

Social Science

Part 1

Standard V



**Government of Kerala
Department of Education**

**State Council of Educational Research and Training (SCERT) Kerala
2016**

The National Anthem

Jana-gana-mana adhinayaka, jaya he
Bharatha-bhagya-vidhata.
Punjab-Sindh-Gujarat-Maratha
Dravida-Utkala-Banga
Vindhya-Himachala-Yamuna-Ganga
Uchchala-Jaladhi-taranga
Tava subha name jage,
Tava subha asisa mage,
Gahe tava jaya gatha.
Jana-gana-mangala-dayaka jaya he
Bharatha-bhagya-vidhata.
Jaya he, jaya he, jaya he,
Jaya jaya jaya, jaya he!

PLEDGE

India is my country. All Indians are my brothers and sisters.

I love my country, and I am proud of its rich and varied heritage. I shall always strive to be worthy of it.

I shall give respect to my parents, teachers and all elders and treat everyone with courtesy.

I pledge my devotion to my country and my people. In their well-being and prosperity alone lies my happiness.

Prepared by :

State Council of Educational Research and Training (SCERT)

Poojappura, Thiruvananthapuram 695 012, Kerala

Website : www.scertkerala.gov.in

E-mail : scertkerala@gmail.com

Phone : 0471-2341883, Fax : 0471-2341869

Typesetting and Layout : SCERT

First Edition : 2014, Reprint : 2016

Printed at : KBPS, Kakkanad, Kochi-30

© Department of Education, Government of Kerala

Dear Students,

Social science focuses on studying the individual's relationship with society and environment. Man's sense of community and hard work contributed to the birth of our culture and civilization. Harmonious efforts are essential for the beneficial existence and security of our social life. Learning social science will help us to skilfully face the challenges of the changing times and to progress with caution. It will help us to develop the knowledge, attitude, and skills required to become ideal citizens who strive for the common good.

Hope you will be able to do further explorations in this field and creatively employ them for social development.

Wishing you the best,

Dr. P. A. Fathima
Director
SCERT

Textbook Development Team

Members

Abdul Hameed V.

HSA, MUMVHS, Vadakara, Kozhikode

Abdul Samad K.C.

HSST, Govt.H.S., Vadakara,
Puthoor (P.O.), Kozhikode

Esha V.K.

UPSA., A.M.L.P.S., Vettikkad,
Perinthalmanna, Malappuram

Gopakumar G.P.

Lecturer, DIET, Kollam

Hari Pradeep S.

HSA, S.V.H.S., Pullad,
Thiruvalla

Hari V.

UPSA, Unity A.U.P.S.,
Thenkkara

Jayakrishnan O.K.

HSA, K.P.C.H.S.S., Pattanoor P.O.,
Pattanoor, Kannur

Nisanth Mohan M.

HSST, Govt. Girls H.S.S., Karamana,
Thiruvananthapuram

Nisha M.S.

UPSA, P.H.S.S., Mezhuvelli,
Pathanamthitta

Rajan K.

G.U.P.S., Thiruvazhiyod, Palakkad

N. Sukumaran

Govt. V & H.S.S. for Girls, Manacadu,
Thiruvananthapuram

Varghese Pothan

HSST, St. John's H.S.S. Mattom,
Mavelikkara

Yusaf Kumar S.M.

HSST, G.M.B.H.S.S., Attingal

English Version

Dr. Priyesh C.A

Assistant Professor,
Department of Economics,
University College, Thiruvananthapuram

Saidalavi C.

Asst. Professor, WMO Arts & Science
College, Wayanad

Meera Baby

Asst. Professor, Department of English,
Govt College Kanjiramkulam

Praseeda P.

Asst. Professor, Department of English,
Govt College Kanjiramkulam

Nisanth Mohan M.

HSST in Geography,
Govt. Girls H.S.S., Karamana,
Thiruvananthapuram

G.V. Hari

HSST in Sociology, NSS HSS Pandalam

Experts

Dr. Abdul Rasak P.P.

Associate Professor,
Department of History,
P.S.M.O College, Thirurangadi

Dr. N.P. Hafiz Muhammed

Associate Professor (Rtd.),
Department of Sociology,
Farook College, Kozhikode

Mahalingam S.

Associate Professor (Rtd.),
Department of Geography,
Govt. College, Chittoor

P.S. Manoj Kumar

Assistant Professor,
Department of History, K.K.T.M. College,
Kodungalloor, Thrissur

Dr. T Neelakantan

Associate Professor,
Department of Geography,
University College, Thiruvananthapuram

Dr. Priyesh M.

Assistant Professor,
Department of Economics,
University College, Thiruvananthapuram

Dr. Venumohan

Assistant Professor,
Department of History,
Govt. College, Nedumangadu

Academic Co-Ordinator

Chithra Madhavan, Research Officer, SCERT

Contents



1. A Road to History - 7



2. From Stone to Metal - 18



3. Our Family - 29



4. Spend Carefully - 39



5. Universe : A Great Wonder - 49



6. Continents and Oceans - 61

**Certain icons are used in this
textbook for convenience**



**For further reading
(Need not be subjected to evaluation)**



Questions for assessing the progress



Summary



Significant learning outcome



Let us assess



Extended activities



A Road to History



This is the picture of a school. You are also studying in such a school, aren't you? You know a lot of facts about your school, don't you? Try to write down the details of your school.

- Name of the Headmaster/Headmistress
- Number of students
- Number of teachers
- Names of teachers
- Library/Laboratory/Computer Lab facilities
- Availability of playground
- Number of buildings
- Details of the place where the school is situated (district, taluk, village, survey number)
- Panchayath/Municipality/Corporation

Prepare a brief report including the data collected, and discuss it in your class.

Discover and Record

Now, let us gather the data on the past of our school.

What information to be found out?

- Year of establishment
- Former teachers
- Alumni
- Buildings at the time of establishment
- Later changes
-
-

From where do we get this data?

It is possible for you to gather some of the data using the following hints

- Name board of the school
- Plaque
- School diary
- Annual souvenir
- Attendance registers of previous years
- Admission register

Let us collect some information orally. To whom shall we approach for this?

- The elders living near the school.
- Alumni
- PTA representatives

Do we need more data?

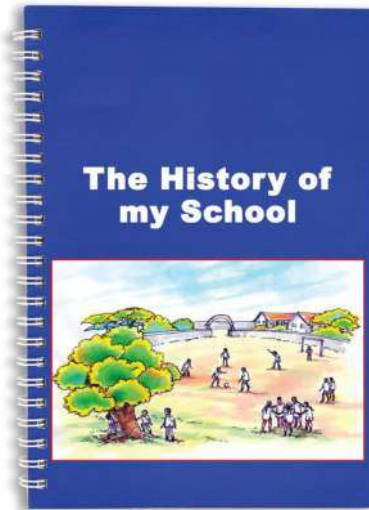
- We can collect more data from the school wiki of IT@ school.

Using the information and photos gathered, prepare a book titled 'The History of my School'. You can release it in the class PTA meeting or assembly.

It is the written records and oral information that helped us to write the history of our school. These are the sources of data for writing the history of the school.



What are the sources that you depended to record the history of your school?



Searching for Evidence

Like the school, each family, village and country has its own history. We get information on the food habits, dress, dwelling places, occupation and administrative system of different ages through historical inquiry. This information helps us to recognize the gradual development that human beings attained through different periods of history. History is the record of the progress that human beings acquired down the ages.

Pre-Historic Period

You have mainly used the written records and documents to prepare the history of your school, haven't you? What sources can be used to draw out information on human life that existed before the beginning of the art of writing?

The remains of the materials that human beings of those ages made and used help us to construct knowledge on those periods. A few such objects can be found in the pictures given below.

The period before the formation of art of writing is known as Pre-Historic Period.



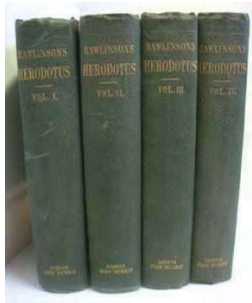
Stone tools used during the Pre-Historic Period



Cave paintings - Bhimbetka

Historic Period

Observe the pictures given below.



Books



Early coins



Palm leaves



Stone inscriptions

These sources provide written information and they help to record history along with the sources from the Pre-Historic Period.

The period with written records is known as the Historic Period.



Differentiate between the historic period and pre-historic Period.

Let us Preserve the Historical Remains

You would have either visited a museum or heard of it, wouldn't you?

What are the objects preserved in a museum?

A museum keeps the objects or their remains that were once used by man. They are preserved because they give much valuable information on the past of human life.

