rahul was his son.

Even at his early age, he was anxious to know about what was happening in the world. He never showed any interest in hunting and luxury. The miseries and poverty of the poor people affected him very much.



**Buddha**

He was disturbed by the luxury on one side, poverty, sickness and old age on the other side. He disowned his parents, wife and son. He went to the forest and meditated. He controlled his

hunger and thirst. But he never got the answer for the question. Since he could not get an answer, he stopped torturing himself and ate food. To find out the truth, he started thinking. He was enlightened.

Siddhartha, who was enlightened under a pipal tree at Gaya became Buddha.

The meaning of the word 'Buddha' is a person who knows what is good, what is bad and what is suffering.

He delivered his first sermon at the Deer Park in Sarnath near Banares at Uttar Pradesh.

### Principles of Buddha:

Life is full of miseries. The reasons for the sufferings are not because of fate or the deeds of our previous birth. There are other reasons for sorrows. We should strive to overcome the sorrows by not being greedy, not telling lies and not harming others. To avoid miseries one should have right thinking, right speech and right livelihood. He opposed caste discrimination. Man need not have any fear for God, soul and fate. One should depend and live on his own ideas and knowledge. We should show compassion towards animals, birds and human beings.

Buddha's principles on suffering are the Four Noble Truths and the principles on conduct are the 'Eight Fold Paths'.

**The Four Noble Truths are:**

1. Life is full of sorrow.
2. Desire is the cause of sorrow.
3. Sorrow can be ended by giving up desire.
4. The eight fold path is the way to end sorrow.

**Eight – Fold Paths to overcome desire:**

- ✓ Right belief
- ✓ Right effort
- ✓ Right speech
- ✓ Right thought
- ✓ Right living
- ✓ Right action
- ✓ Right memory
- ✓ Right meditation

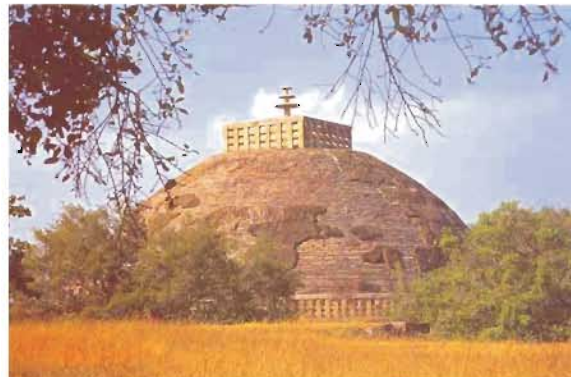
In order to spread the truth he went from place to place. Wherever he went, he discussed his ideas with various groups of people. Buddhist monks came forward to spread the principles of Buddha. The organization of the monks was called as 'Sangam'.

The agriculturists, poor people, women, menial labourers and those who were affected by the society accepted the principles of Buddha. The idea that all are equal was new to them. So Buddhism spread far and wide.

Many kings followed Buddhism like Jainism. The most important among them was King Ashoka. Jainism and Buddhism were at their zenith till the 6<sup>th</sup> century. They started to decline when Hinduism regained its earlier position. Buddhism split into Hinayana and Mahayana.

Hinayana	Mahayana
Accepted Buddha's principles.	Worshipped Buddha as God.
No idol worship.	Idol worship

**Art and Architecture**



**Sanchi Stupa**

Even today Buddhism is followed in Ceylon, Burma, Tibet, China, Japan and Thailand.  
 The kings who followed Bhuddism – Ashoka, Kanishka and Harsha.

### To know:

- Our National Emblem (The figure of four lions) is taken from the capital of Ashoka Pillar.
- The Chakra in our National Flag which has 24 spokes is taken from the 'Dharma Chakra' of the Ashoka Pillar.
- Bihar is the place where there are many Buddha Viharas.
- Manimekalai and Kundalakesi are Buddhist literature.
- The books written by Jain monks.
- Sillapathikaram, Nannool (Grammar)
- Chivagacinthamani; Vallayapathi (Literature).
- Religious text: Angas and Purvas.

