

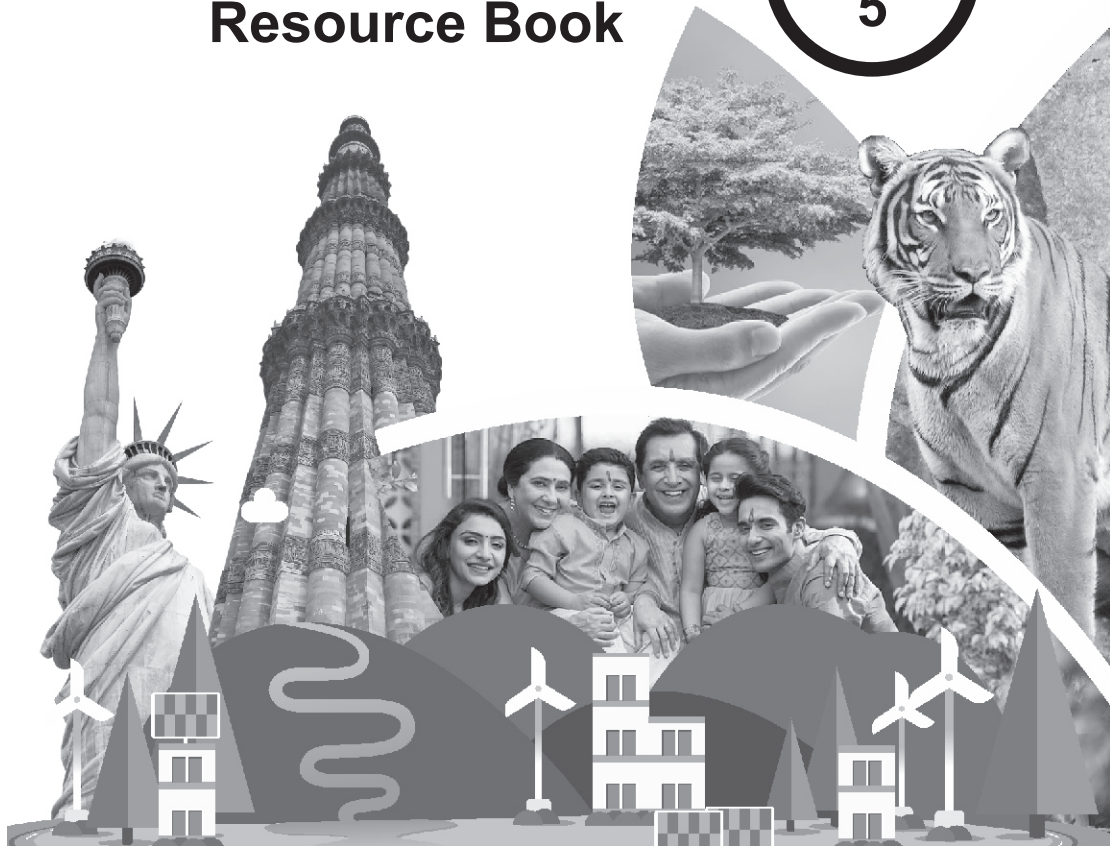


OUR WORLD

A Book of **Environmental Studies**

**Teacher's
Resource Book**

**Class
5**



OUR WORLD-5

Unit 1 : Family and Friends

1. SHIFTING PLACES

Get Ready

Do it yourself.

Class Assignment

I. Do it yourself.

II. Do it yourself.

III. A. Work out, how the following people are related?

1. Majid Abdullah is brother-in-law of Mehboob Ali.
2. Mumtaz is Imran's aunt.
3. Fauzia is Salim's aunt.

B. Also find out :

1. Salim has four cousins.
2. Salim is Ayaz's cousin.
3. Salim's uncle's wife is Fauzia.

Read and Answer

A. State whether True or False :

1. F, 2. F, 3. T, 4. F, 5. T.

B. Fill in the blanks :

1. place, 2. emigrants, 3. immigrants, 4. reasons.

C. Answer the following :

1. Mohit's grandfather moved to Delhi in search of a better livelihood.
2. Three important reasons that make people shift out or migrate are as follows :
 - (i) In search of better livelihood.
 - (ii) Due to transfer in job.
 - (iii) Due to natural disaster like, cyclone, earthquake or deluge.
3. Nadeem is Saleem Ali's paternal uncle.
4. Janaki's family was displaced due to construction of dam. No, the displacement had a bad effect on them because the place where they were asked to shift was far from the river and forest on which Janaki's family depended for wood and

growing cereals and vegetables. Besides, the soil too was not fertile.

5. Emigrants are the people who leave their country to live and work elsewhere permanently while immigrants are the people who move into a particular country to live there.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.
- C. Do it yourself.

Life Skills and Values

- H. Do it yourself.

2. DIFFERENT KIND OF PEOPLE

Get Ready

Do it yourself.

Class Assignment

Do it yourself.

Read and Answer

A. State whether True or False :

1. T, 2. F, 3. T, 4. T, 5. F.

B. Answer the following :

1. Garima was pleasantly surprised when Deepika praised the poori-bhaji made by her grandmother.
2. The people whose one of the body parts do not function normally are called differently-abled people.
3. Deepika feel sad because she still fits into the clothes she has been wearing from two years.
4. When the electricity suddenly goes off at night, it becomes completely dark. We find our way by feeling with our hands.
5. Do it yourself.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

Life Skills and Values

Do it yourself.

3. THE GAMES WE PLAY

Get Ready

Do it yourself.