Besides these objects, monuments like forts, palaces, old buildings, etc. are preserved because of their historical importance.



Palakkad Fort

This is a fort in Palakkad. It is more than 200 years old. We still preserve it. Why are the historical monuments preserved? Discuss.

Visit places of historical importance and prepare a report on it.

Seek and Find

The pictures given below are the remains related to the funeral practices in ancient Kerala. Find out their names and write them down in the columns provided.



History Museum in School

Collect the objects of historical importance from your home and locality and set up a history museum in your school.

Things to be collected are

- Coins
- Palm leaves
- Antique lamps

- Old utensils
- Old tools
- Traditional agricultural tools
-
-

In Search of Data



These objects were used by our forefathers in the past. Make an enquiry on their importance with the help of the elders in your family and locality. Prepare a report based on the information gathered and present it in your class.

There are a lot of historical remains around us. They are to be preserved for the coming generations as it would provide them with the opportunity to learn about the past. If we are able to recognize the period to which these sources belong, the study about them would be more interesting.

Prepare an Album

Collect pictures of historical sources and prepare an album with proper description.

Reckoning Time

When did India attain independence? It was in 1947, as you know.

The formation of the state of Kerala was in 1956.

How many years after independence was the state of Kerala formed?

Gandhiji led the Salt Sathyagraha in 1930.

How many years before the independence was the Salt Sathyagraha organized?

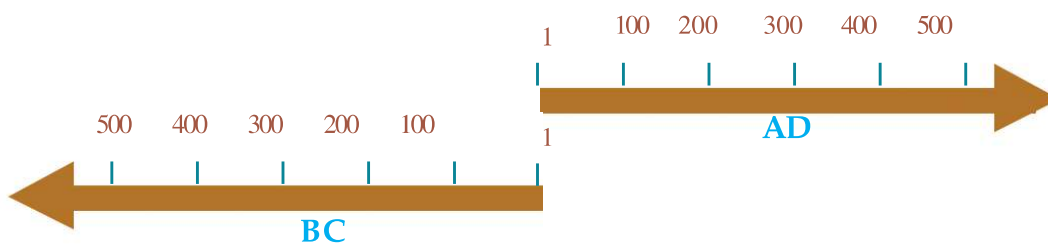
Here, chronology is measured based on the year of Indian independence.

Today, the Christian era is the common scale of chronology all over the world. The period in history is divided into AD and BC based on the birth of Jesus Christ. The time before and after the birth of Jesus Christ is known as BC (Before Christ) and AD (Anno Domini) respectively. Now they are also known as CE (Common Era) and BCE (Before Common Era).



Anno Domini

These Latin words mean 'In the year of our Lord'. It signifies the year of birth of Jesus Christ.



This picture helps us to recognize the concept of AD and BC.

Have a Glance at the Calendar

What are the different eras mentioned in the calendar? Write them down.

- Christian Era
-
-
-



Centuries

Do you know in which century you are living? Yes, in the 21st century.

Do you know when it began?

A century denotes 100 years. For example, AD 1 to AD 100 is the first century. AD 1901 to AD 2000 is the 20th century.

See the illustration below.



Identify the centuries to which the following years fall.

Year	Century
AD 2014	
AD 1947	
AD 1857	
261 BC	
326 BC	

In history, the question 'when' is very important. The chronological sense helps us to find out the answer to this question. The chronological order and sense are inevitable in recording and learning history.



Summary

- History is the record of the progress human beings acquired through the ages.
- The tools, coins, utensils, other historical remains, and the written documents are the major sources that help us to record history.
- The period with written documents is called Historic Period and the period prior to written documents is called Pre-Historic Period.
- History is divided into AD and BC. (Now also known as CE and BCE)



Significant learning outcomes

- Explains that history is recorded on the basis of evidences.
- Differentiates between Historic and Pre-Historic Periods.
- Analyses the concepts of AD, BC and century.
- Describes the need of conserving historical monuments.
- Acquaints methodology of writing local history.



Let us assess

- List out the various evidence that are helpful in recording history.
- Classify the following into historic and pre-historic sources.
 - Coins
 - Books
 - Cave paintings
 - Stamps
 - Stone weapons
 - Ancient earthenware
 - Palm leaves



Extended activities

- Visit any historical remains (forts, ancient buildings, ponds, statues, etc.) in your locality and draft a report on the measures taken for their preservation.
- Examine the coins belong to different ages and list out the information that can be found out from them.
- Prepare a poster for the protection of historical monuments
- With the help of elders, collect the folk wisdom, folksongs, and legends once popular in your locality. Prepare a magazine based on the information collected.
- Collect the pictures, news and advertisements related to historical monuments and exhibit them on the display board.



2

From Stone to Metal



Early human life - An illustration

The picture given above depicts the early human life. What can you identify from the picture?

- Early human beings lived in forests
-
-

A human being does not have a gigantic body like that of an elephant, sharp claws like that of a tiger or the strength of a bison.

Hence tools and weapons were essential for the early men to defend themselves from wild animals and to collect food. For this purpose, they used stones. As stone was the material that influenced the early human life the most, this period came to be known as 'Stone Age'.

Palaeolithic Age



Stone weapons of the Palaeolithic Age

The rough stones that the early humans used can be seen in the picture.

For what purpose might these stones have been used?

- To hunt animals
- To defend oneself from the attack of animals.
- To dig up edible tubers
-

The period in which rough stones were used as tools and weapons is called Palaeolithic Age (Old Stone Age).

During this age, man lived in caves and ate fruits and tubers, and meat of hunted animals. The use of fire was an invention of this age.



Use of fire in the Palaeolithic Age. - An illustration

For what purposes fire might have been used by the early man? Discuss.

-
-

Neolithic Age



Neolithic weapons

Later, man used the weapons as shown in the picture above.

What differences do these weapons have from those of the Palaeolithic Age?

- Sharper
- Polished

The age that used the tools, implements and weapons with the features discussed above is called the Neolithic Age (New Stone Age). In this period drastic transformations occurred in human life.

The pictures given below signify those changes.



Human life in the Neolithic Age - An illustration

From the pictures, what features can you identify about the human life in the Neolithic Age?

- Engaged in farming
- Developed shelters
- Tamed animals
-
-



In what ways does the Neolithic Age differ from the Palaeolithic Age?

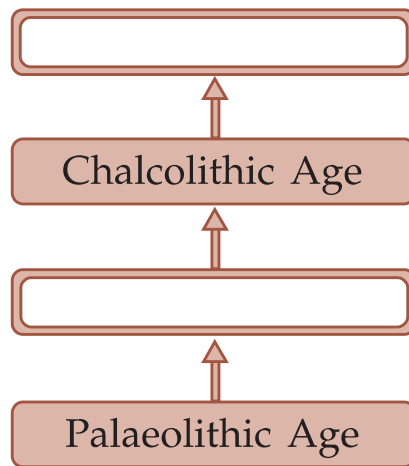
Bronze Age

Later copper tools began to be used along with stone tools. Compared to stones, copper was easier to sharpen and mould and was convenient to use. The period when man used both stone and copper tools is known as Chalcolithic Age (Copper-stone Age).

In course of time, man discovered tin and learned to mix copper with tin to produce the alloy called bronze, which was harder than copper.

The age in which bronze was widely used to make weapons and tools is called 'Bronze Age'.

Complete the following flow chart related to ancient human life.



Let us find out the changes brought about in human life by the invention and use of bronze weapons and tools.

During this period agriculture improved and resulted in better harvest. The fertile soil of the river valleys and ample irrigation also helped in improving agriculture.

What changes might have been brought about by the improvement in agriculture?

- The storage of surplus food grains.
- Development of public places for the exchange of agricultural products
- Increase in the production and use of new agricultural tools.