### Historical Monuments:

- The Jataka tales describes the history of Buddhism. The **Jataka stories** are depicted at Gaya, Sanchi and Burcut.
- Ajantha and Ellora Cave paintings which are in Aurangabad at Maharastra describe the fame of Buddha. Gandhara art also belongs to Buddhism.
- The prayer halls of the Buddhist monks are called Chaityas and their monasteries are called Viharas. They are of rock cut structures.

### To know:

Mahavamsam, a book of Sri Lanka says that Tripitakas was written during the reign of Vattakkamini Abayan. In Pali language it is called as Tripitakam which means three baskets.

Water cannot enter into a well constructed house;  
Evil thoughts cannot enter into the hearts of those who have good thoughts.

– Buddha.

### Literature

- **The Buddhist religious texts are called Tripitakas.** They are Vinaya Pitaka, Sutta Pitaka and Abhidamma Pitaka.

### Evaluation:

#### 1. Choose the correct answer:

1. The one who laid strong foundation to Jainism  
a) Vardhamana Mahavira      b) Athinathan      c) Rishabadeva
2. The principles stressed by Jainism  
a) idol worship      b) not to kill      c) untouchability

3. A place in Tamil Nadu where you can see Jain sculptures
  - a) Girnar
  - b) Kazhugumalai
  - c) Hathigumba
4. The place where Buddha was enlightened
  - a) Kundagrammam
  - b) Deer Park
  - c) Gaya
5. One of the most important kings who followed Buddhism
  - a) Chandra Gupta
  - b) Ashoka
  - c) Bindusara

#### II. Fill in the blanks:

1. \_\_\_\_\_ was known as Conqueror or Jina.
2. The principles stressed by Jainism are called \_\_\_\_\_.
3. \_\_\_\_\_ is the place where Gomatheswara statue is situated.
4. The principles of Buddha are called \_\_\_\_\_.
5. The organization of the Buddhist monks is called \_\_\_\_\_.
6. The Dharma Chakra in our National Flag is taken from the \_\_\_\_\_ pillar.

#### III. True or false :

1. Mysore is the place where Gomatheswara statue is situated.
2. The son of Buddha was Rahul.
3. The founder of Jainism was Buddha.
4. Mahavira was the 24<sup>th</sup> Thirthankara.
5. There are 24 spokes in the Ashoka Chakra.

#### IV. Match the following:

1. Tripitakam - worshipped Buddha as God
2. Hinayana - Buddha's first sermon
3. Sillapathigaram - who accepted Buddha's principles
4. Deer Park - Jain literature
5. Mahayana - religious text of Jains

#### V. Answer in five lines:

1. What are the causes for the rise of Jainism and Buddhism?
2. Describe the Triratnas insisted on by Jainism.
3. Write short notes on the contribution of Jains to Tamil literature.
4. Write the Four Noble Truths of Buddha.
5. Mention the Eight Fold Paths to overcome desire.

#### VI. Answer in detail:

1. Explain the distinctive features of Jainism.
2. Explain the ideas you like in Buddhism.



## 6. RISE OF KINGDOMS

### Mahajanapadas:

At the end of the Vedic period, the Janapadas fought with each other for the new fertile lands and mineral wealth and for the same reason they tried to move towards the east. Because of this, they had clashes with the non-Aryans who came from the east and south of the Indus Valley. Ultimately, the small Janapadas either defeated or joined themselves with the Mahajanapadas.

Many Janapadas joined to form the Mahajanapadas. They depended more on the types of lands than on the clans. There are sources to prove that during the period of Buddha there were 16 powerful Mahajanapadas in North India. Some of them were ruled by hereditary kings. The rest were ruled by elected kings. There were 18 groups together in the Vajjian confederacy which had Vaishali as their capital. Kosala, Avanti, Vatsa and Magadha were some of the powerful monarchies of this period. They fought with each other and other republics. Ultimately, Magadha defeated others and became the most powerful Mahajanapada.