Class Assignment

I. 1. Lawn-tennis, 2. Volleyball

II. **For each sport write the name of two players that have made a name for themselves and made the country proud :**

1. Viswanathan Anand, Koneru Humpy
2. Leander Paes, Sania Mirza
3. Saina Nehwal, P.V. Sindhu
4. Geet Sethi, Pankaj Advani
5. P.T. Usha, Milkha Singh
6. Ajeet Pal Singh, Pargat Singh
7. Manu Bhakher, Ravi Kumar
8. Sachin Tendulkar, Rahul Dravid
9. M.C. Mary Kom, Dingko Singh

III. **Write the national game of the following countries :**

- | | |
|-------------|-------------------|
| 1. Pato | 2. Taekwondo |
| 3. Kabaddi | 4. Sumo wrestling |
| 5. Football | 6. Rugby |
| 7. Archery | 8. Baseball |

IV. Do it yourself.

Read and Answer

A. **Answer the following :**

1. The manner and spirit in which something is played, determines whether it is a game or a sport. If it is played for fun and enjoyment, it is a game but if it is played competitively and for prize money, it is a sport.
2. Indoor games are the games played inside a court, stadium or any other building while outdoor games are played in open grounds, courts, etc.
3. A team is a group of individuals. When team members work for the betterment of the team and do not put their interests first, they display team spirit. It helps the team to overcome its weaknesses and win. This is the importance of team spirit.

4. In individual games, athletes demonstrate only individual talent and hard work but in a team game, two teams consisting of several players, compete against each other.
5. Boys and girls play together in school and in the neighbourhood. They play games like kho-kho, kabaddi etc. In some games like tennis, a boy and a girl play together in mix doubles.

B. Fill in the blanks :

1. Sports, 2. confident, 3. athletes, 4. country, 5. Hockey

Do and Learn

A. Find some popular sports in the given words search :

Football, Billiards, Badminton, Hockey, Volleyball, Basketball.

B. Who is the present captain of each of the following team?

1. Prunoy Halder 2. Virat Kohli 3. Mithali Raj 4. Manpreet Singh

Life Skills and Values

Do it yourself.

4. TRADITIONAL GAMES AND MARTIAL ARTS

Get Ready

Do it yourself.

Class Assignment

Do it yourself.

Read and Answer

A. Answer the following :

1. Some local games played in my neighbourhood are hopscotch, gilli-danda, marbles and kushi.
2. Kabaddi is played in different regions of India and is known by different names. It is called Kabaddi in north India, Hu-tu-tu in Maharashtra and Chadukadu in South India.
3. 'Kho-Kho is played between two teams of 12 players, each of which enters the field. In this game one team sits or kneels in a row in the middle of the court with alternate members in the row facing opposite directions. The other team sends in two or three members at a time into the court. All opponent players must be physically touched in the shortest time. The team which takes less time, wins.

4. An ancient traditional Indian sport, mallakhamb is composed of 'Malla' means gymnast and 'khamb' means pole. Thus 'mallakham' means 'pole gymnastics'. In this sport, the player performs complex exercises on the khamb.
5. The coach is very important in a sport. Besides teaching how to play, he is the one who teaches the values of practice, patience, mutual respect and fair play to his trainees.

B. Fill in the blanks :

1. Mallakhamb, 2. martial, 3. international, 4. kushti, 5. onam, 6. Judo, Kung-fu. 7. Kith Kith, 8. large amount of

C. Write a passage describing how the nature of leisure activities have changed with the advent of television and video games.

In earlier times, people used to play local games and take part in cultural activities. Boys used to play games like gulli-danda, lattu etc. and girls played games like skipping, stappoo etc.

Today popularity of all these games is declining because people watch TV, play computer games and use social media to entertain themselves. Our elders are also hooked on TV and indoor activities rather than including in physical activities.

D. State whether True or False :

1. F, 2. F, 3. T, 4. T, 5. T.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.
- C. Do it yourself.

5. BREATHING IN AND OUT

Get Ready

Do it yourself.

Read and Answer

A. Match the column 'A' with column 'B' :

- | 'A' | 'B' |
|--------------|--------------------------|
| 1. Exhale | (i) burning |
| 2. Oxygen | (ii) 72 times per minute |
| 3. Inhale | (iii) on elastic bag |
| 4. Diaphragm | (iv) giving out air |
| 5. Heartbeat | (v) taking in air |

B. Define the following :

1. The ribcage is a cage made up of bones called 'ribs'. This cage protects the lungs and the heart.
2. Breathing is the process of taking in and giving out air.
3. Lungs are made of muscular tissue and located inside the ribcage. Their upward and downward movement help us to breathe.
4. Diaphragm lies at the bottom of lungs and helps in the contraction of lungs.

C. Give one word answer for the following :

1. Stethoscope
2. Heart
3. Lungs
4. Rib cage,
5. Trachea.

D. Answer the following :

1. We breathe to provide oxygen to the whole body. Oxygen is necessary to release energy in the body.
2. When we fan a flame with cardboard, we supply more air to it. This air has oxygen which aids in burning. So, the flame burns more.
3. We blow air on burnt skin to cool it because the air from our mouth which is comparatively cool takes the place of hot air. The cool air absorbs heat quickly and cools the burnt skin.
4. The process of breathing in air is called inhalation and letting out air is called exhalation.
5. When we play, we need more energy and hence we breathe faster and our heartbeat also increases.
6. When we blow out air from our mouth we see our breathe turning to fog because our breathe contains water vapour. When water vapour comes in contact with cold surface it changes into water droplets.
7. Blowing at a hot cup of tea makes its cool because when we blow on it, we move the hot air above the milk away from it. The air from our mouth is comparatively cool and takes the place of hot air. The cool air absorbs heat quickly and cools the milk.

Do and Learn

Do it yourself.

6. DIGNITY OF LABOUR AND WORK

Get Ready

Do it yourself.

Class Assignment

Classify the following jobs of work as mental, physical or both mental and physical work :

1. Physical 2. Mental 3. Mental 4. Physical 5. Physical 6. Both physical and mental

Read and Answer

A. Fill in the blanks :

1. Physical, 2. mental, 3. blue-collar, 4. important

B. State whether True or False.

1. F, 2. F, 3. T, 4. T.

C. Answer the following :

1. Any work which involves physical labour is called physical work while any work which involves mental work is called mental work.
2. The doctor, teacher and architect are three examples of people who do mental work.
3. Division of different kind work in between different people is called division of labour.
4. The people doing physical labour should also be given equal respect by everyone. The respect of work and the person is called dignity of labour.
5. Do it yourself.

Do and Learn

A. A student of your class has been made fun by your classmates as his father drives an autorikshaw. Do you think that your classmates are justified in doing so?