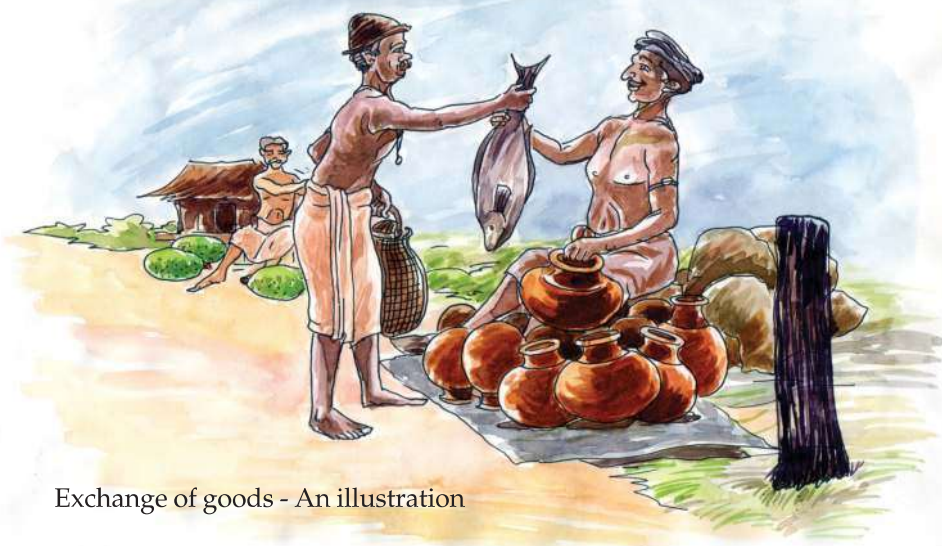
Ancient farming - An illustration

What other occupational fields might have developed along with agriculture? Find them from the pictures given below.



In addition to the ones you have found out, the following occupational fields also developed during that period.

- Brick making
- Weaving



Exchange of goods - An illustration

Those who were engaged in a particular occupation needed the goods produced by others. This necessitated the exchange of goods and it created a sense of mutual dependance among people. Surplus products were exported to far off places. As a result, both inland and maritime trade flourished. Consequently, means of transportation also developed. In course of time, systems of administration were formed to regulate these activities. The invention of the art of writing was another striking feature of the Bronze Age.

With these features, ancient cities developed gradually in various river valleys. These cities are regarded as the centres of the Bronze Age civilizations.

The Mesopotamian Civilization

The Mesopotamian Civilization flourished in the valleys between the Euphrates and the Tigris rivers. The word

'Mesopotamia' means 'the land between rivers'. It is now in Iraq. The Cuneiform script evolved in Mesopotamia. The 'Ziggurats' are the major remains of this great civilization.



Cuneiform Script

The Cuneiform is one of the oldest known scripts. It was developed in the region of Sumer. The script is represented by wedge-shaped pictographic marks on clay tablets.



Ziggurats

The Ziggurats were temple complexes. The walls of the Ziggurats were built of burnt bricks. It has been found that around twenty five Ziggurats were built in this area. The Ziggurat in the city of Ur is still preserved.



The Egyptian Civilization

The Egyptian civilization flourished in the valley of the river Nile. Egypt is called 'the Gift of the Nile'. The Hieroglyphic script was developed in Egypt. The world famous pyramids are the most remarkable remains of this civilization.



Hieroglyphics

It is the script used by ancient Egyptians. It is a combination of symbols and letters commonly written on papyrus and wood.





Pyramids

The Pyramids are the tombs of the 'Pharaohs', the rulers of Egypt. The biggest pyramid is the one at Giza, built by the Pharaoh of Khufu.



The Chinese Civilization

The Chinese Civilization flourished in the Hwang-Ho river valley. It is remarkable that the Chinese pictographic script formed in the Bronze Age exists even today with some changes. The Chinese were experts in making bronze sculptures.



Chinese bronze sculpture

The Harappan Civilization

The Harappan Civilization flourished in the valley of the river Indus. The major sites of this civilization are situated in the present India and Pakistan. Town planning was a striking feature of the Harappan Civilization. The thoroughfares, drainage system, granaries, trade centres, multi storeyed houses made of burnt bricks, etc. astonish even the modern world. The Harappan people were familiar with the art of writing. Mohenjodaro, Harappa, Kalibangan, and Lothal were the major cities of the Indus-Valley Civilization.



The Great Bath

The Great Bath is one of the important remains of the Harappan Civilization. It is situated in Mohenjodaro.





Human life underwent changes when it progressed from the Neolithic Age to the Bronze Age. What are they?

List out the tools, implements, utensils and weapons made of stone, copper and bronze that can be found in your house and premises.



Summary

- The period in which rough stones were used as tools is known as the Palaeolithic Age.
- The period in which polished stones were used as tools is known as the Neolithic Age.
- Agriculture, domestication of animals and permanent settlement began in the Neolithic Age.
- River valley civilizations flourished in the Bronze Age.
- The major civilizations during the Bronze Age were Mesopotamian, Egyptian, Chinese and Harappan.



Significant learning outcomes

- Describes the features of the Stone Age
- Compares the Palaeolithic and the Neolithic Ages.
- Identifies the major Bronze Age Civilizations and analyses their remarkable features.



Let us assess

- Compare and contrast the tools, implements and weapons of the Palaeolithic Age with those of the Neolithic Age.
- What were the changes brought about in the human life in the Neolithic Age with the beginning of agriculture?

- List out the various occupational fields developed in the Bronze Age.



Extended activities

- Collect pictures related to river valley civilizations and prepare an album with proper descriptions.
- Conduct a seminar on the topic 'Man's progress from the Stone Age to the Metal Age civilizations'.

Our Family



Look at this picture of a family. Can you identify the members?

-
-
-
-
-
-

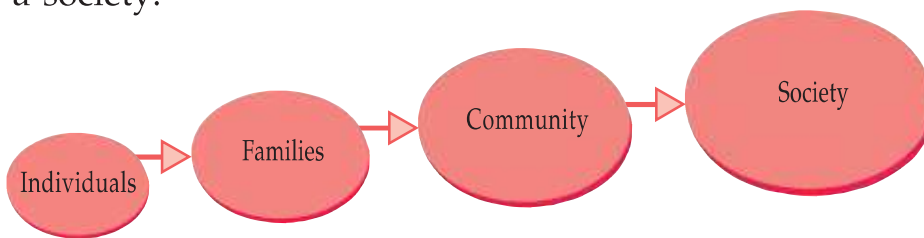
Who are the members of your family?

- Mother
-
-
-
-
-

A family consists of father, mother, children and their close relatives. Every individual is a member of a family. When did you become the member of your family? Of course, by birth. Normally we live in a family from birth to death and so the family influences us the most.

Is your's the only family in your locality? Of course, no.

Family is the smallest unit of a society. Several families together form a community and several communities together give rise to a society.



Family - the basic unit of society

It is our family that teaches us the social norms, manners and the way of life for the first time. Family fulfills our basic needs such as food, cloth, shelter etc. It ensures love and security to all the members of the family. It is from the family that we start making social relationships, develop and retain such relations. That is why family is said to be the basic unit of society.

Read the poem of Kunjunni Mash.

I am Kunjunni

My mother, Narayaniyamma;

Grandmother, Parukkuttiyamma.

Great, grandmother? - no idea!

So scarce is my knowledge about my family.

(Enniloode - Kunjunni Mash)

Haven't you noticed that in his poem, Kunjunni Mash could name the members of his two previous generations but not more than that? You know the names of your parents, but how many of you can name your grandparents and great grand parents? Try filling up the family tree given below, beginning with your name in the lowest leaf.



Information about how many former generations are you able to draw out in your family tree? Do all these people live together?

Formation of a family

We have seen that one becomes a member of a family by birth. Family members are related by blood. One's relation to his father, mother and siblings is by blood. People also become relatives by marriage.

Didn't your father and mother formed your family by marriage?

There are some couples who adopt children to make their family complete.

Based on the information given above, make a list of different ways by which a family is formed.

- Blood relation
-
-

Different Types of Families



Picture 1
Nuclear family



Picture 2
Extended family.



Picture 3
Joint family

You have seen the pictures of three families. What are the differences among these three families?

In the first picture, you can see only father, mother and their children. A family of this type is called Nuclear family. In picture two, we can see grandparents, parents and children. When two or three nuclear families live together, they form an extended family. The family in the third picture is very large. Three or four generations live together under one roof. It is called Joint family.

Do you have such joint families in your locality? Make an enquiry.

A visit to ten families in your locality will provide you the necessary information. After examining the number of members, their relationships and the number of generations in the families you have visited, list them as nuclear, extended and joint families.

Characteristics of a family





Have you examined the pictures? They are the pictures of families in different countries. Now it is clear that, families exist all over the world irrespective of nation, language etc. So family is universal.

What are the factors that bind the members of a family together?

- Affection
- Mutual respect
-
-

Emotional bond among the members in the family is another important characteristic.

How many members are there in your family? A family will always have a limited number of members that can be accommodated in its house. This is another feature of a family. Who does the following works at your home?

Sl. No.	Household works	Member of the family
1	Cooking	
2	Gardening	
3	Washing clothes	
4	Shopping	
5	Cleaning the courtyard	

On the basis of the information filled above, it is clear that all the members of the family take part in the household activities.