### Mahajanapadas

1. Anga	7. Kedi	13. Aswakas
2. Magadha	8. Vatsa	14. Avanti
3. Kosala	9. Kuru	15. Gandhara
4. Kasi	10. Panchala	16. Kamboja
5. Vajji	11. Matsya	
6. Malla	12. Surasena	

### Rise of Magadha :

#### Bimbisara - Ajatasatru

The area around Patna in today's Bihar is called Magadha. Its first capital was **Siravasthi**, the second capital was **Rajgir** and lastly **Pataliputra**. Bimbisara belonged to Haryanka Dynasty. He expanded the kingdom of Magadha by conquests and by marriage alliances. His son Ajatasatru imprisoned his father and succeeded the throne. He waged war for a long period with Kosala, Avanti, Vaishali and extended his empire. The fort of Pataliputra was laid by Ajatasatru.

#### Sisunaga – Mahapadma Nanda

Sisunaga defeated the Haryanka Dynasty. The Nanda Dynasty who succeeded Sisunga Dynasty spread the rule of Magadha throughout north India. Mahapadmananda, the first Nanda king crossed the Vindhyas and annexed Deccan. He extended the Magadha Empire beyond Vindhyas to Deccan.

Though Sisunaga and Mahapadmananda, were Sudras they became the kings. It was a great change. The Nandas patronized Jainism. The Macedonian king Alexander came with his troops through the West of India. He had to return since he was aware of the Nanda warfare and his soldiers were tired after a long journey.

## MAURYAN EMPIRE

### Chandragupta Maurya :

Chandragupta of Mauryan Dynasty revolted against the last Nanda king Dhanananda, defeated him and took over the Magadha Dynasty (BC 324-299).



Megasthenese



Chandragupta Maurya

He invaded parts of West India which were annexed by the Greeks under the leadership of Alexander and extended the Mauryan Dynasty. He defeated the Greek General Seleucus Nikator and he annexed Afghanistan and Gandhara with his empire.

Megasthenese, the ambassador of Seleucus stayed at Pataliputra for many years and wrote about India in his book 'Indica'. The Jain religious text says that Chandragupta Maurya became a monk leaving his throne and went with the Jain monk, Bhadrabahu to south India. He ended his life by fast unto death as a devout follower of Jainism at Saravabelagola.

### Asoka:

Chandragupta was succeeded by his son Bindusara, who ruled for 25 years. He was succeeded by one of his sons Ashoka. (BC 273-236) For the first four years, he spent his time to suppress his brothers who were his rivals. After the eighth year, he waged a terrible war against Kalinga which was separated and annexed with the Mauryan empire. Ashoka was so upset and grief stricken at the sight of the war that he took a pledge that he would never wage war again.

### Ashoka's Dharma Vijaya:

Ashoka declared that helping his subjects and leading them in the righteous way is the duty of a king. He spent the rest of his life, meeting people and helping them. He hated 'Dig Vijaya' (Conquest of the World). In order to spread Dharma, he undertook a journey which was called 'Dharma Vijaya'. He constructed inns and hospitals for everyone irrespective of caste and creed. Medical assistance was given to cattle. Sacrifices were banned. The laws were altered on humanitarian basis. Death sentence was reduced. He spread Dharma among people through rock edicts which were inscribed on regional languages. He appointed Dharmamahamatras to help the people. Ashoka was the first emperor who established the welfare state for people.



Ashoka



Sarnath Pillar

### Ashoka and Buddhism:

Ashoka embraced Buddhism which insisted love, knowledge and discipline. Eventhough he was a Buddhist, he was kind to Brahmins and Agivagirs. He took maximum effort to spread Buddhism. He renovated and expanded the monuments at Kapillavastu, Saranath and Buddhagaya. He constructed hundreds of stupas and pillars. He organized the Third Buddhist Council at Pataliputra. In order to spread Buddhism, he sent Buddhist monks to different parts of his empire and also to foreign countries. Mahendra, the one who spread Buddhism in Ceylon was believed to be his son. Buddhism became a world religion by the efforts of Ashoka.