No, they are not justified in doing so because we must respect every work and the person who does it.

B. By what names do you call these people in your local language?

1. Jamadar 2. Nalsaaz 3. Subziwala 4. Chaukidar 5. Pansari
6. Mochi 7. Mali 8. Naukar

7. OBSERVING ANIMALS

Get Ready

Do it yourself.

Class Assignment

Do it yourself.

Read and Answer

A. Fill in the blanks :

1. whiskers, 2. surroundings, 3. lizards, 4. Cats, 5. Dolphins

B. Write the name of sense organ that is highly developed in the following animals :

1. Nostril (trunk) (Sense of smell)
2. Whiskers (Sense of touch)
3. Eyes (Sense of Sight)
4. Ears (Sense of hearing)
5. Eyes (Sense of sight)
6. Hair on legs (Sense of touch)
7. Nose (Sense of smell)
8. Antennae (Sense of touch)

C. Who am I?

1. Dolphin, 2. Cat, 3. Cow, 4. Horse

D. Answer the following :

1. Animals like dog can track people and things like bombs, drugs etc. with the help of sense of smell and ants smell with their antennae.
Cats use their whiskers to feel the change in the air and cockroaches and spiders detect sound in the air with the help of hair on legs and save themselves from enemy.
2. Following animals have a strong sense of taste, hearing and sight :
 - (i) Bees have a strong sense of taste.
 - (ii) Cats, dogs, leopards and tigers have a well-developed sense of hearing.
 - (iii) Eagles, hawks and vultures have well-developed sense of sight.
3. Smaller animals spend more energy than larger animals, so they need more sleep while larger animals have less sleep.

4. Three examples of animal communication in three different ways are as follows :
- Dogs communicate by growls, yelps and barks.
 - Female glowworms communicate with the males by producing a series of flashes.
 - A male grasshopper attracts the female by making a shrill noise by rubbing its back legs together.

Do and Learn

- Do it yourself.
- Do it yourself.
- Do it yourself.

Life Skills and Values

Do it yourself.

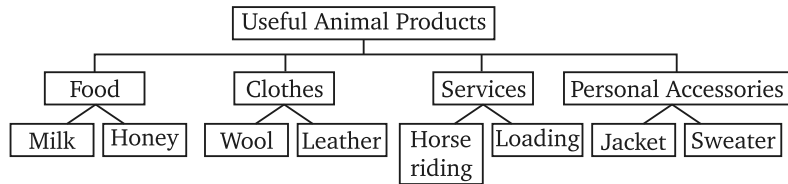
8. ANIMALS ARE USEFUL

Get Ready

Do it yourself.

Class Assignment

Complete this diagram



Read and Answer

A. Fill in the blanks :

1. milk, 2. honey, 3. eggs, 4. meat, 5. yak

B. Match the columns :

- | ‘A’ | ‘B’ |
|---------------|------------------------|
| 1. Chiru | (i) Tusks |
| 2. Musk deer | (ii) Ornamental dagger |
| 3. Tiger | (iii) Hairy glands |
| 4. Elephant | (iv) hair |
| 5. Rhinoceros | (v) Skin |

C. Answer the following :

1. Animals which may become extinct in the near future are called endangered animals.
2. Illegal killing in which animals are hunted for their fur or body parts are called poaching.
3. Animals are killed by poachers for their body parts which fetch very high prices in international markets.
4. The four persons who depend on animals for their livelihood are as follows :
 - (i) Gujjars
 - (ii) Saperas
 - (iii) Madaris
 - (iv) Mahouts
5. **PETA** (People for Ethical Treatment of Animals) is world's largest animal rights organisation. Its slogan is 'Animals are not to eat, wear, experiment' or for entertainment. It is an animal welfare organisation.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

Life Skills and Values

Do it yourself.

9. GROWING PLANTS

Get Ready

Write the name of :

1. Oranges, Lemons
2. Pomegranate, Papaya
3. Mango, Litchi

Read and Answer

A. Fill in the blanks :

1. Reproduction,
2. plumule,
3. air, water, warmth,
4. wind.

B. Match the columns:

‘A’		‘B’
1. Watermelon	→	(i) India
2. Coffee	→	(ii) South Africa
3. Pepper	→	(iii) Peru
4. Potato	→	(iv) Egypt
5. Onion	→	(v) Ethiopia

C. Define the following :

1. The process by which plants increase their number is called reproduction.
2. Spores are tiny structures found on the edges of the leaves of plants like ferns.
3. The seed is the unit of reproduction of a plant which is capable of developing into another such plant.
4. A stem cutting is a plant stem or a portion of a stem without the apex which includes one or more nodes removed from a parent plant and capable of growing roots.
5. The process of changing of a seed into a seedling is called germination.

D. Answer the following :

1. The ovule after fertilization develop into Seed. It consist of following parts :
 - (i) **Seed coat** : Outermost covering of the seed.
 - (ii) **Seed leaves** : Below the seed coat two seed leaves or colyledons are present.
 - (iii) **Embryo** : It is tiny baby plant.
2. Seed dispersal is scattering of seeds away from the parent plant, so that they gets enough space, air, water and sunlight to grow into a new plant.
3. The three ways in which plants reproduce are :
 - (i) through seeds (ii) through spores (iii) through vegetative parts.
4. The process of reproduction in plants in which a multicellular structure detaches from the plant and develops into a new plant is known as vegetative propagation.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

Life Skills and Values

Find out the two medicinal values of :

1. Tea (i) Tea may help in weight loss.
(ii) Tea may reduce our risk of heart attack and stroke.
2. Coffee (i) Coffee lowers the risk of type-2 diabetes.
(ii) Coffee protects against liver cirrhosis.

10. FORESTS

Get Ready

Do it yourself.

Class Assignment

- I. Do it yourself.
- II. Tribals decided to protect forest because for them, it's not just a collection of trees but a symbol of their identity and their way of life. Yes, the trees belong to them.