This kind of joint efforts are very essential for the integrity of the family. This sense of responsibility is an essential factor for keeping the family a permanent unit.

The features of family are given in the column 'A'. Match them with the items in column 'B'.

A	B
Universal	Less number of members in a family
Limited size	Love, affection, feeling of security
Emotional bonds	Carrying out duties
Sense of responsibility	Beyond the boundaries of nation and language

Functions of a family

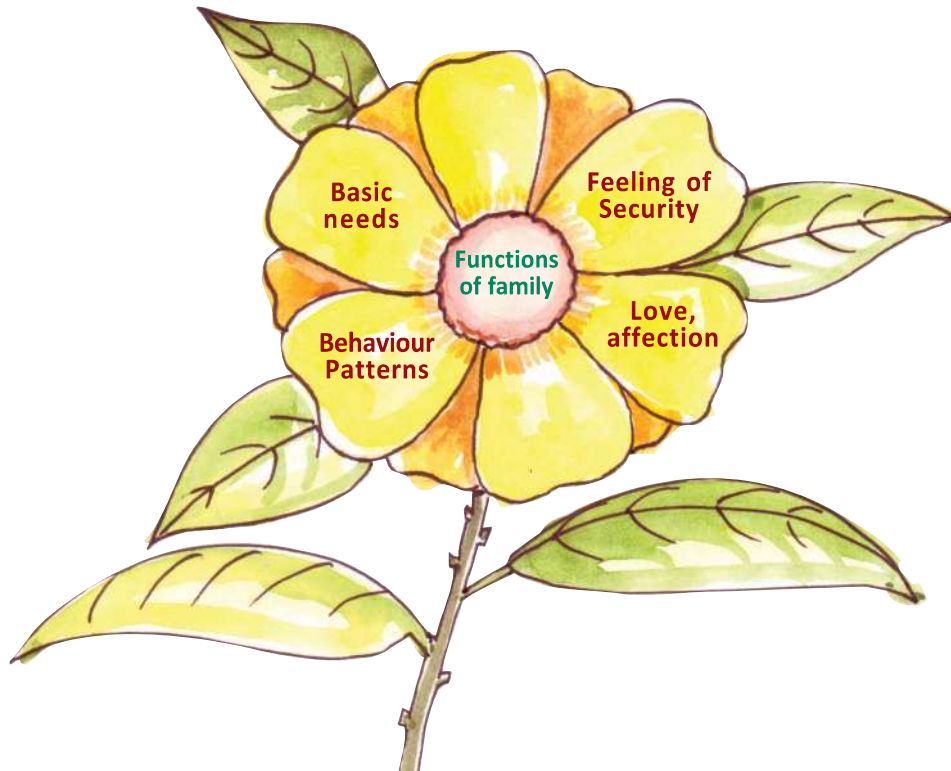
What are your basic needs? Are they not food, cloth and shelter? Usually all these needs are met by family. You love your parents and they love you too. This mutual love and co-operation that exist among the members of a family mould the personality. Do you now behave in the same way as you were infants? An individual's behaviour changes as he grows older. We acquire

The function of a family is to create an atmosphere of love and care among its members.
Ogburn



the qualities such as discipline, manners, share and care, honesty etc from our family.

Don't you wish to be at home when you fall ill? Of course, you will. You will get the feeling of security at home than any other place. Family ensures safety and provides us with the feeling of security.



Observe the picture above and write down the functions of a family in the columns provided.

- Namita is waiting for her school to reopen. Her father has bought her study materials.

- Despite being very busy, Minnu's mother prepared for her the favourite dessert on her birthday.

- Grandfather constantly reminds us of the need for respecting elders and being friendly towards others.
- When Nisha met with an accident on her way to school, the first thing she demanded was to take her home.



Summary

- Family is the basic unit of society.
- A family is formed by blood-relation, by marriage or by adoption.
- Based on the structure, family is divided into three - Nuclear family, Extended family and Joint family.
- The major features of a family are universality, emotional bonds, limited size and sense of responsibility.
- The important functions of a family are to ensure security to its members, provide basic needs, give love and affection and cultivate good qualities in them.



Significant learning outcomes

- Explains that family is the basis of social relationships and an important agency of personality development.
- Identifies and Describe the different ways of formation of a family.
- Explains the characteristic features of family.
- Identifies and Analyse the functions of family.



Let us assess

- Ammu shares the day's events at school with her parents on reaching home.

What do you usually share with your parents? Prepare a brief note.

- How do you help your parents at home?
- How do your parents help you?

Complete the following table.

Responsibilities of parents	Your duties towards them



Extended activities

- We have understood the functions of a family. Based on the daily news, hold a discussion on how far the families observe their roles in the present society.
- Collect stories, poems and pictures that highlight and reveal the importance of relationships in the family prepare a magazine.



Spend Carefully

We studied about family and its social importance in the last chapter. Now let us see some other aspects related to family.



Examine the picture. You can see the members of this family - father, mother and children - engaged in different activities. What are they doing?

- Father is ploughing the land using tractor
-
-

Who among the members of this family, are engaged in income earning activities?

Family gets income by doing such different activities. Employment is an economic activity that generates income. Reward of employment is earned either in the form of wage or salary. Employment is one source of income for family. As income is generated in different ways, the sources of income are also different.

Given below are some information about two families:

Family 1	Family 2
<i>Satheesh is an agricultural labourer. His family consists of his wife, two children and his mother. He owns a house and five cents of land. Satheesh's wife, Sumathy, is engaged in preparing meals in the nearby school. His family gives adequate care to his bedridden mother.</i>	<i>Shaji's family consists of his wife and three children. He runs a tailoring shop. His elder son is engaged in newspaper distribution. Younger children are students. His wife, Seena does household activities. They live in a rented house.</i>

What are the sources of income in the families of both Satheesh and Shaji? Complete the table.

Family 1	Family 2
1. Agriculture	1. Tailoring
2.	2.

The sources of income are different for these two families. Reward generating ventures or assets can be termed as sources of income. For example, business is a source of income and profit out of business is income.

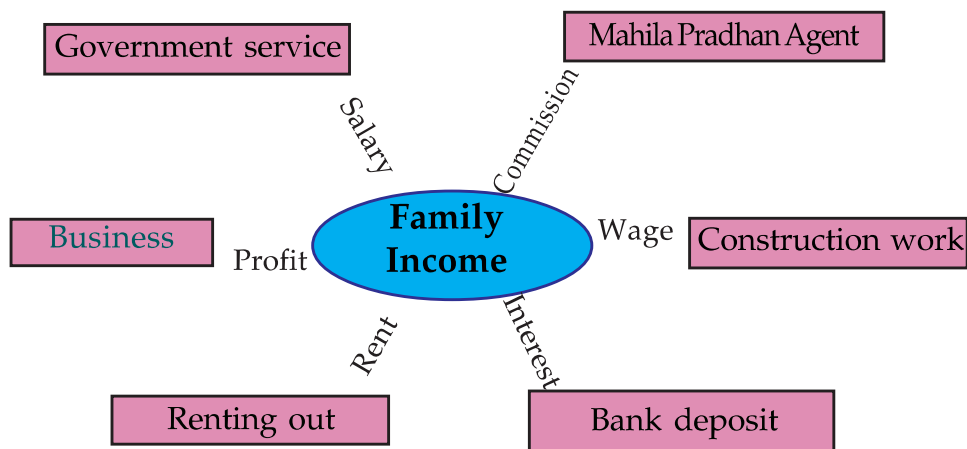
List out the members of your family who earn income?

Let us examine some other contexts in which families earn income.

1. A certain amount deposited in bank
2. Renting out owned buildings
3. Runs industrial unit profitably
4. Working as insurance agent

Interest from bank deposit, rent from building, profit from industrial unit, commission from insurance agency are income for families.

See the word web depicting different sources of income of families.



Families earn income from different sources such as bank deposit, business, agriculture, industry, land and other properties, services etc. Thus, earnings of family members from different sources are the income of the family.

