

3

Our Natural W RLD

Teacher Manual



Class-3

Chapter-1 The House We Live in

Exercise

A. 1. c. Skyscraper

2. a. caravan

3. b. floating

4. b. round

5. a. airy

- **B.** 1. The two most common kinds of houses are kuchcha houses and pucca houses. Single-storey house is an example of pucca house and hut is an example of kuchcha house.
 - 2. A slum is a highly populated urban residential area consisting mostly of closely packed, weak housing units with poor or incomplete infrastructure.
 - 3. Many places on river banks get flooded due to heavy rainfall during the rainy seasons. People living here built stilt houses. These houses stand on thick wooden poles.
 - 4. Igloos are made of solid ice blocks. Eskimos living in places like Alaska, Siberia etc. where it is very cold and the land is covered with snow all throughout the year people live in igloos.
 - A good house should be well-ventilated so that it gets enough sunlight and fresh air.
 - It should have proper drainage system to carry dirty water out of the house.
 - Things should be kept at their proper places.

C. 1. X

2.

3. 🗸

4. 1

5. 🗸

D. Do it yourself.

HOTS

- 1. Wood and other light materials are used to build houses in earthquake prone areas. These houses do not collapse easily.
- 2. A good house, should have many windows. Windows allow sunlight and fresh air to come into the house. They also help the stale air to escape out of the house. This is known as ventilation. The advantage of well-ventilated house is it gets enough sunlight and fresh air.

Things to Do

Do it yourself.

Fun Time

Do it vourself.

Life Skills

People living in the hilly areas receive heavy rainfall or snowfall, so the houses have slanting rooftops.

Such roofs allow the rain water or the snow to fall down easily.

Chapter-2 The Games We Play

Exercise

A. 1. c. obese

2. a. India

3. b. Kerala

4. b. team games

5. b. Hockey

- **B.** 1. The games that can be played inside a room or building are called indoor games. Chess, carrom, ludo, snooker etc. are some popular indoor games.
 - 2. Some games are played outside the house in an open field or ground. They are called outdoor games.
 - 3. Outdoor games played by children depend on the area they live. In big cities, where facilities are available, children play football, cricket etc. Many of them even learn judo, karate etc. In villages, where the facilities are comparatively less, children play traditional games like kabaddi, hide and seek, marbles etc. They also learn to climb trees and fly kites.
 - 4. Many games which ancient people started playing are still popular. These games are called traditional games. Carrom, chess, polo etc. are examples of traditional games. Whereas local games are played in certain regions only. Bull-fighting, ice-skating, boat race etc. are some such games.
 - 5. Sports and games become a lucrative career these days because besides earning a lot of money, they also earn fame and become popular.

C. 1. X

2. 🗸

3. **X**

4. X

5. 🗸

D. Do it yourself.

HOTS

- 1. Some advantages of sports and games are:
 - Sports and games build healthy bones and muscles.
 - It also increase fitness, improve sleep and lower the risk of getting obese.
 - It also improves cooperation skills and boosts self-confidence.
- 2. In modern times, many people around the world have chosen sports as career. Besides learning a lot of money, they also earn fame and become popular.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-3 People With Special Needs

Exercise

- **A.** 1. b. love 2. a. two 3. b. German
 - 4. c. dots
- B. 1. There are people with physical deficiencies. These deficiencies might be inborn or might have caused due to some accident, injury or some serious disease.
 - 2. Helen Keller became deaf and blind due to an illness at the age of two years. She learned to read and write with the help of her teacher Annie Sullivan and wrote many books later.
 - Sudha Chandran is an accomplished Bharatanatyam dancer. Her strong will
 power and dedication to overcome her disability and went on to become an
 established Bharatnatyam dancer made her famous. She was honoured with
 several awards and toured almost all parts of the world.
 - 4. Physically and mentally challenged people are also part of our society. We should treat them with love and affection.

HOTS

- 1. We should try to spend as much time with them as possible.
 - We should try to understand their problems.
 - We should always talk to them in a polite and respectful manner.
 - We should always be ready to help them whenever they need it.
- 2. People, who are sick, need special care and attention.
 - We should take proper care of their medicines and meals.
 - We should try to spend time with them and fill their minds with positive thoughts.
 - We should ensure that their rooms as well as their surroundings are neat and clean.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-4 Food-Types and Importance

Exercise

- A. 1. b. wholesales 2. a. harvesting 3. c. dairy
 - 4. c. rice 5. b. nutrients
- **B.** 1. The farmers sold their products after harvesting to the wholesale markets known as mandis.

