

Key to

Learning Environment

5



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1. FAMILY IN TRANSITION

- 1. T 2. T 3. F 4. T
- 1. place 2. education 3. occasion
4. family
- 1. People settle down away from their own homes because of following reasons :
 - (a) Transferable jobs
 - (b) In search of better job
 - (c) Due to disasters such as epidemic, starvation or war.
- 2. The people who go to a foreign country and settle there are called emigrants.
- 3. When displaced, people live a miserable life. Sometimes, they are not able to find a job to earn their living. They are often compelled to live in dirty jhuggis in slums.
- 4. It is important to educate both girls and boys for the betterment of the society. If both are educated, they can earn for their families and can also educate their children.
- 1. Transferable job is the job in which people have to shift themselves from one place to another.
- 2. Emigrants are the people who go to a foreign country and settle there.
- 3. Displacement means shifting of people or things from one place to another. It can be due to transfers, demolition or due to construction of dams.
- 4. Values in the family have changed now. Today women work in offices, they run business and frequently go out. Now-a-days girls are also educated which once was considered to be the man's fort. It is said, "Educate a girl and you educate a family."

Think and write

** This section should be attempted by the students themselves.*

2. ALL OF US GROW

- 1. F 2. T 3. T 4. T
- 1. cells 2. brain 3. infants 4. hungry

- 1. I know that I am growing when my feet do not fit into last year's shoes, or when my shirt/frock becomes small to wear.
- 2. No, we do not keep growing throughout our lives. We stop growing between the age of eighteen to twenty years of age.
- 3. We measure height in feet and inches.
- 4. Babies cry due to following reasons :
 - (a) when they feel hungry.
 - (b) when they are wet and need a clean nappy.
 - (c) when they are uncomfortable, tired or neglected.

Think and write

** This section should be attempted by the students themselves.*

3. OUR LIKES AND DISLIKES

- 1. T 2. F 3. T 4. T
- 1. change 2. criticise 3. change
- 4. fish 5. handicaps
- 1. When we grow, our thoughts and feelings change and so do our likes and dislikes.
- 2. Our culture influences our smells to a large extent. People born to families of fishermen like the smell of fish because from childhood they are surrounded by it, but others may not like it. Similarly people who are strictly vegetarian do not like the smell of cooking meat, chicken or fish, but their smell is aromatic to those who eat non-vegetarian food.
- 3. Smell of food influences our likes and dislikes of taste. The appetizing smell of some food waters our mouth.
- 4. Blind people read a book with the help of Braille script system.

Think and write

** Q. 1 to 4 should be attempted by the students themselves.*

- 5. Yes, he uses hearing aid to improve his hearing.
- 6. A lame man walks with the help of a stick.

4. IMPORTANCE OF TEAM SPIRIT IN GAMES

- 1. F 2. T 3. F 4. T
- 1. health 2. exercise 3. indoor
4. teams 5. captain
- **Games** **Sports**
 - (a) Games are unorganized activities (a) Sports are organized activities
 - (b) Games are played for fun and recreation (b) Sports are played for competition both at national and international level
- 2. Team spirit means to forget about self interests and playing together for common goal. It brings happiness, unity, oneness, harmony, peace and cooperation.
- 3. My criteria to choose the player would be
 - (a) They should be young enough to play the game.
 - (b) They should be fit and strong for the game.
 - (c) They should know the rules of the game.
- 4. Tennis, badminton, kho-kho are some of the games where men and women play together as a team.
- 1. P.V. Sindhu
2. Mary Kom
3. Virat Kohli.
4. Deepa Malik

Think and write

1. The indoor games I play in my leisure time are carom, ludo and chess.
2. The outdoor games I play in my leisure time are cricket, basket ball and football.
3. The games that I play individually are computer games and video games.
4. The games that I play in groups are kho-kho, cricket, football, volleyball, etc.
5. I like to watch the Cricket on television.

5. LOCAL AND TRADITIONAL GAMES

- 1. T 2. F 3. T 4. T 5. T
- 1. gymnastics 2. India 3. akhara
4. chaturanga 5. popular
- 1. The modern concept of games is changed with time. Earlier games were played keeping in mind the whole community. But today, children like to play computer games and video games on television. Because of it, the social importance of traditional games is 'lost'.
- 2. Earlier radio was one of the main source of entertainment. People listen to music, local news and sports news on radio in their leisure time. But now, due to television and the advent of cable television and direct to home television, people like to watch TV programmes, family dramas, etc. and the children like to play video games on television in their leisure time.
- 3. Yes, there is an advantage of playing computer games or video games as they sharpen our skills.
- 4. Martial art is a technique for self-defence. Its different forms are Karate (a popular international sport), Kalarippayattu (practiced in Kerala) and Sarit Barak (practiced in Manipur).