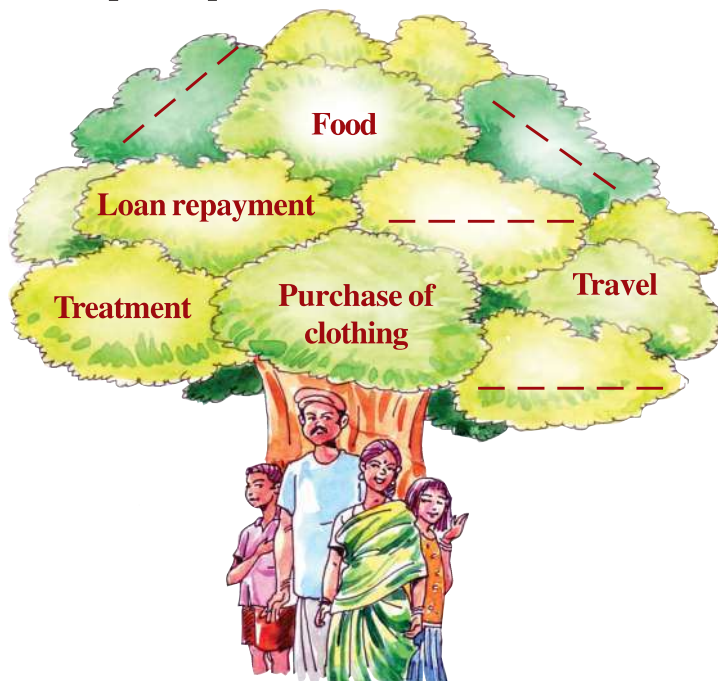


What are the income generating sources of your family?

Diverse Expenses

The common requirements and personal demands of each member of the family are met with the income generated through different sources. All the requirements of a family do not have equal preference. Some are very urgent and essential. Some others are good, if met with. The rest does not pose a problem, even if not met with. The family requirements should be prioritised based on family income. Expenses need to be co-ordinated accordingly.

See the picture depicting major expenses of a family. You can identify the major expenses of a family from the diagram. Think of the other possible expenses of this family and write them down in the spaces provided.



Among these expenses, some are meant to meet day to day requirements. Some others are to meet particular requirements. Expenditure on food, clothes, loan repayment are expected expenses. Unexpected events may occur in our life. Accidents, natural calamities and diseases are unexpected events which lead to unexpected expenditure. A part of our income may be kept apart to meet such unexpected expenses.

Economic Security

Expenses exceeding income will lead to economic crisis in the family. When expenses are less than income, there will be surplus. This surplus is the saving of a family. Saving plays a vital role in economic security. Economic security means maintaining higher standard of living and the ability to meet expenses likely to incur in future. We can attain economic security through better management of family income.

The following three states can be observed on examining the income and expenses of families.

- Expenses and income are equal
 - Income more than expenses
 - Income less than expenses
- In which context, can we have surplus?
 - Which context ensures economic security?
 - Is it desirable to control expenses for ensuring economic security?

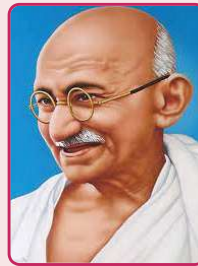
Habit of Thrift

Now-a-days, several products are available in the market. There are advertisements persuading people to buy these products. Influenced by advertisements, we purchase excessively and this leads to increased expense.



"The world has enough for everyone's need, but not enough for everyone's greed".

- Gandhiji



We should have the sense to buy good quality essential products without falling into the temptation of advertisements. Thrift is the habit of spending our income effectively to meet our desired requirements. Thrift should be a part of our life style. Thrift helps to ensure economic security. Simple life style is essential for thrift.

All members of a family should practice thrift. As a student, what can you do to ensure thrift?

- Avoid luxury goods
- Produce food grains, vegetables and fruits that can be cultivated at home.
-

You may find and add more to the list.

Family-Income and Expenditure

See the income and expenditure of a family for a month.

Income (Rs)		Expenditure (Rs)	
Particulars	Amount	Particulars	Amount
Salary	20,000	Rice & Grocery	4,000
Income from Properties	1,000	Vegetables	2,000
		Milk, fish	3,000
		Telephone, news paper	1,000
		Electricity charge	900
		Clothes	1,000
		Education	500
		Medical expenses	2,000
		Travel	3,000
		Loan repayment	3,000
		Insurance	2,000
		Other expenses	1,000
Total	21,000	Total	23,400

What can you infer from the analysis of the given data on the income and expenditure of this family? Make use of the following indicators:

- Total income and expenditure of the family
- Measures that can be taken by the family to ensure economic security

Families may not always keep records on their income and expenditure. But they can ensure better life if they anticipate income and expenditure. Keeping records on the estimated income and expenses of a family can be called a family budget.

Let us examine the benefits of preparing a family budget.

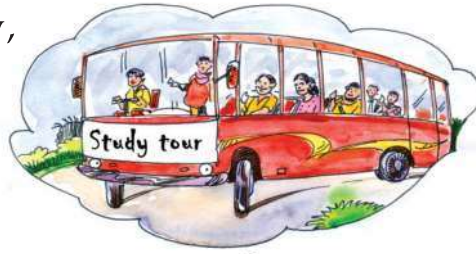
- Co-ordinate expenses in accordance with the income
- Requirements can be prioritised and met with accordingly.
- The need for thrift and saving can be realised.

Income and expenditure of all families are not the same. Family budgets depend on the variation in income and expenses of each family. Around us we see families with high and low income. This leads to economic disparity among families. The Central and State Governments have been implementing various programmes for minimising this economic disparity.

Activity Budget

Just like family budget, each and every organization or institution around us too have budgets. Likewise, activity budgets can also be prepared. A budget prepared for a particular activity or a programme is called activity budget. A budget prepared for your study tour is an example of an activity budget.

Using the format given below, prepare a budget for a one day study tour organized by the Social Science Club.



Activity Budget - Study Tour

Income (Rs)		Expenditure (Rs)	
Particulars	Amount	Particulars	Amount
•		•	
•		•	
•		•	
Total		Total	



Local self government bodies such as Panchayats, Municipalities and Corporations have budgets. There are budgets for the Central and State Governments. The Central and State Governments present the expected expenditure in the budget by calculating the anticipatory expenses and identifying sources of revenue to meet with. In India, financial year is the period from 1st April to 31st March. The Central and State Governments prepare annual budgets for every financial year.



Summary

- Employment is a source of income for families.
- Sources of income are diverse.
- Requirements of families are met with income.
- Controlling expenses helps economic security.
- Thrift is advisable for economic security.

- Income and expenditure of all families are not alike.
- There exist economic disparity among families.
- Union Government, State Governments, Local self governments, other institutions and organizations present budgets.



Significant learning outcomes

- Describes different sources of income of families.
- Explains the importance of saving.
- Discusses the importance of thrift in ensuring economic security.
- Makes thrift a life style.
- Analyses family budget and understand its relevance.
- Distinguish and describes the existence of economic disparity among families.
- Analyses that the Union and the State Governments have budgets.



Let us assess

1. Among the following, which is not a source of income ?
 - Government job
 - Agricultural job
 - Household job
 - Doctor's job
2. Complete the table

Source of Income	Income
<ul style="list-style-type: none"> • Road construction • Business • Government service • Bank deposit 	

3. Prepare a note on the importance of practising thrift in a family.
4. Suggest two ways to ensure economic security.
5. 'Thrift should become a part of life'. Elucidate your opinion.
6. Explain the reasons for variations in family budgets.
7. As students, suggest areas where you can practice thrift.
8. Identify and state the important features of government budgets. Which of the following is the important feature of the government?
 - Arrange expenditure in accordance with revenue.
 - Practice thrift.
 - Determining expenditure in advance and finding ways to generate the desired revenue.
 - Balancing revenue and expenditure.



Extended activities

- Prepare a monthly budget of your family in consultation with your parents.
- Interview the local self government representative of your locality and prepare a note on their budget related activities.

Universe : A Great Wonder

Clear night with the Moon amidst the twinkling stars...
Shooting stars flashing occasionally...

These night scenes have generated curiosity and anxiety in
mankind since ancient times.