- 2. Some milk products like cheese, ghee, butter etc. are processed, packed and sold in the market. We buy them from shopkeepers.
- 3. Some food items give us energy to do work. Cereals like rice, wheat, millet, maize etc. contain carbohydrates and are starchy food. Milk, butter, cheese, oils and ghee are fatty food. All these food items give us energy.
- 4. A balanced diet has all the essential nutrients in right amount. To get essential nutrients and proteins it is necessary to take a balanced diet.
- 5. Growing children need more body building food rich in proteins.

C. 1. ✓

2. 🗸

3. **X**

4. X

5. 🗸

D. 1. b.

2. d.

3. a.

4. e.

5. c.

HOTS

- 1. Our body needs different nutrients. Proteins, carbohydrates, vitamins and minerals are called nutrients. In order to stay fit and healthy, our body needs all these nutrients along with a good amount of water and roughage.
- A man doing manual labour needs more energy giving food than a person working in an office because a person doing manual labour do more physical work and hence required more energy.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-5 Sources of Food

Exercise

A. 1. b. Rice

2. a. root

3. b. southern

4. c. Spice

5. b. cabbage

- **B.** 1. All living things need food to survive and grow. Food gives us energy. We need this energy for our day to day activities.
 - Beetroot, carrot, radish and turnip are roots of plants. We can eat them raw as well as cooked.
 - 3. Banana blossoms of banana tree is eaten as vegetable.
 - 4. We get butter, curd, cheese from milk.
 - 5. Food obtained from marine animals is called seafood. Oyesters, crabs, lobsters and prawns etc. are some examples of seafood.

C. 1. X

2. 1

3. **X**

4. 🗸

5. 🗸

D. 1. d.

2. c.

3. e.

4. a.

5. b.

HOTS

- Spices are added in food to make it tasty. India is famous for a varity of spices. Chilli, clove, pepper, cumin seeds, cardamom etc. are spices that are used in our food to make it delicious. Cow and goat give us milk.
- 2. Milk gives us all the necessary nutrients and energy and is considered as wholesome food. Cow and goat give us milk.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-6 Cooking Food

Exercise

A. 1. b. cucumber3. c. baking2. a. boiling4. b. steaming

- 5. b. sunlight
- **B.** 1. If vegetables or fruits are washed after cutting, many important vitamins and minerals get washed away.
 - 2. Boiling is used to cook rice. Besides making the food soft, boiling also kills the germs present in the food.
 - Three methods are used while frying: deep frying, shallow frying and stir frying or sautling. Puris, samosas etc. are cooked by deep frying. Paranthas are cooked using shallow frying and chowmein is cooked by stir frying or sauteing.
 - 4. Different types of vessels and utensils are used in the kitchen for cooking food. They are made of different materials such as steel, copper, aluminium etc.
 - Fuels are the materials used for producing heat or energy needed for cooking food. In many rural areas food is still cooked on mud stoves using cow dung cakes or firewood as fuel.

C. 1. √
 5. √
 D. 1. d.
 2. √
 3. X
 4. X
 5. √
 a. 3. e.
 b.

5. c.

HOTS

- 1. Most of the food we eat are cooked. Cooking makes the food soft, tasty and also easy for chewing and digesting. Cooking also kills many germs present in food that might be harmful for our body.
- Fuels are the materials used for producing heat or energy needed for cooking food. People living in towns and cities use gas stoves, heaters or oven to cook food. Gas stoves work on LPG while heaters and ovens work on electricity. A solar cooker

uses sunlight as fuel. In many rural areas food is still cooked on mud stoves using cow dung cakes or firewood as fuel.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-7 Means of Transport

Exercise

- A. 1. c. wheel 2. a. roadways 3. a. Thane
 - 4. b. Air 5. b. spaceships
- **B.** 1. Different means of transport are roadways, railways, waterways and airways.
 - A great revolution came when engines were invented. These engines run fuels like petrol, diesel, CNG etc.
 - 3. On 16th April, 1853 the first train in Indian sub-continent ran between Bombay to Thane.
 - 4. Water is the slowest mode of transport. Hence, very few people use it for travelling to other countries. It is mainly used to carry goods.
 - 5. There are airports in all major cities and towns of the country. Airports from where flights are available within the country are called domestic airports. The airports from where we can get flights for travelling to other countries are called international airports.
- **C.** 1. ✓
- 2. 🗸
- 3 X
- 4. X

- 5. X
- **D.** 1. d.
- 2. a.
- 3. e.
- 4. b.