Read and Answer

A. Fill in the blanks :

1. deforestation, 2. Chipko, 3. Sacred grove, 3. Vana Mahotsava

B. State whether True or False

1. T, 2. F, 3. T, 4. F.

C. Match the following :

- | ‘A’ | | ‘B’ |
|------------------------|---|--------------------------------|
| 1. Amrita Devi | → | (i) K.M. Munshi |
| 2. Sunderlal Bahuguna | → | (ii) Leader of Chipko Movement |
| 3. Vana Mahotsava | → | (iii) Bishnoi women |
| 4. Chandi Prasad Bhatt | → | (iv) Chipko Movement |

D. Answer the following :

1. A forest is a very large area dominated by trees and dense undergrowth which provides shelter to many types of animals, birds and insects.

2. Some important forest products are fruits, wood, honey, fibres, resins and medicinal plants.
3. When forests are removed, the existence of tribals is threatened. They depend on forests for their food, fodder, fuel and building material.
4. A sacred grove is a patch of forest land which is protected by the local communities living around it.

Do and Learn

- A. Basket, Blinds, utensils
- B. Tulsi, Neem
- C. Oak, Maple

Life Skills and Values

Things to remember

Unit 2 : Food

11. WHEN FOOD GETS SPOILT

Get Ready

Do it yourself.

Class Assignment

- I. Name three foods that are stored in dry storage :**
Wheat, Pulses, Sugar.
- II. Name three foods that are stored in cold storage :**
Vegetables, Fruits, Fresh meat
- III.**
 1. Milk is boiled to kill bacteria and to prevent it from getting spoilt.
 2. We add salt, sugar and vinegar in pickles to prevent it from getting spoilt.
 3. We keep kneaded flour and milk in refragerator because they remain fresh and do not loose their nutritional value.
- A. Give two examples of food preserved in the following ways :**
 1. Salted fish, Cabbage
 2. Pickles, ketchup
 3. Jams, Squashes
 4. Meat, Eggs
 5. Vegetables, Seafood.

B. Match the columns :

- | ‘A’ | | ‘B’ |
|-----------------|---|---------------------------|
| 1. Stale food | → | (i) Fruit |
| 2. Boiling | → | (ii) Natural preservative |
| 3. Salt | → | (iii) Sugar |
| 4. Cold Storage | → | (iv) Diseases |
| 5. Dry Storage | → | (v) Kills germs |

C. Explain the reasons for the following :

1. We must serve only what we can eat because it is a crime to waste food while others do not have enough to eat.
2. Cooked food should not be left outside for long because then germs and bacteria would start growing in it and it will get spoiled.
3. Preservatives are added to food materials to store them for a long time.
4. Food is stored in refrigerator because freezing slows down the growth of bacteria.
5. Vinegar and oil are good preservatives because they prevent food from getting spoilt.

D. Answer the following :

1. If food is kept uncovered for a long time, germs and bacteria start growing on it and cause it to get spoiled.
2. Preserving food means keeping it safe for a long time. This is a way of reducing wastage of food, a priceless commodity.
3. Following steps are necessary to prevent food wastage :
 - (i) Buy small quantities of food.
 - (ii) Cook only as much as required.
 - (iii) Food should be stored properly and preventing food from getting spoilt.
4. Perishable food materials are saved dry using following methods :
 - (i) Drying (ii) Pickling (iii) By adding preservatives (iv) Freezing (v) Canning (vi) Sweetening and Salting (vii) Oil (viii) Boiling.
5. Chemical preservatives keeps food fresh and inhibit the growth of bacteria. Two examples of chemical preservatives are sodium benzoate, calcium sulphate.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

12. FOOD AND HEALTH

Get Ready

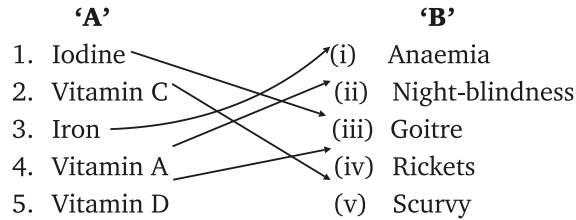
Do it yourself.

Read and Answer

A. Fill in the blanks :

- 1. A balanced diet, 2. Disease, 3. perishable, 4. Famine, 5. beri-beri.

B. Match the following :



C. Write the symptoms of the disease caused due to the deficiency of the following nutrients in the food :

- 1. Haemoglobin level in blood falls.
- 2. Bleeding gums.
- 3. Cannot see well in dim light.
- 4. Swollen joints.

D. Write two food items you must eat to get one of the following nutrients :

- 1. Carrots, Papaya
- 2. Milk products, Legumes
- 3. Egg, Yolk
- 4. Cabbage, Amla
- 5. Pulses, Rice

E. Answer the following :

- 1. Food habits in people are changing due to the following reasons :
 - (i) introduction of new crops.
 - (ii) Growth of food processing industry.

- (iii) Packed foods.
 - (iv) Fish meat and poultry processing.
 - (v) Advancement in storage and preservation technology.
2. Fruits and vegetables are perishable food materials and cannot be kept for long. Hence, in order to keep and enjoy such foods for a long time, these need to be processed.
 3. India is a land of uncertain rainfall many a times, it does not rain for 2 or 3 years at a stretch. This leads to shortage of water and crop failure, creating shortage of food and fodder. This condition is called famine. It leads to widespread hunger and causes death of humans and livestock.
 4. Shortage of food is created by man in the following ways :
 - (i) Due to lack of proper storage.
 - (ii) Black marketing and illegal hoarding.
 5. When an individual consumes a diet which lacks one or more nutrient, the body loses energy and becomes severely emaciated. Such a condition is called malnutrition.
 6. Whenever there is a natural disaster or when the weather damages crops, there is a shortage of food supply. In order to earn more profit, some shopkeepers hoard food items and later sell them at very high prices. This is called black marketing and shows human greed. It is illegal and punishable.

Do and Learn

- A.** Do it yourself.
- B. Find out the following from the word search :**
 1. Nutrients 2. Goitre 3. Saliva 4. Glucose 5. Drying

Life Skills and Values

- A.** Do it yourself.
- B.** Do it yourself.

13. MEETING FARMERS

Get Ready

In summer season, major kharif crops like cotton, soyabean and etc. and in winter season, wheat, barley etc. are harvested.