### Ashoka's contribution to art and architecture :

Ashoka's stupas and pillars are considered to be the oldest after the monuments of the Indus Valley Civilization. Buddhist stupas at Sarnath and Lumbini are marvellous. The Ashoka's pillar cannot be compared with any other art. The structure of Ashoka's pillar, the bell shaped capital resembling an inverted lotus shows the influence of the Persian architecture.

### Ashoka's Stone Edicts:

Ashoka's royal proclamations and messages are inscribed on the walls of the caves, stone pillars and rocks that are kept all through his empire. Most of them are written in Prakrit, Kharoshti in north western India, Greek in Afghanistan. These edicts depict Ashoka's humanitarian love and non-violence.



Ashoka's Stone Edict

### The Stone Edict of Ashoka:

"I captured Kalinga after eight years of war. In the war, one lakh people died and one and a half lakh people left the country.

It made me very sad when more than a lakh of my people were killed and captured during the war of Janapata. The war separated loved ones.

The ruins of the war affected all the people. It troubled me. So I accepted Dharma more than war."

-Ashoka

### Mauryan Administration:

For the convenience of administration, the empire was divided into five provinces. Taxilla was the capital of North province, Ujjain was the capital of West province, Swarnagiri was the capital of South province and Dosali was the capital of East province. The main province, Magadha was ruled by the king himself with Pataliputra as its capital.

A council of ministers and army chiefs were appointed to help the king in his administration. They were appointed without the discrimination of caste. The higher officials called Mahamatras were appointed as superintendents and governors of the big provinces. Princes were also appointed as Mahamatras. There were other officers like Yuktas, Pradeshikas, Ambassadors and Spies. Those who protected the frontier were known as 'Andamahamatras'. Dharma mahamatras looked after the moral life of the public. There were local self government in the cities. Megasthenese described in his Indica that the administration of the city of Pataliputra was maintained by a set of 30 officers who belonged to 6 committees. Each committee had a specific duty. The strong army of Mauryas was administered by a set of 30 officers. Infantry, cavalry, elephants, chariots and navy were controlled by 5 committees. The sixth committee looked after the transport, food, medical facility and production of weapons for the army.



# The Mauryan Empire during Ashoka's period



The judicial administration was very strict. Ashoka brought some changes on humanitarian grounds. Torture was banned. He introduced new methods to console the people who were given death sentence. The tenure of petty cases were reduced.

Kings and ministers went on tours to solve the problems of the people.

Brihadratha, the last king of the Maurya Dynasty was assassinated by Pushyamitra. After this, the Magadha lost its power for more than 500 years.

### Evaluation:

#### I. Choose the correct answer:

1. The one who built fort Pataliputra
  - a. Ashoka
  - b. Bimbisara
  - c. Ajathasatra
2. The book written by Megasthenese
  - a. Arthasasthra
  - b. Indica
  - c. Mudra-rakshasa
3. Ashoka ascended the throne in
  - a. BC 232
  - b. BC 273
  - c. BC 255
4. The place where the Third Buddhist Council was held
  - a. Pataliputra
  - b. Kashmir
  - c. Kapilavastu

#### II. True or false:

1. Seleucus Nikator was the ambassador of Megasthenese.
2. Mahapadmananda was the first king of Nanda Dynasty.
3. Ashoka refused Dharma Vijaya and accepted Dig Vijaya.
4. Ashoka was the first one to establish a welfare state for people.
5. Mahendra spread Buddhism at Ceylon.

#### III. Answer the following:

1. How did the Mahajanapadas establish themselves?
2. To whom does the credit go in establishing the first empire in India? - Explain.
3. Ashoka was the one who established an empire for the welfare of the people- Why?
4. What are the causes for the change in Ashoka's life?
5. Explain the inscriptions used in the stone edicts of Ashoka.