5. c.

HOTS

- 1. There are three types of transport: Land transport, Air transport and Water transport.
- 2. Airports from where flights are available within the country are called domestic airports whereas airports from where we can get flights for travelling to other countries are called international airports.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-8 Various Means of Communication

Exercise

A. 1. a. smoke signal 2. b. Letter

3. a. post offices 4. c.

5. c. computer

- B. 1. We live in a society. Many other people also live around us. We often need to exchange information, news and ideas with other members of the society. This process of expressing our ideas and feelings or giving information to others is called communication.
 - 2. Telephone and letters are two means of personal communication.
 - 3. Communication is mainly of two types: One to one communication and mass communication.
 - 4. Urgent letters can be sent through courier service. Almost all courier services have their offices in many parts of the country. Letters, parcels etc. are handed over to them and a receipt is obtained after paying due charges. The said letters are delivered to the recipient within a day or two. Post offices also provide similar services called speed post.
 - 5. Email is the fastest means of sending messages, pictures, video etc. to any part of the world.

C. 1. ✓ 2. X 3. X 4. ✓

5. 🗸

D. 1. d. 2. a. 3. e. 4. b.

5. c.

HOTS

- 1. Print media is one of the oldest and basic forms of mass communication. The two most common print media are newspapers and magazines.
- 2. Do it yourself.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-9 Our Natural Environment

Exercise

A. 1. c. third 2. b. gills 3. b. sun

4. c. Whale 5. b. two

B. 1. More than three-fourth part of the earth is covered with water. It appears to be blue when seen from the outer space.

- 2. The earth is surrounded by a thick layer of air. It is a mixture of different gases. We call it the atmosphere.
- 3. Plants make their own food using carbon dioxide from air, nutrients and water present in the soil and energy from sunlight. The process is performed in the green leaves and is called photosynthesis.
- 4. Anything that causes a living thingto react is called a stimulus.
- 5. Non-living things can be divided into two groups: natural and man-made things. Things like air, water, soil, sun, moon etc. are natural things. House, school, parks etc. are made by men. They are called man-made things.
- **c**. 1. ✓ 2. ✓ 3. ✓ 4. X
 - 5. **X**
- **D.** Do it yourself.

HOTS

- 1. Air is important for all living things. It helps us to breathe. If there is no air in our environment we won't be able to breathe.
- 2. Air is a mixture of various gases. It consists of nitrogen, oxygen, carbon dioxide and some other gases. Percentage of these gases in the air:
- Nitrogen 78%
- Oxygen 21%
- Carbon dioxide 0.03%
- Other gases 0.07%

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-10 The World of Plant

Exercise

A. 1. a. Shrubs

2. c. Creepers

3. b. climber

4. b. Water hyacinths

5. a. two

- **B.** 1. Trees are the largest of all plants. They are tall, strong and big in size. They have a thick and woody stem called trunk and many big branches spread around them. The stem is covered with thick buckle. Mango, banyan, peepal are examples of trees.
 - 2. Some plants are short and bushy. Their heights vary between one to three meters. They have thin and woody stem with many branches. Such plants are called shrubs. Rose plant and cotton plant are examples of shrubs.

- 3. There are some plants with very weak stems. But their fruits are so big and heavy that they cannot bear the weight of their fruits. Hence they creep along the ground. Such plants are called creepers. For example-cucumber plant and pumpkin plant.
- 4. Plants that live for one season only are called annuals. Wheat, rice etc. are examples of annuals whereas plants that live for many years are called perennials. Neem tree, mango tree etc. are examples of perennials.
- 5. Plants are very helpful for us in many ways. They provide us many things and fulfil our requirements. They are the primary resources of food for living beings on earth. They absorb carbon dioxide and release oxygen in the atmosphere which is necessary for our survival.