Read and Answer

A. Give one two word for the following :

1. Pesticides, 2. Famine, 3. Agriculture, 4. Floriculturist, 5. Irrigation

B. Fill in the blanks :

1. agriculture, 2. crops, 3. landless labourers, 4. seeds, 5. loans.

C. Answer the following :

1. Farmers depending on subsistence farming live a very difficult life. The crop they grow barely fulfils the food demands of their own family. They do not have enough money to buy seeds, fertilizers or new farm implements and are also unable to grow surplus crops.
2. No, landless labourers have no land to cultivate crops.
3. Subsistence farmers have small land holdings to cultivate while commercial farmers have large land holdings.
4. A landless labourer works on other's land and migrates to nearest town for working once the crop is harvested and returns to his village before the start of the next agricultural season. Such migration is called seasonal migration.
5. Irrigation means the watering of growing crops artificially. Water is essential for crops but rainfall depend on seasons. Some places get very little rainfall whereas some are flooded with water. Some crop require more water than others, that is why we need irrigation.
6. The Government can help the farmers as in the following ways :
 - (i) Agriculture loans should be made easily available to small farmers at low interest ratio.
 - (ii) All farmers should be provided proper irrigation facilities.
 - (iii) The farmers should be ensured a good price for his yield.
7. A fertilizer is a chemical that helps plants to grow and ensures a good yield. It is needed to ensure proper supply of nutrients to the soil.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

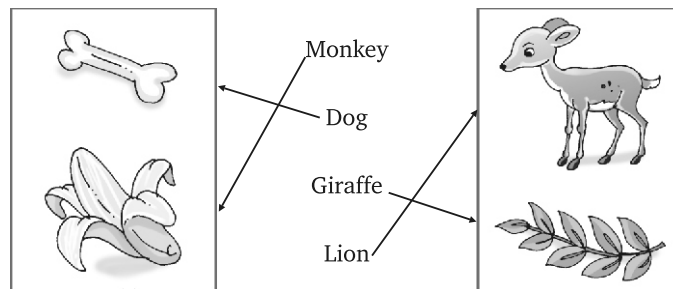
Life Skills and Values

A. The two government schemes are as follow :

- (i) Soil Health Card scheme.
 - (ii) Pradhan Mantri Krishi Sinchai Yojana (PMKSY)
- B. Do it yourself.

14. FOOD FOR PLANTS AND ANIMALS

Get Ready



Class Assignment

Read and Answer

A. Give two examples of :

1. Mosquito, Tapeworm
2. Vulture, Hyena
3. Fungus, Mould
4. Cow, Buffalo
5. Lion, Tiger
6. Amarbel, Cuscuta

B. What is the difference between :

1. Some animals which feed on plants only are called herbivores whereas carnivores do not eat plants or plant products. They are flesh eating animals.
2. Some plants that eat insects are called insectivorous plants whereas some plants which grow on other plants or trees and absorb their sap for food, are called parasitic plants.

3. Some animals derive their food by decomposing the dead and decaying organisms and are called decomposers whereas some animals which live inside the body of other animals take food from there and are called parasites/ parasitic animals.
4. Some animals which eat the flesh of dead animals are called scavengers whereas some other animals which eat both plants and flesh of other animals are called omnivores.

C. Answer the following.

1. The green leaf makes the food for the plant by photosynthesis. It has a green pigment called chlorophyll. The leaf uses water, carbon dioxide, sunlight and chlorophyll and makes food for the plant.
2. Non-green plants can not make their food, therefore they get food from dead and decaying plants and animals.
3. Plants need nutrients to grow. They get these from the soil. Sometimes, the fertility of the soil gets depleted due to certain factors. Manures are needed to maintain the level of the soil's fertility.
4. Animals are grouped according to their food habits are as follows :
(i) Herbivores, (ii) Carnivores, (iii) Omnivores, (iv) Parasites, (v) Decomposers, (vi) Scavengers.
5. In a food chain, food goes from one level to the next and there is also a transfer of energy. Different food chains are connected to each other like a web of a spider. Food web is the coming together of food chains to form a complete feeding relationship.

D. Define the following terms :

1. The green coloured pigment present in the leaf is called chlorophyll.
2. The process by which green plants make their own food from carbon dioxide and water in the presence of sunlight and chlorophyll is known as photosynthesis.
3. The sequence of 'eaten and being eaten' results in a chain called the food chain.

4. The different food chains connecting together form a complete feeding relationship called a food web.

Do and Learn

A. Do it yourself.

B. Study the food chain given below :

What would happen if :

- (a) If the number of deer doubles in number, they would eat up crops and domestic plants and disturb the natural balance on earth.
- (b) If the deer are withdrawn from the food chain, it would create confusion as lions would die out due to lack of food.

Unit 3 : Water

15. SOURCES OF WATER

Ger Ready

Do it yourself.

Class Assignment

Complete the crossword with the help of clues give below :

I. Across (→)

1. BAOLI
2. IRRIGATION
3. BOILING

Downward (↓)

4. GLACIER
5. RAIN
6. WELL

II. Do it yourself.

Read and Answer

A. Fill in the blanks :

1. pitchers, 2. taps, 3. well, 4. baoli, 5. crops

B. State whether True or False :

1. F, 2. T, 3. T, 4. T, 5. F.

C. Answer the following :

1. On the earth, about 97% water is stored in seas and oceans which is salty and of no use for us. Rest 3% water is used for different activities.
2. Underground water is the water that seeps below the ground. This water can be drawn out in the following ways :
(i) Well (ii) Tubewell (iii) Handpump (iv) Step well

3. Though it rains every year, its distribution is not the same all over India. At some places, rainfall may be heavy, at some places, it may be moderate while at some, it may not rain at all. So, the crops need to be irrigated regularly so that they do not die.
4. Sprinkle irrigation is the method where crops are irrigated by means of thin pipes with sprinklers fitted on top of them. This gives the effect of rainfall.
5. Windmills can be seen in coastal areas.
6. A baoli is like a tank which has steps on all its sides. These were used as a meeting place by people.