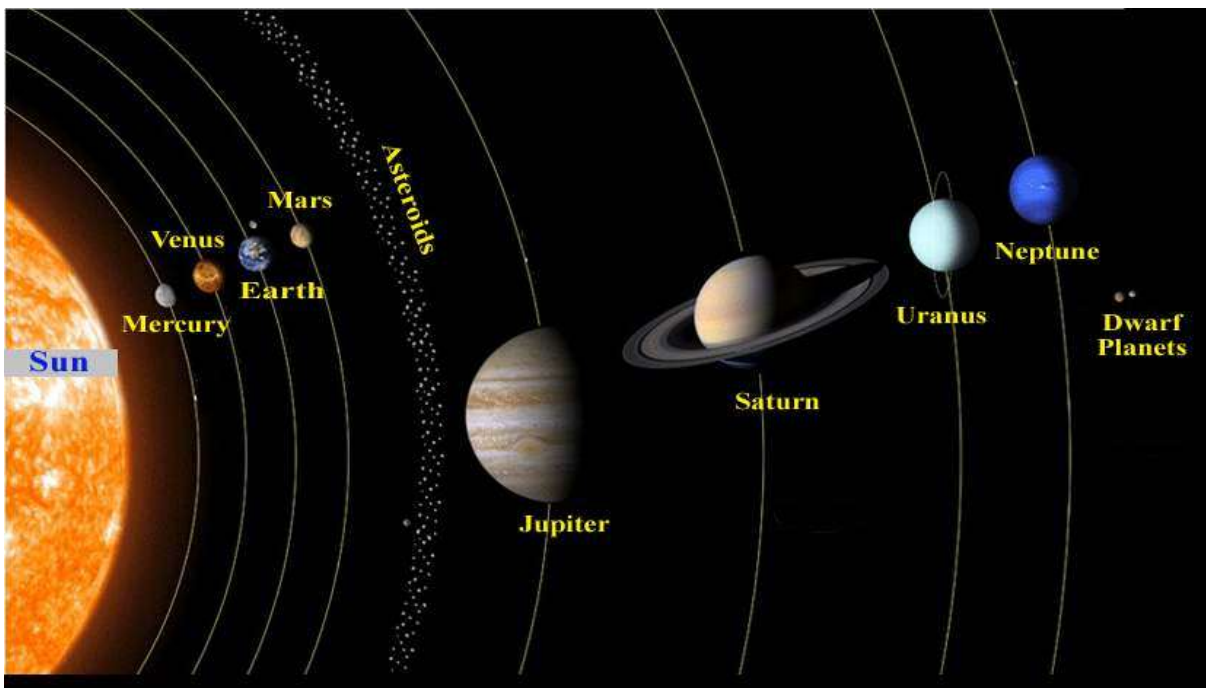


Are these stars far off? Are there only the Sun, the Moon and the stars in the sky? How many such doubts have sprouted in the minds of human beings since then! Aren't you interested to know about such astonishing night scenes? This lesson takes you to these wonders.

Aren't you the member of a family? Just like you, the earth is also a member of a family. Solar system is the family in which the earth is a member.

Solar system

Observe the diagram below that depicts the solar system (Fig 5.1). What do you see at the centre of the solar system? Isn't it the sun? Sun is a star. Stars are giant celestial bodies that burn by themselves. Stars emit heat and light in large quantities.



Solar System

Fig. 5.1

Do you notice the celestial bodies that revolve around the Sun?
Which are they?

- Mercury
- Venus
- Earth
- Mars
- Jupiter
- Saturn
- Uranus
- Neptune

The celestial bodies that rotate themselves while revolving around the Sun are called planets.

Identify the paths of planets shown in the given figure (Fig 5.1). The path of a planet around the Sun is called orbit. Satellites are celestial bodies that revolve around the planets. Moon is the satellite of the earth.

Now arrange the planets on the basis of their distance from the sun. Softwares like K-Star and Stellarium in your school Social Science lab will be of more help for this.

- Mercury
-



Nicolaus Copernicus 1473 - 1543 AD



Copernicus was a geoscientist and astronomer from Poland. Ancient belief was that the earth was the centre of the solar system. Copernicus questioned this belief. He announced to the world that the Sun is at the centre of the solar system.

Planets in the



Neptune

- More than a dozen satellites
- 164 years to revolve around the sun



Uranus

- More than 25 satellites
- 84 years to revolve around the sun

Saturn

- Has rings around
- More than 30 satellites



Jupiter

- Biggest planet
- More than 60 satellites
- 12 years to revolve around the sun



Solar System



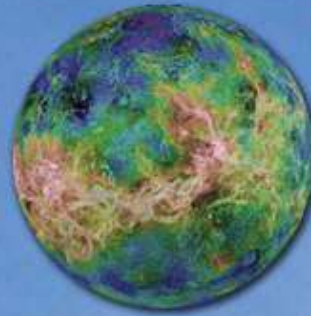
Mercury

- No satellites
- Smallest planet



Sun

- The only star in the solar system



Venus

- Brightest planet
- Hottest planet
- No satellites



Earth

- Blue in colour when viewed from space
- The only planet where life is found to exist
- One satellite - Moon



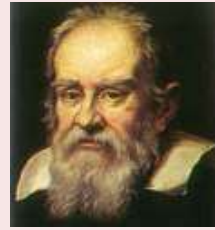
Mars

- Two satellites
- Traces of water flow in ancient times discovered



Galileo Galilei : 1564 - 1642 AD

Italian physicist, astronomer, mathematician and philosopher. Started observing sky with a self-made telescope. Discovered four satellites of Jupiter.



Identify the other members of the Solar System from the diagram (fig 5.1)

- Asteroids
- Dwarf planets

The rock fragments revolving around the Sun in between Mars and Jupiter are the asteroids. On rare occasions they come towards the Earth and pose threat to the Earth.



Fig. 5.2 Asteroid named Ida



Amazing Facts

- Uranus is the rolling planet in the solar system. While all the other planets spin like top, Uranus spins like the wheel of vehicles.
- If you are planning to go to Venus, don't forget that the Sun rises in the west there!
- In the Moon, stars are visible during day time also.

For a celestial body to be considered as a planet, it should have spherical shape, should revolve around the sun and should have its own obstacle free orbit. The celestial bodies which do not follow these conditions set by the International Astronomical Union (IAU) are called 'Dwarf Planets'.



The Expelled Pluto

Pluto was considered a planet till very recently. The International Astronomical Union (IAU) withdrew its status and declared Pluto as a dwarf planet in August 2006. Such a decision was due to the fact that Pluto crosses the orbit of Neptune and revolves around its own satellite namely Charon.

Guests in the Solar system



Fig. 5.3 Halley's Comet

Comets are rare visitors to the solar system. They are lumps of cosmic dust and snow particles. Their tail is formed as they approach the sun and it glows in the sun light. Though they revolve around the sun, they come close to the sun very

rarely. The length and the brightness of the comet's tail increase as it approaches the Sun. Do you remember the comet ISON which arrived by the end of 2013? It rushed towards the Sun and will never return.

Meteoroids

Haven't you noticed light beams flashing in the sky during clear nights? These disappear in no time before one can show it to another person. Such rock fragments of various size, which enter into the earth's atmosphere are called meteoroids.

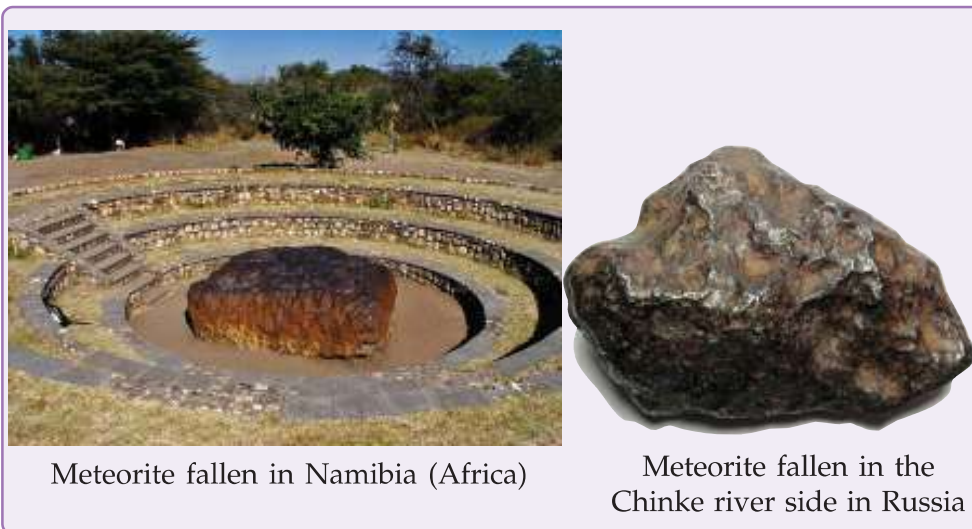


Fig. 5.4

They burn due to friction with air on entering into the atmosphere. This is the flash that we see in the sky. The unburned remains of the meteors falling on the earth are called meteorites.

You have learned that the solar system includes the Sun, the planets revolving around the Sun, their satellites, asteroids, comets and the dwarf planets.

List out the members of the solar system.

- Sun
- - - - - -
- - - - - -
- - - - - -

Earth, Our Planet



The earth is the only planet where life is found to exist. Vast expanse of surface water reserve exists only on the Earth. When viewed from space, the Earth's colour appears to be pale blue. This is due to the fact that two third of the Earth's surface is covered with water.