Think and write

* *This section should be attempted by the students themselves.*

6. BLOW HOT, BLOW COLD – OUR BREATHING

- 1. T 2. T 3. T 4. T 5. F
- 1. pump 2. food 3. oxygen
4. stethoscope 5. inhalation
- 1. Our heart beats to pump blood and to circulate it in the whole body.
- 2. Blood carries oxygen to all the cells in the body.

3. We inhale air to get oxygen from the surrounding. This process of breathing in oxygenated air is called the inhalation.
4. Diaphragm and the muscles fastened to my ribs move my chest in and out.
5. Doctors use stethoscope to listen to the sound of heart beat.

Think and write

1. I breathe faster after running.
2. I breathe 72 times a minute.
3. Yes, a glass can be made cloudy by blowing on it.
4. Yes, I have sometimes blown to keep the fire burning brighter.

7. DIGNITY OF LABOUR

- 1. F 2. T 3. T 4. F 5. T
- 1. regard 2. work 3. dependent
4. concern 5. respected
- 1. Dignity of labour means 'Work is Worship'. It makes man realize that every individual must contribute his share of work for the betterment of society.
- 2. We should treat our servants with respect.
- 3. The three essential services done by the people for us are
 - (a) A sweeper sweeps the roads and keeps the street clean.
 - (b) A garbage collector collects the garbage.
 - (c) A cobbler repairs our shoes.
- 4. The workers who help in our day to day life are : sweeper, garbage collector, tailor, washerman, cobbler, plumber, electrician, etc.

Think and write

1. Ten different types of work that people do for us are
 - (i) sweeping the road and keeping the street clean

- (ii) collecting garbage from houses and dispose it off at proper place.
 - (iii) repairing and making shoes
 - (iv) stitching clothes
 - (v) washing clothes
 - (vi) cooking food
 - (vii) repairing vehicles
 - (viii) selling fruits
 - (ix) building house
 - (x) painting house and walls
2. If there were no one to clean our streets, our homes, clear the garbage, there would be heaps of garbage all around and drains would be choked, which may cause various infections and diseases among the people.

8. HOW ANIMALS FIND THEIR FOOD

- 1. T 2. F 3. F 4. T 5. T
- 1. animals 2. eyesight 3. smell
4. tongue 5. smell
- 1. Sight is the most important sense for land animals.
2. A housefly walk on food because it tastes with feet.
3. A horse sleep while standing.
4. No, all the animals do not have and use all the senses.

Think and write

1. Dogs smell things around them in search of food. If they sense it to be a food item, they eat it.
2. If we leave the leftover food outside in night, some nocturnal insects such as mosquitoes, cockroaches, housefly, and some animals will eat it.
3. Animals find their food with the help of their senses. Birds have powerful eyesight because they can not find food if they can not see from heights, dogs sense the

food with their strong sense of smell, while sea creatures sense their food through their sense of smell and taste. Many insects have sensory antennae to sense their food.

4. No, my dog doesn't bark when my father returns from work. It barks on my friend when he comes to my house to borrow a book.
5. The dogs have keen sense of knowing what is going around them. So, in order to response, they act differently for different stimuli.
6. When a crow finds some food, it communicates with other birds of its family by making a sound of caw-caw.

9. ANIMALS IN OUR LIVES AND THEIR PROTECTION

- 1. T 2. T 3. T 4. T 5. T
- 1. mulberry 2. threats 3. wild
4. earning 5. bears 6. wars
7. trouble
- 1. Many people depend on animals as a source of their earnings. A tongawals depend on a horse, a washerman depends on a donkey, a snake charmer depends on snakes, a madari depends on monkey or bear, a mahout depends on an elephant. people living in deserts depend on camels. Animals are also trained and used in circus to entertain people. Milkman depends on cows and buffaloes for milk.
- 2. Animals become endangered due to following factors :
 - (a) Habitat destruction
 - (b) pollution
 - (c) trading of animal products
 - (d) over hunting
 - (e) growing human population

3. Government has passed a law in 1972 to protect wildlife. A number of national parks and wildlife sanctuaries have been set up to protect wild animals. Animals are also protected by international agreement. For example, all nations have stopped commercial killing of whales because so many whales were threatened with extinction.
4. Habitat destruction and poaching brought about a sharp decline in the number of tigers in our country.
5. *This question should be attempted by the students themselves.*

Think and write

1. Farmers use oxen to plough their fields.
2. Cruelty to animals means to force them to perform stressful, confusing, uncomfortable and even painful acts. It can include beating, food deprivation, drugging, removing or impairing teeth and claws, etc.
3. Cows and buffaloes give us milk.
4. Mountain goat and camels in desert are the animals other than sheep whose hair are used as wool.
5. People kill wild animals for hunting and poaching.
2. Animals become endangered due to following factors :
 - (a) Habitat destruction
 - (b) pollution
 - (c) trading of animal products
 - (d) over hunting
 - (e) growing human population
7. Two national parks of our country are (a) Jim Corbett National Park and (b) Kaziranga National Park.
8. *This question should be attempted by the students themselves.*
9. Yes.
10. Yes, I think madari is not right in keeping a monkey or a bear as a pet. Wild animals cannot be kept as pets.
11. Same as Q. 2 above.