Do and Learn

A. Name the following :



Water Wheel



Water pump



Water purifier (RO)

B. Do it yourself.

c. Do it yourself.

16 AQUATIC LIFE

Get Ready

Do it yourself.

Read and Answer :

A. Match the following :

- | ‘A’ | ‘B’ |
|--------------------------|----------------|
| 1. Emergent plant | (i) Hydrilla |
| 2. Rooted-floating plant | (ii) Duckweed |
| 3. Free-floating plant | (iii) Cat-tail |
| 4. Submerged plant | (iv) Lotus |

B. Give one examples of each of the following :

1. Herons, 2. Penguin, 3. Duckweed, 4. Turtle, 5. Seahorse

C. Write 'S' for soluble and 'I' for insoluble substances :

1. I, 2. S, 3. S, 4. S, 5. I, G. S

D. Answer the following :

1. Plants that live in water are called aquatic plants.
2. Frog can live both in water and land. Their moist skin and gills help them to breathe in water and on land.
3. A coral reef is made of coral colonies that are formed by tiny coral animals. It is an underwater ecosystem characterised by reef-building corals.
4. Whales and dolphins are mammals which breathe with lungs and keep coming upto the surface of water to gulp in air.
5. Animals that can live both in water and on land are called amphibians.
6. A substance which dissolves in water is known as soluble substances whereas substances that does not dissolve in water is known as insoluble substance.
7. Some liquids that dissolve in water are known as miscible while immiscible liquids do not dissolve in water.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.
- C. Do it yourself.

17. MOSQUITOES AND MALARIA

Get Ready

Put a tick (✓) for the diseases that are spread by mosquitoes :

1. (✓), 2. (✗), 3. (✓), 4. (✓), 5. (✗), 6. (✓).

Read and Answer

A. Fill in the blanks :

1. Chloroquine, 2. odomos, 3. stagnant water, 4. female anopheles 5. blood.

B. State whether True or False :

1. T, 2. T, 3. F, 4. T

C. Answer the following :

1. We should empty water coolers during rainy season because mosquitoes breed in stagnant water. Later, these are the cause of many diseases.
2. Kerosene oil is lighter than water and floats on the stored water. Mosquitoes do not breed on it.
3. Female anopheles mosquito has malarial parasite in it which does not harm the mosquito. When it bites a person, the parasite is passed into the body and causes fever.
4. We can prevent the spread of malaria in the following ways :
 - (i) We should not let water stagnate in and around our house.
 - (ii) Change the water in water cooler after every 4-5 days.
 - (iii) Spray a mosquito repellent in the house at regular intervals.
 - (iv) Fix wire netting on doors and windows to prevent entrance of mosquitoes.
5. The symptoms of malaria are severe headache, fever and chills. The fever either gradually rises over 1 to 2 days or spikes suddenly upto 105°F or higher. It is often accompanied by vomiting and convulsions.

Do and Learn

Do it yourself.

Unit 4 : Shelter

18. HOUSES WE LIVE IN

Get Ready

Do it yourself.

Read and Answer

A. State whether True or False.

1. T, 2. F, 3. F, 4. T, 5. T

B. Answer the following :

1. It is good to live together in neighbourhood because neighbours help each other in times of need and share each other's joys and sorrows.
2. Different kinds of houses are built in different places because of difference in climate and living conditions.

3. Modern neighbourhood is made up of many individual and institutional services. On one hand, we have traditional service providers like cobblers, washerman etc. and on the other, we have institutions like schools, colleges, hospitals etc.
4. Today's neighbourhoods have services like doctors, bankers, engineers, managers etc.
5. Animals like bees, ants, termites and wasps live in groups and colonies.
6. The worker ants collect food, look after eggs and clean the nest.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.
- C. Ant colony and bee colony look almost the same but ants are more social creature than bees, living with more than one queen and sharing neighbours colony workers. A beehive is a place where a bee colony lives. It is comprised of hexagonal cells called combs. These combs are like small rooms where the bees store nectar and pollen.
Each beehive has one queen be that lays egg. There are some male bees called drones and a large number of worker bees. The worker bees build hive, look after the young bees and collect nectar from flowers.

Life Skills and Values

Do it yourself.

19. Times of Emergency

Get Ready

Do it yourself

Class Assignment

Do it yourself

Read and Answer

- A. **State whether True or False :**
1. F, 2. T, 3. T, 4. T, 5. T.
- B. **Fill in the blanks :**
1. Emergency, 2. natural, 3. rivers, 4. hurricane, 5. coastlines.

C. Answer the following :

1. The term 'emergency' refers to any situation which may occur suddenly. Such a situation may have a potential of harm. It may be an accident, a bomb scare or a natural disaster.
2. The following precautions should be taken when an earthquake strikes :
 - (i) We should come out of our house or school building and move to an open area.
 - (ii) Do not stand near windows, bookcases, mirrors, hanging pots, fans etc. during or immediately after an earthquake.
 - (iii) If we are on the road then keep away from trees, signboards, buildings and electric poles.
3. The armed forces organize rescue operations. They help clear roads so that relief can reach early. They also send medicines and help in the distribution of food and other essential things.
4. The immediate help given to an injured or sick person before the doctor arrives is called first aid. If the fire is caused by kerosene or petrol, never throw water over it but throw sand or mud on the fire.
5. If a person is bleeding from his nose, make him sit on a chair with his head tilted slightly backward and pinch his nostrils for a few seconds. Let him breathe through his mouth in the meantime.

Do and Learn

- A. Do it yourself.
- B. Do it yourself.

Life Skills and Values

Suppose, no adult is member at home. What would you do, if :

1. I will apply a thick pad of cotton wool over the cut and press it gently. This will stop the bleeding.
2. I will make him sit on a chair with head tilted slightly backward and pinch his nostrils for a few second.
3. I will put cold water or apply ice on the burnt area. This will give him relief from pain. Then I will antiseptic cream or lotion to prevent infection.