It is our duty to protect the wealthy diversity of nature in terms of air, water, soil and life forms.

The World of Stars

The Sun is the closest star to the earth. As the Sun sets, the other stars start twinkling one by one. As the night grows

darker stars become countless. Crores of stars make a galaxy. The galaxy which includes the Solar System is the Milky Way. It is also known as 'Akasha Ganga'. It contains nearly ten thousand crore stars.



Fig. 5.5 Milky Way

Universe

Universe includes millions of galaxies. What would be its size then! It is beyond our imagination, isn't it?



The universe was a tiny ball crores of years ago! It is believed that the universe expanded to the present form by a violent explosion.

The news regarding the celestial bodies and the universe appear very often in the dailies. Collect and paste them in a notebook.

Continue this activity throughout the year. This collection can be named as 'My Universe Book'.

The Milkyway is one among the nearly ten thousand crore galaxies which contains crores of stars, of which the Sun is the one around which the eight planets revolve, of which earth is the one, where our country is located, in which our state of Kerala is, in which my beautiful land is,

However, with his unending thirst for knowledge, inquisitive mind and with his hard work, man is able to understand the secrets of the universe.



Summary

- The universe includes crores of galaxies.
- Galaxies contain crores of stars.
- Milky way is the galaxy containing the solar system.
- Solar system includes the Sun, the planets and their satellites.
- Sun is at the centre of the solar system.
- Asteroids, dwarf planets and comets are also part of the solar system.
- Earth is a member of the solar system.
- The earth is the only planet where life is found to exist.
- Man is one among the millions of life forms on the Planet Earth, which revolves around the Sun, which is a small star in this gigantic universe.



Significant learning outcomes

- Explains the features of the solar system.
- Picturises sequentially the planets in the solar system.
- Describes the universe, the milky way, the Solar System, which is part of it and the Earth, a member of the solar system.



Let us assess

1. Identify the position of asteroids in the solar system.
 - a. between Mercury and Earth
 - b. between Earth and Mars
 - c. between Mars and Jupiter
 - d. between Mercury and Venus
2. Meteorite fall on the earth is not as frequent as on the Moon - Why?



Extended activities

- India has a wealthy tradition in astronomy from ancient times. Try to identify the contributions of great astronomers in India, starting from Aryabhata and Varahamihira to the modern astromers like Subramanyam Chandrasekhar.



6

Continents and Oceans

Man's sea voyages in search of the unknown world, for wealth, and to satisfy curiosity have a long history. Where could these explorers have reached in search of a new world? Some of them have gone around the world travelling exclusively along sea routes.

Is it possible to go around the world along a land route? Find this out from the globe in your Social Science lab.



Fig. 6.1

Try to answer the following questions by observing the world map in the Social Science lab.

- Which colour represents the major part of the map?
- What does this colour indicate?

These vast waterbodies are called oceans. About two third of the earth's surface is covered by oceans.

The other areas represented in different colours signify land.

Continents are vast land masses, located in between the oceans.

Identify the continents from the globe?

- Asia
- Africa
- North America
- South America
- Antarctica
- Europe
- Australia

Let us examine the features of the continents one by one.

Asia

ദ്വീപുകൾ

- Asia is the largest continent.
- It is located to the north of the Indian Ocean.
- It is the world's most populated continent.



- India is part of this continent.
- Mount Everest, the highest peak in the world, is situated here.
- The continent has regions that enjoy diverse climatic features like heavy rainfall, low rainfall, snowfall, extreme heat, moderate heat and cold.



Mount Everest



Paddy cultivation in China



The Indus River

- Crops like paddy, wheat and maize are cultivated in this continent.
- Asia is the largest producer of paddy in the world.



The Lofty Himalayas

The Himalayas are the world's highest mountain range. Located to the north of India in the continent of Asia, it greatly influences the climate and the culture of India. This mountain range acquired the name 'Himalaya' from its several permanently snow-covered peaks including the Mount Everest in Nepal, which is the highest peak in the world.



Collect the pictures of the important plants and animals in Asia from the internet. These can be kept in a separate folder on the computer in your Social Science lab.

Africa

- Africa is the second largest continent.
- It is located between the Indian Ocean and the Atlantic Ocean.
- It stands second in population.
- Most of the regions are deserts. Hence agriculture is sparse.



African tribals



African elephant

- The Sahara, the world's largest desert, is located here.
- The Nile, the world's longest river, flows through this continent.



The Sahara Desert

- Dense forests with the world's richest animal diversity exist in this continent.

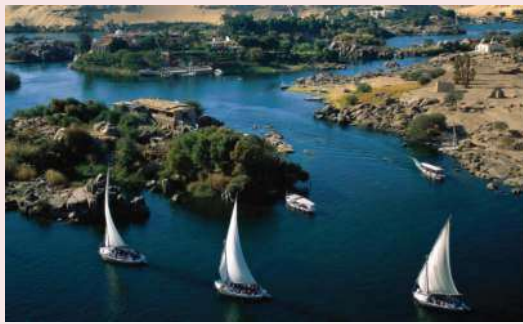
Collect the pictures of the important plants and animals in Africa from the Internet. These can be kept in a separate folder on the computer in your social science lab.

North America

- It is located between the Pacific Ocean and the Atlantic Ocean.
- It stands third in size.
- Mount Mckinley in the Alaska Mountain Range is the highest peak.
- The five great lakes which together hold 21% of the world's available fresh water are located here.
- The Inuits (Eskimos) living in snow-covered regions are a special feature of this continent.



The Nile



The Nile coursing through North-East Africa is the longest river in the world. It has an approximate length of 6850 km and is known as an international river because it flows through 11 countries. The Nile is usually described as the life blood of nations like Egypt and Sudan.



- The climate and soil are suitable for agriculture.
- It is the world's largest producer of wheat.

Collect the pictures of animals and plants in North America from the internet. Save them in a separate folder on the computer in your Social Science lab.



New York



Wheat fields in North America



Inuits (Eskimos)



Ice Homes



The Inuits (Eskimos) living in the frozen regions of the North Pole, make temporary houses with blocks of ice. These are known as 'igloos'.



The Five Great Lakes

The lakes Superior, Michigan, Huron, Erie, and Ontario located in Canada and the United States of America are collectively known as the five great lakes of North America.

South America

- It is located between the Pacific Ocean and the Atlantic Ocean.
- It stands fourth in size.
- Mount Aconcagua is the highest peak.
- River Amazon with the largest share of fresh water, flows through this continent.
- The dense forests of the Amazon river basin situated to the north of South America are rich in diverse plant and animal life.
- Cattle rearing is an important occupation of the people.



Coffee plantation in Brazil



The Amazon River



Commercial cattle rearing



Don't Step into the River!



Piranha is a type of fish found in the river Amazon. They have extremely sharp teeth with which they ferociously attack other fishes and animals, and finish them off within seconds!



Tapioca is a Foreigner



Tapioca, the favourite food of Keralites, originated in South America. Many of our agricultural crops have come from South America.

Collect the pictures of the important animals and plants of South America from the internet and save them in a separate folder on the computer in your Social Science lab.

Antarctica

- Antarctica stands fifth in size.
- It is the coldest region of the world.
- It is known as 'the White Continent' since it is covered with snow throughout the year.



- There is no permanent human settlement.
- Many countries have set up research centres for climate studies and mineral explorations in this mineral-rich continent.



Penguins of Antarctica



Maitri - The Indian Research Centre

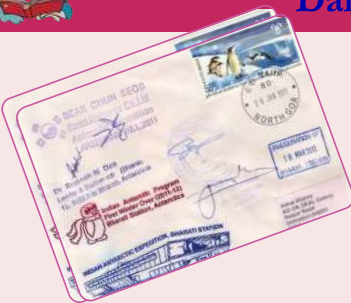


Icebergs

- Maitri and Bharathi are the Indian research centres in Antarctica.



Dakshin Gangotri P.O.



India opened a post office in 1983 at its first Antarctic Research Centre named Dakshin Gangotri. Nearly 2000 letters were mailed from there!

Collect the pictures of animals in Antarctica from the Internet and save them in a separate folder on the computer in your Social Science lab.

Europe

- It is located between the Atlantic Ocean and Asia.

- It stands sixth in size.
- The Ural mountain range separates it from Asia.
- It is the third most populated continent.
- Though Southern Europe enjoys moderate heat and cold, the northern part experiences severe cold.
- It is industrially developed.
- Fishing is an important occupation.