## 7. KUSHANA EMPIRE

The powerful empire which was established in India after the decline of the Mauryans were the Kushans. The Kushans were the people who belonged to the Yueh-chi tribe. During the 1<sup>st</sup> century AD Kadphises I established the kingdom of Kushana in the North west part of India. Kadphises II (AD 65-75) who succeeded Kadphises I conquered Punjab and Indus Valley.

### Kanishka:

After the death of Kadphises II, Kanishka (AD 78-101) captured the throne. He was considered as the most powerful king of Kushans. He marched to Pataliputra and subdued Saka Satraps. He fought with the Chinese twice. He was defeated by the Chinese commander-in-chief Panchao in the first expedition. In the second war, he won and annexed Kashgar, Yarkand, Khotan and the parts of central Asia with his Empire. He created a new capital called Purushapuram. (Peshawar).

He was impressed by Buddhism. He organized the Fourth Buddhist Council at Kashmir. The famous Buddhist philosophers like Vasupandu, Ashvaghosa and Nagarjuna participated in the Fourth Buddhist Council.

The new division of Buddhism, Mahayana originated in this council. Groups of monks were sent to **Tibet and China to spread Mahayana.**



Ashvaghosha, who was the Mahayana Buddhist scholar wrote large volumes of Sanskrit literature like Buddhacharita, Sutralankar. Vasumithra compiled Mahavibhasa. Nagarjuna wrote books on philosophy. Charaka, a famous physician and the great builder Ajilasim were in Kanishka's Empire.

The Gandhara art which combined the Indo-Greek style made new statues of Buddha and Bodhisatvas. Kanishka was called **Asoka II** because of the involvement and the steps he took for the spread of Buddhism. The year that Kanishka ascended the throne was the beginning of the **Saka era**. He met a violent death in his tent. Thus the Kushan Empire declined.

## THE GUPTA EMPIRE

After the Kushans the next empire to arise in north India was that of the **Guptas with Pataliputra as its capital. Chandragupta I was the first important king of the Gupta dynasty (AD 319-335).** The year of his coronation was considered as the beginning of the Gupta Era. The Allahabad inscription describes the conquests and the victories of Samudragupta (AD 335-375) who succeeded Chandragupta I. The Gupta empire extended from Bengal to Indus and the Himalayas to Vindhya. The Allahabad inscription describes that he conquered 9 North Indian kings, 11 Republicans and 12 South Indian kings. The **Allahabad pillar** inscription was inscribed by his minister **Harisena**. After Samudra Gupta, Chandragupta II (AD 380 – 414) was considered as a famous king.

He defeated Sakas, the foreign invaders and captured Ujjain.

The epics like Ramayana, Mahabharata, 18 Puranas and Panchatantras were compiled during Gupta's period. They patronized Sanskrit scholars like Kalidasa, Panini and Visakhadatta. Sanskrit was the official language. They built small temples for Gods and Goddess like Vishnu, Shiva and Durga. The Ajanta cave paintings and sculptures belonged to the Gupta age.

The famous astrologer and mathematician, **Aryabhata**, **Varahamihira**, the famous physicians **Susruta and Dhanvantari** belonged to the **Gupta age**. The iron pillar at Mehrauli which is 1500 years old is a specimen of the art of metallurgy that flourished during the Gupta age. **Nalanda University** was founded by Kumara Gupta. Caste system was worse. The sacrifices which were banned during the period of Ashoka revived. They worshipped Shiva, Sakthi, Vishnu, Kumaran (Murugan) and temples were built for Hindu Gods.



Ajanta Cave Painting



Mehrauli Iron Pillar

**Gupta period was considered the Golden Age.** The Gupta empire declined because of the invasion of Pushyamittra and Huns. The **Chinese traveller Fahien** visited the Buddhist pilgrim centres during the period of Chandragupta II. (Vikramaditya)





Harsha

## HARSHADYNASTY

Harshavardhana, the King of Thaneshwar created an empire in north India which was already defeated by the Huns after the downfall of the Guptas. (AD 606 – 647) Harsha fought for a long time with Sasanka, the one who killed his brother. In this war, the king of Kamarubha, (Assam) Bhaskaravarma helped him. After the death of Sasanka, he annexed most of the parts of the kingdom of Bengal. As per his sister's request, he became **the king of Kanauj, which became his capital.** He conquered Malwa, Sind and Orissa. He also tried to conquer south India which was a failure because Pulikesin II defeated Harsha.