Unit 5 : Travel

20. FUEL FOR VEHICLES

Get Ready

Write the name of any three vehicles that move :

1. Car, Bus, Scooter
2. Ship, Boat, Steamer
3. Aeroplane, Helicopter, Hot air balloon

Class Assignment

1. Traffic on the road congests it completely. As number of vehicles is more, there is a lot of noise which leads to noise and air pollution. In such a situation, no one is able to breathe in fresh air.
2. Some ways to reduce air pollution are :
 - (i) reduce number of vehicles;
 - (ii) car-pooling;
 - (iii) plant more trees, etc.
3. Petroleum is also used for heating and electricity generation, asphalt and for making of chemicals, plastics and other synthetic materials.

Read and Answer

A. Unscramble the following to get the correct answer :

1. COMBUSTION
2. NON-RENEWABLE SOURCES
3. BLACK GOLD
4. AIR POLLUTION
5. LIQUEFIED HYDROGEN

B. Tick (✓) the correct answer :

1. fossil,
2. Digboi,
3. aircrafts,
4. CNG,
5. Bio-diesel,
6. Petrol.

C. Answer the following questions :

1. Fuels produce heat energy on burning and provide power to the vehicles to move.
2. Any material that is burnt to get energy is called fuel. Fuels are of two types :
 - (i) Fossil fuels
 - (ii) Alternate fuels.
3. Fossil fuels like coal, petroleum and natural gas have been formed from the remains of dead plants and animals that got buried inside the earth millions of years ago. Different types of fossil fuels are petroleum and coal.
4. Materials other than fossil fuels that can be used as fuel are called alternate fuels. Examples are hydrogen, biofuels like alcohol fuel and bio-diesel.

5. Biofuels are not very popular because they are more expensive than fossil fuels.

Do and Learn

- A.** Do it yourself.
- B. Why is diesel much more cheaper than petrol in India?**
Though diesel is much more expensive than petrol, in India, it is cheaper than petrol as it is used by farmers and public transport, so the government subsidises it and bears the extra expense.
- C. Find out the names and locations of some coal mines in our country :**
Jharia coalfield; Bokaro coalfield; Talchar coalfield.
- D. Find out the locations of in India where we can see coal Oil refineries**
- (i) RIL Jamnagar (Gujarat)
 - (ii) MRPL Mangalore (Karnataka)
 - (iii) LOC Koyali (Gujarat)

Life Skills and Values

- A.** Do it yourself.
- B.** Do it yourself.

21. HERITAGE BUILDINGS

Get Ready

Do it yourself.

Class Assignment

Do it yourself.

Read and Answer

A. State whether True or False.

1. T, 2. T, 3. F, 4. F, 5. F.

B. Match the following :

- | ‘A’ | | ‘B’ |
|------------------|---|-----------------------|
| 1. Jantar Mantar | → | (i) Hyderabad |
| 2. Char Minar | → | (ii) Gateway of India |
| 3. Sun Temple | → | (iii) Red Fort |
| 4. George Millet | → | (iv) Varanasi |
| 5. Diwan-i-Khas | → | (v) Black Pagoda |

C. Answer the following :

1. Heritage buildings are those old buildings which is declared by the government as public property.
2. By looking at these monuments, people can know about our rich culture and glorious past. They also come to know about the prosperous economy and artistic brilliance of ancient India.
3. We can protect historical building by not writing and scratching on them.
4. Gateway of India was built by British architect George Millet to commemorate the visit of king Geogee to India in 1911.
5. Konark Sun Temple is a monumental representation of God Surya's chariot with six horses and twenty fair wheels carrying the God Sun, across the heaven. The temple walls are extensively sculpted with figures of Gods and Goddesses, dancers and musicians.
6. This monument presents a blend of Rajasthani and Mughal Style. The carved arches are supported by grey white marbles pillars with floral motifs in gold and coloured stones. Two carved elephants in marble guard the entrance.

Do and Learn

- A. Do it yourself.
- B. Do It yourself.
- C. Do It yourself.
- D. Do It yourself.
- E. Do It yourself.

22. ADVENTURE AND EXPLORATION

Get Ready

Write answers to the following questions :

1. Blue
2. We see the sun in the day and moon and stars at night.

Class Assignment

Do it yourself.

Read and Answer

A. Fill in the blanks :

1. satellite, 2. Sunita Williams, 3. Tenzing Norgay, 5. Edmund Hillary, Tenzing Norgay, 5. Sun, 6. Moon

B. Answer the following :

1. Mountaineering is considered an adventurous sport because while climbing on slippery rocks or soft snow, a mountaineer runs the risk of slipping and falling down could be possible any time. The weather condition in mountain change very fast, so danger of landslides and avalanches is also possible.
2. In India, boys and girls get special training for mountaineering at the Indian Institute of mountaineering, Darjeeling (West Bengal).
3. A planet is a large object like the earth or Jupiter, that orbits a star.
We live on the planet earth. In solar system there are eight planets : Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
4. Astronomers are space scientists who study the universe planets etc. whereas astronauts are trained to go in space.
5. The name of four Indian satellites are : Aryabhata, Rohini, Apple, INSAT 1B etc.
6. The first man to go into space was Yuri Gagarin of U.S.S.R.

Do and Learn

A. Beside Earth some other planets also have moon.

Write the name and number of moon each one has :
Mars has two small moons : Phobos and Deimos. Jupiter has 79 known moons. It has the biggest moon Ganymede in the solar system. Saturn has 53 moons. Uranus has 27 moons while Neptune has 14 known moons.

B. Why is Pluto no longer considered a planet? Find out the reasons.

Pluto is no longer considered a planet because it does not dominate its neighbourhood and so, is now classified as a dwarf planet.

C. Write a paragraph on each of the following :

Do it yourself.

Life Skills and Values

G. Do it yourself.

Unit 6 : Things We Make and Do

23. GROWING FOOD

Get Ready

Do it yourself.

Read and Answer

A. State whether True or False :

1. F, 2. F, 3. T, 4. T, 5. F.

B. Define the following terms :

1. Sowing is the process of planting seeds at the proper depth in well prepared soil for proper germination.
2. The process of removal of weeds or plants harmful to the main crop, either by hands or by hands, is called weeding.
3. The process of loosening and turning of the soil ready for planting is called tilling or ploughing.
4. Winnowing is the process of separating seeds from the husk by dropping from a level above the farmer's head.
5. Harvesting is the cutting down of crops or the removal of fruits that are ripe.