C. 1. / 2. / 3. X 4. X

5. 🗸

D. 1. Mango tree 2. Rose plant 3. Grapevine

4. Cactus 5. Coontail

HOTS

- 1. Plants are of various shapes and sizes. Some plants are big and strong, some are short and bushy, while some others cannot even stand erect. While trees are the largest of all plants. They are tall, strong and big in size. They have a thick and woody stem called trunk and many big branches spread around them. Mango, neem etc. are examples of trees. Shrubs, herbs etc. are example s of plants.
- 2. Coriander, mint and basil plant are three herbs that are commonly used in almost every house.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter- 11 Parts of Plants

Exercise

A. 1. b. Stem 2. a. chlorophyll

3. b. leaf 4. b. Leaves

5. b. Seeds

- **B.** 1. The tap root has one main root with several smaller roots growing from its sides. Raddish, carrot etc. are examples of tap root.
 - 2. Functions of the stem:
 - Stem gives support to the plant and keeps it upright.
 - It carries water and nutrients absorbed by the roots to the leaves.
 - It carries food prepared by the leaves to different parts of the plant.

- 3. Leaves prepare food for the plant using water, carbon dioxide, sunlight and chlorophyll present in the leaf. The process of preparing food by the green leaves is called photosynthesis.
- 4. Functions of a flower:
 - Flowers are the reproductive parts of plants.
 - Honeybees make honey from the nectar of flowers.
 - Flowers bear fruits and seeds that give birth to new plants.
- 5. Most of the fruits have seeds inside them. Mango has one seed. Apple has few seeds and guava has many seeds.
- **c.** 1. ✓ 2. ✓ 3. X 4. X
 - 5. 🗸
- **D.** 1. b. 2. d. 3. a. 4. e.

5. c.

HOTS

- 1. Leaves prepare food for the plant using water, carbon dioxide, sunlight and chlorophyll present in the leaf. The process of preparing food by the green leaves is called photosynthesis.
- 2. Each part of a plant has a job that will help it grow. Root is the part of a plant that grows inside the soil. The stem grows out of the soil, giving the main support to a plant. It also supports the branches, leaves, buds, flowers and fruits.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter- 12 Water

Exercise

- **A**. 1. a. rain 2. b. three 3. c. no
 - 4. b. drought 5. b. watering plants
- **B.** 1. Our earth is called the blue planet because three fourth part of it is covered with water.
 - 2. Some water is absorbed in the soil and is called underground water. The water is taken out through wells, deep tube-wells and hand pumps.
 - In our country, distribution of rainfall is very much uneven. There are some
 places, which get heavy rainfall leading to flood and widespread damage,
 while some other places like Rajasthan get less or no rainfall at all causing
 droughts year after year.

- 4. Dams are built across big rivers to provide a regular supply of water for irrigation. Dams also control floods. The force of falling water is used to generate electricity. This type of electricity is called hydro-electricity. Since dams help us in many ways, they are called multi-purpose projects.
- 5. Some of the ways that should be adopted to conserve water are:
 - Use water economically and prevent wastage.
 - Prevent cutting down of trees and promote planting of trees to maintain the water cycle.
 - Waste water of kitchen should be used for watering garden plants.

C. 1. 🗸

2. 🗸

3. **X**

4. X

5. 🗸

D. 1. Ocean

2. Polar regions

3. Canals

4. Rajasthan

5. Precipitation

HOTS

- 1. The rivers carry a large volume of water into the oceans and seas and with it, a huge quantity of dissolves minerals and salts making the ocean water very salty and unfit for direct consumption. We need fresh water for drinking and other purposes.
- 2. Water is one of the most important natural resources. We need water for drinking, cooking, bathing, washing and for irrigation. Since availability of fresh water in the world is limited, we must try to conserve it so that it may last longer.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter- 13 Soil

Exercise

A. 1. a. top

2. b. thousands

3. a. alluvial

4. c. Black

5. b. mountain

- **B.** 1. The thin layer of top-soil is very important for plants because all plants, trees and vegetables grow and get their nutrition from this layer.
 - The importance of soil lies in its fertility. The quality and fertility of soil depends upon the minerals it contains and humus present in it. Some minerals provide nutrients to the plants. Such soils are called fertile. The fertility of soil varies from place to place.