Skiing



Grape cultivation



London

Collect the pictures of plants and animals of Europe from the Internet and save them in a separate folder on the computer in your Social Science lab.



Norway - The Land of the Midnight Sun



Countries like Norway and Finland, falling within the Arctic circle ($66\frac{1}{2}^{\circ}\text{N}$), experience six months of night and six months of day every year. To know more about these places read 'Pathira Sooryante Nattil' by S. K. Pottekkatt.

Australia

- It is the smallest continent.
- Australia along with a few surrounding islands is known as Oceania.
- It is referred to as 'the Island Continent' as it is surrounded by Ocean.
- Platypus (the egg laying mammal), kangaroo (the animal with a pouch), Dingo (belonging to the dog family), etc. are found exclusively in Australia.



Sydney



Kalgoorlie goldmine

- Wheat is cultivated extensively.
- Minerals like gold, iron ore and uranium are heavily mined here.
- It is famous for sheep rearing.



Islands

Islands refer to land that are completely surrounded by water. The Greenland, located to the north of the Atlantic Ocean, is the world's largest island.



The Baby in the Skin Pouch



A skin pouch on the belly outside the body; a baby inside that pouch. Do you recognise the animal? It is the kangaroo, commonly found in Australia. It can hop fast using its hind legs and tail.

Collect the pictures of the important animals and plants in Australia from the Internet and save them in a separate folder on the computer in your Social Science lab.

Prepare a list of the information gathered about the continents. You can also use an atlas.



Cattle rearing in Newzealand

Continents in Decreasing Order of Size	Major Mountains	Deserts	Major Rivers	Other Peculiarities

Copy this on to a chart paper and display it in the class or in the Social Science lab. (Please remember that all the columns are not applicable to all continents).

Prepare a digital album with the pictures collected in connection with different continents.

You are now familiar with the seven continents of the world. Haven't you noticed the vast oceans in between these continents?

Can you name these oceans? You may refer to a world map. Write them down.

- The Pacific Ocean
-
-
-
-
-



Sea

Seas are the parts of oceans partially surrounded by land.

Oceans are interconnected. You can identify this with the help of a globe or softwares like the Sunclock and the Marble. These interconnected oceans are together known as the 'World Ocean'.
(Not to Scale)

Let us learn about each ocean.

The Pacific Ocean

The Pacific Ocean is the largest ocean (Fig 6.2). It has the largest number of islands. 'The Challenger Deep' in the Pacific Ocean is the world's deepest point. The Pacific Ocean is the world's largest fishing ground and is rich in minerals.



The Size of the Pacific Ocean

The Pacific Ocean along with its associated seas, covers one third of the earth's total area. It is more than the total size of all the continents put together.

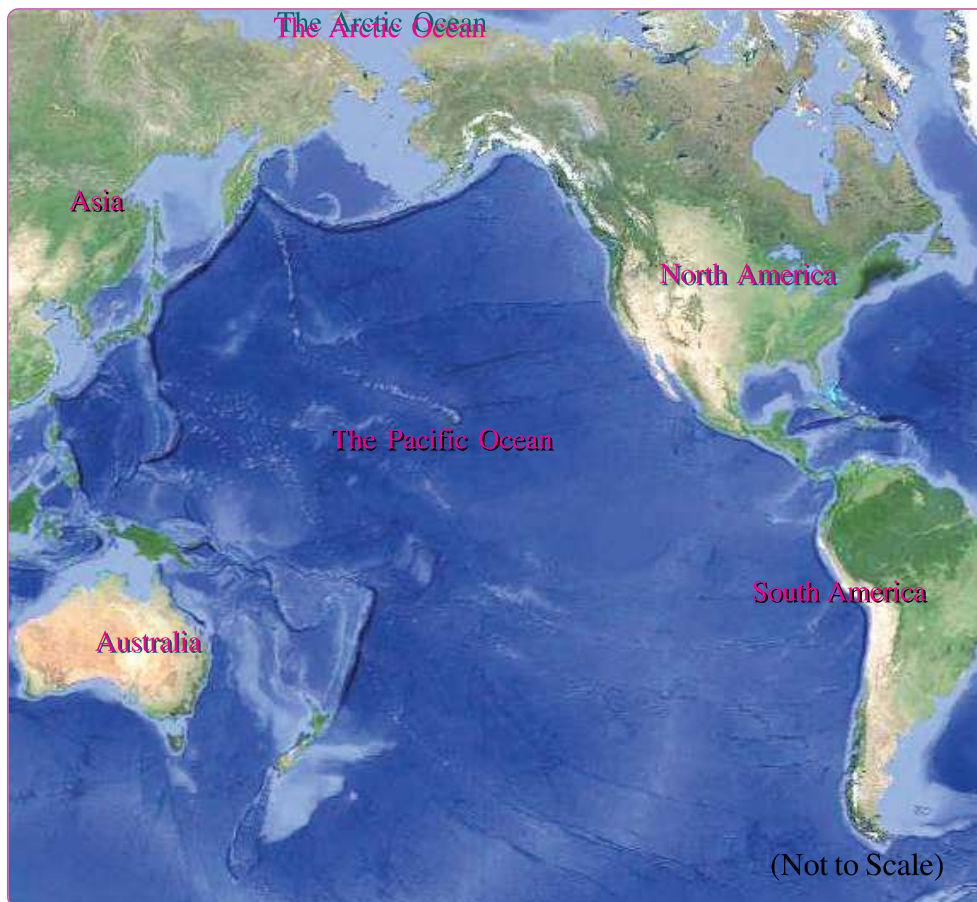


Fig : 6.2 The Pacific Ocean

Observe Fig 6.2 and list out the continents bordering the Pacific Ocean.

The Atlantic Ocean

The Atlantic Ocean is the second largest ocean. 'The Grand Banks' which is an important fishing ground is in this ocean. The northern part of this ocean is the world's busiest ocean route.



Fig : 6.3 The Atlantic Ocean

Observe Fig 6.3 and note down the continents bordering the Atlantic Ocean.

The Indian Ocean

Observe Fig 6.4. Third in size, this ocean has the distinction of being an ocean named after a country. The Arabian Sea and the Bay of Bengal are parts of the Indian Ocean.

Identify the continent situated to the north of the Indian Ocean from Figure 6.4.



Fig. 6.4. The Indian Ocean



The Coral Reefs

The coral reefs are an important feature of the Indian Ocean. Corals are formed by the accumulation of calcium compounds secreted by tiny marine organisms called coral polyps found in tropical oceans. Lakshadweep islands are formed of these accumulated coral polyps.

Observe Fig. 6.4 and list out the continents bordering the Indian Ocean.

The Antarctic Ocean

The ocean bordering Antarctica is known as the Antarctic Ocean. Since the region experiences severe cold, the surface of this ocean is almost entirely frozen. It is believed that the ocean bed is rich in minerals. Many varieties of fish are also present in this ocean.

The Arctic Ocean

The ocean that encircles the North Pole is the Arctic Ocean. It remains frozen for over six months a year. Locate the Antarctic and Arctic oceans with the help of a world map and globe.

You would have now realised that the earth we live in is vast and diverse. The plant and animal life including man, make use of this diversity for their existence. Man depends on the earth's land masses for the basic needs like water, food, shelter and clothing. Like the continents, the oceans also play an important role in making life on earth possible. We utilise oceans directly or indirectly for various purposes such as fishing, minerals, exploration, transport and recreation. This beautiful earth belongs to all living beings. It is the duty of every individual to preserve the resources on land and in water for the future generations.



Summary

- Major portion of the Earth's surface is water.
- There are seven continents and five oceans on the Earth.
- Oceans are extremely vast water bodies.

- Continents are vast land masses situated between oceans.
- Diversity exists in the topography, climate and plant and animal life in the continents.
- Like the continents, oceans also play an important role in sustaining life on the Earth.
- It is the duty of every individual to preserve the resources and diversities on the Earth.



Significant learning outcomes

- Explains different continents and oceans with the help of a map, globe and atlas.
- Finds out basic knowledge regarding the continents and oceans.
- Analyses one's role in this diverse world, realises that the existence of all life forms is based on this diversity, and recognises the need for its conservation.
- Describes that it is the duty of every individual to preserve the resources and diversities on Earth.



Let us assess

1. Identify the continents from the clues given and name the oceans surrounding them.
 - a) The world's largest desert is in this continent.
 - b) This continent is called the Island Continent.

2. Asia is a continent of diversities. Elucidate.
3. Arrange the continents in the order of size.



Extended activities

Prepare a class magazine using the information and pictures collected on continents.