C. Answer the following.

1. Agriculture is the process of cultivating a piece of land. A plough is a cutting blade fixed in a wooden frame drawn or pulled by farmer himself or by oxen or tractor. It makes furrows in the soil and turn it around.
2. Drip farming is applied in those regions where water supply is limited. In this process a system of pipes is joined together. The pipes have holes at regular intervals. This causes water to drip out and water the fields.
3. The combine harvest is a versatile machine used to harvest a variety of grain crops. They have increased the farmer's efficiency and reduced the labour & also increased productivity many times.
4. Water lifts are devices that help to carry water from a source to the fields. Water can be lifted by hand by animals or by using power. The types of lifts are counterpoise lift and rope and bucket lift.

- The stages of rice cultivation are as follows (i) Preparation of soil, (ii) Sowing, (iii) Adding manure and fertilizers, (iv) irrigation, (v) harvesting and storage of crop.

Do and Learn

- Do it yourself.
- Do It yourself.
- Do It yourself.

**Half Yearly Test Paper
(Based on Chapter 1 to 11)**

A. Answer the following :

- People move from one place to another place for different reason. Sometimes it is in pursuit their studies especially at college level or in search of jobs while some others move to new place for getting married.
- The five main organ systems of the body circulatory system, respiratory system, reproductive system, nervous system and excretory system.
- The diet that contains all the needed nutrients in correct proportion is called a balanced diet.
Cats use their whiskers to feel the change in air and cockroaches and spiders with the help of hair on legs can detect second in the air and save themselves from enemy.
- Seed dispersal is scattering of seeds away from the parent plant, so that it gets enough space, air, water and sunlight.
Wind and water are the two ways in which seeds get dispersed.
- A sacred grove is a patch of forest land which is protected by the local communities living around it.

B. Write the difference between these two :

- In a food chain, food goes from one level to the next and there is also a transfer of energy. Different food chains are connected to each other like a web of a spider. Food web is the coming together of food chains to form a complete feeding relationship.

2. Solvent is a liquid in which a substance dissolves whereas a solute is a substance which dissolves in a solvent.
3. Migration is the voluntary movement of people from one place to another whereas displacement is involuntary movement of people caused by unfavourable conditions such as conflict, war or natural disasters.
4. Endangered animals are the ones which might be finished forever in the near future if not conserved whereas extinct animals are the ones which lived in earth once upon a time but will now never be seen.
5. Canning is the process of preserving food by packing them in air-tight cans whereas drying is another process where food is preserved by removing moisture from it.

C. Fill in the blanks :

1. ancestors, 2. overflow, 3. doctor, 4. disease, 5. poachers.

D. State whether True or False :

1. F, 2. T, 3. F, 4. T, 5. T.

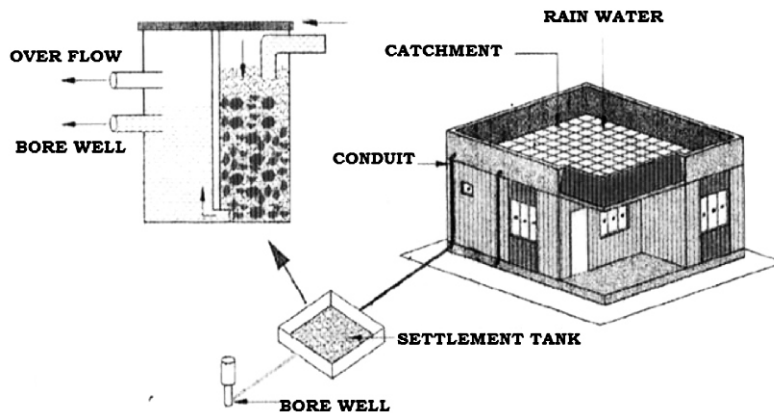
E. Give one word answers :

1. Diet; 2. Flat; 3. Mallkhamb; 4. Excretory system.

Annual Test Paper (Based on Chapter 12 to 23)

A. Answer the following :

1. When there is an extreme shortage of food, it is called famine. Famine occurs due to less food production or destruction of crops.
2. An act of nature which results in loss of life and property is called a natural disaster. There are many institutions and charitable organisations that help the affected people. Doctor work from mobile clinics. The police help the people to reach relief camps. The fireman put out fire mostly caused due to earthquakes and armed forces organize rescue operations.
3. Collection of rainwater on rooftops and its utilisation later on is called rainwater harvesting.



4. Amphibians are the animals which can live both on land and in water. Crocodile and frog are amphibians.
5. Some tools used in the cultivation of plants are plough, trowel, harvester, combine harvester etc.

B. Write short notes on the following :

1. The immediate help given to an injured or sick person before the doctor arrives is called first aid.
2. Taj Mahal is a beautiful monument. It is situated on the bank of river Yamuna in Agra. It was built by Emperor Shah Jahan in the memory of his beloved wife Mumtaz Mahal.

3. Red Fort is made of red sandstone. This monument is built on the bank of river Yamuna in Delhi. The two main gates, the Delhi Gate and Lahori Gate face the famous Chandni Chowk.
4. Germination is the process by which a plant grows from a seed.
5. The dirtying of water and water bodies by mixing of undesirable objects and things causes water pollution.

C. Fill in the blanks :

1. death; 2. dhenki; 3. cheap; 4. spiral; 5. excretory.

D. State whether True or False :

1. T, 2. T, 3. F, 4. T, 5. T.

E. Write the difference between :

1. The boiling point of water is the point at which water boils and changes to water vapour whereas freezing point is the point at which water freezes to become ice.
2. Zooplankton is an animal while phytoplankton is a plant. Phytoplankton is the chief source of food for the zooplankton.
3. Fossil fuels have been formed from the remains of dead plants and animals that got buried inside the earth millions of years ago while alternative fuels are those materials that can be used as fuels.
4. Saline water contains a certain amount of salts while fresh water is the water with less than 1% concentration of dissolved salt.
5. A baoli is like a tank which has steps on all its sides while johad is a rainwater storage tank.