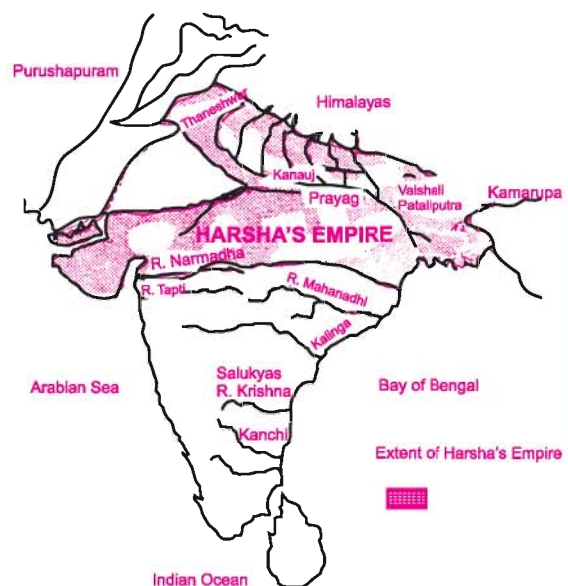
Because of the influence of his sister and **Hieun Tsang, the Chinese scholar,** Harsha embraced Buddhism. He held religious councils at Kanauj and Prayag. In this, most of the Buddhist and other religious scholars participated. At the end of the council, he generously distributed all his wealth



Nalanda University

to the monks, scholars and public. The **Nalanda University** was the great seat of learning which came to limelight under Harsha's patronage. It attracted not only Indians but also foreigners.

Harsha went on frequent tours to find out the problems and fulfil the needs of his subjects during his administration. He patronized art and architecture. His minister **Bana** was a Sanskrit scholar.



He wrote the book called 'Harshacharita'. Harsha, who was a scholar wrote Nagananda, Ratnavali and Priyadarshika. The Chinese Buddhist monk Hieun Tsang visited India during his reign. He visited Kanauj, Prayag, Nalanda and Kanchipuram. He stayed in Harsha's court for sometimes.

Si-Yu-Ki, a book on tours tells about Buddhism and about India on those days. Harsha's Empire was the last Empire in north India before the Islamic conquest.

### Evaluation:

#### I. Fill in the blanks:

1. -----established the Kushana Dynasty.
2. The book Buddha Charita was written by-----.
3. -----was the physician of the Gupta period.
4. ----- was the king of Thaneshwar.
5. The period of Gupta was called the -----of India.

#### II. True or false:

1. Peshawar was the capital of Kanishka.
2. Si-yu-ki was written by Hieun Tsang.
3. Ajilasmim was the Greek architect.
4. Mehruvali pillar belongs to the age of the Guptas.
5. Ashvaghosha wrote Sutralankar.

#### III. Match the following:

- |                            |                             |
|----------------------------|-----------------------------|
| 1. Fourth Buddhist Council | - established Kushan Empire |
| 2. Samudra Gupta's period  | - Kumara Gupta              |
| 3. Kanishka's period       | - Kanishka                  |
| 4. Pannar                  | - Yueh - Chi tribe          |
| 5. Harsha                  | - AD 335 – AD 375           |
| 6. Kushan                  | - AD 78 – AD 101            |
| 7. Ashoka II               | - Harshacharita             |
| 8. Nalanda University      | - Kashmir                   |
| 9. Kadphises I             | - Priyadarshika             |

#### IV. Answer the following :

1. Explain the background of Gandhara art.
2. Why Gupta's period is known as the 'Golden Age' of India?
3. Mention the foreign invaders who were responsible for the decline of Guptas.
4. Explain - Saka period and Gupta period.
5. Discuss about Fahien and Hieun Tsang.