- Afforestation is the action of planting trees on an area of land in order to make a forest.
- 4. Black soil is found in Gujarat, Madhya Pradesh and Tamil Nadu.
- 5. Displacement of the upper layer of soil from one place to another is called soil erosion. Various natural and human factors are responsible for erosion of soil. Natural factors include slope, intensity of rainfall and velocity of wind etc. While human factors include over-grazing, over-using of land by adding more chemical fertilisers, cutting of trees etc.

C. 1. ✓

2. X

3. 🗸

4. X

5. 🗸

D. 1. Thin layer

2. Minerals and humus

3. Fertile soil

4. Red soil

5. Himalayan ranges

HOTS

- 1. The method of growing crops on sides of hills and mountains is known as terrace farming. Terrace farming is practiced in himalyan ranges.
- 2. Soil conservation is the action of preserving and protecting of soil from destruction. Growing of trees, use of organic fertilizers like manure and compost, crop rotation etc. are some of the methods that can be adopted to improve the quality of soil.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Chapter-14 The Art of Pottery

Exercise

A. 1. a. grass

2. b. clay

3. a. a klin

- **B.** 1. The art of making different items using clay is known as pottery.
 - 2. First of all, the potter carefully selects the clay needed for a particular type of pottery product he is about to make and kneads it well. Then he places it at the centre of the wheel. The wheel is then spun at fast speed. The potter uses his hands to give desired shape to the clay.
 - 3. Even today, many pottery items are used for various purposes. Earthen lamps or diyas are used in temples and for decorating our houses during Diwali. Clay vessels of different shapes and sizes are used to store various food items and other day to day items. In cities and towns, fancy clay ornaments, toys and decorative items are used.

C. 1. 🗸

2. X

3. X

HOTS

Potter places the clay at the centre of the wheel. The wheel is then spun at fast speed. The potter uses his hands to give desired shape to the clay.

Things to Do

Do it yourself.

Fun Time

Do it yourself.

Life Skills

Do it yourself.

Model Test Paper-I

A. 1. c. skycraper 2. a. India

3. h. love 4. a. root

5. Wheel c.

B. 1.

2. X

3. X

4. X

5. /

C. 1. Qualities of a good house:

- It should be well-ventilated so that it gets enough sunlight and fresh air.
- Things should be kept at their proper places.
- Floors should be swept and mopped everyday.
- 2. The games that can be played same a room or building are called indoor games. Chess, carrom, ludo etc. are sine popular indoor games.
- 3. Some food items give us energy to do work. Cereals like rice, wheat, millet, maize etc. contain carbohydrates and are starchy food. Milk, butter, cheese, oils and ghee are fatty food. All these food items give us energy.
- Boiling is used to cook rice. Besides making the food soft, boiling also kills the germs present in the food.
- 5. A great revolution came when engines were invented.
- **D.** 1. Airports from where flights are available within the country are called domestic airports whereas the airports from where we can get flights for travelling to other countries are called international airports.
 - 2. A man doing manual labour needs more energy giving food than a person working in an office because a person doing manual labour do more physical work and hence require more energy.

Model Test Paper-II

A. 1. smoke signal a.

2. c. Creepers

3. b. leaf 4. b. three

5. b. clay

B. 1. Х 2.

3.

4. 🗸

5. Х

C. 1. More than three-fourth part of the earth is covered with water. As such, it appears to be blue when seen from the outer space.

- 2. Leaves prepare food for the plants using water, carbon dioxide, sunlight and chlorophyll present in the leaf. The process of preparing food by the green leaves is called photosynthesis.
- Conservation of water: 3.
 - Use water economically and prevent wastage.
 - In domestic use, wastage of water should be checked.
 - Waste water of kitchen should be used for watering garden plants.
- Displacement of the upper layer of soil from one place to another is called soil erosion. various natural and human factors are responsible for erosion of soil. Natural factors include slope, rainfall etc. While human factors include cutting of trees, over-grazing etc.
- 5. Potter places the clay at the centre of the wheel. The wheel is then spun at fast speed. The potter uses his hands to give desired shape to the clay.
- Print media is one of the oldest and basic form of mass communication. The **D.** 1. two most common print media are newspapers and magazines.
 - 2. Air is important for all living things. It helps us to breathe. If there is no air in our environment we won't be able to breathe.