12. People who use animals for their livelihood treat them very badly. They beat and thrash them. Sometimes, they are starved and ignored of their needs. For example, An oxen is beaten and thrashed by the owner, when it pulls the cart slowly.

10. GROWING PLANTS

- 1. T 2. F 3. T 4. T 5. F
- 1. Seed coat 2. moisture, air, suitable temperature
3. underground 4. aquatic 5. roots
- 1. Dispersal of seeds is important as it helps seed to germinate under favourable conditions.
2. The process of development of a seed into a seedling (new plant) is called germination. The seed first absorbs water and swells. After sometime, the tiny roots come out and grow downwards. It further brings out shoot which grows upwards. The plant together with seed leaves is called seedling. The seedling grows into an adult plant. On reaching maturity, it starts producing fruit, flowers and seeds.
3. Conditions necessary for germination are – moisture (water), air (oxygen) and suitable temperature.
4. Potatoes have swollen roots. Food is stored in these roots. They are called tuberous roots. When these roots are cut and sown in the soil, they produce new plants.
5. When some of the flowering plant are propagated by vegetative parts such as roots, stems and leaves, it is known as vegetative reproduction or vegetative propagation.

Think and write

1. Yes, I have seen the seeds of some plants like marigold sticking to my clothes many times.

2. Coconut seed does not sink in water because it is very light weight and less dense due to the hollow inside, and a light outer covering of coir.
3. Seeds come from the fruits or flowers.

11. FORESTS AND FOREST PEOPLE

- 1. T 2. F 3. T 4. F 5. T
- 1. forest 2. Gond 3. tribal
4. burial 5. Sanctuaries
- 1. Forest is a large area of land covered with trees. It also includes smaller plants such as mosses, shrubs and wild flowers. In addition, wild beasts, many kinds of birds, insects and other animals make their home in the forests.
- 2. The people living in forests are called Adivasis or tribal people.
- 3. Deforestation results in the displacement of the tribals from their native place which affect their culture, their beliefs, myths and rituals, etc. It is a painful experience to get uprooted from where they had been living for generations to move to a new place as a stranger. Very often, the family breaks up. It is a big price that the tribals have to pay.
- 4. Sacred groves are the important vegetation area that preserves the original flora of a locality without any outside disturbance. These groves are dedicated to local deities or ancestral spirits.
- 5. We can protect trees by establishing biosphere reserves, national parks, sanctuaries and reserve forests.
- 6. Deforestation results in the displacement of the tribals from their native place which affect their culture, their beliefs, myths and rituals, etc. It is a painful experience

to get uprooted from where they had been living for generations to move to a new place as a stranger. Very often, the family breaks up. It is a big price that the tribals have to pay.

Think and write

1. Yes, I have seen a forest in Dehra Dun.
2. People living in forests are known as adivasis or tribal people. Life and economy of these people are entirely dependent upon forests. Major portion of these people live inside the forest and makes a living out of forest products. They make baskets, mats and leaf plates and sell them in nearby villages and towns. Wild fruits, tubers, some leaves, some animals and birds are their only food for survival.
3. Tribals collect wild fruits, tubers and some leaves from the plants in the forest.
4. Yes, they are made up of banyan leaves.
5. Optional question. Students may provide any suitable answer.
6. Trees are cut by the people due to more land requirement because of increased urbanization. Now a days, multistory buildings, industries, dams, highways, flyovers, etc. exist in their place.
7. Tribals and villagers living in or near forests try to save trees as certain species of trees are valued for their fruits, bark, leaves and flowers, e.g., mango (fruit), neem (medicinal plant), etc. Moreover, life and economy of these people entirely depends upon forests.
8. Yes/No (optional).

12. PLANTS THAT HAVE COME FROM FAR

- 1. F 2. T 3. T 4. F 5. T
- 1. Ethiopia 2. wheat 3. subtropical
- 4. Palestine 5. Chinar tree

- 1. Sugarcane, potato, tea and lemon are four plants that originated somewhere else, but are now grown widely in India.
- 2. When there was no tea in India, people were fond of drinking milk, buttermilk and lassi.
- 3. The three main kinds of tea are – black tea, green tea and oolong tea.
- 4. Tea is considered the most popular beverage because it is readily available in every household.

Think and write

1. No.
2. No, tea can only be grown in hilly areas, where there is lot of rainfall.

13. PRESERVATION OF FOOD

- 1. F 2. T 3. F 4. T
- 1. health 2. spoiled 3. moisture
- 4. flavour
- 1. We should eat fresh food because it is good for health.
- 2. Microorganisms such as bacteria, mould and yeasts multiply in the food and change the flavour and odour. Bacteria multiply rapidly to produce chemicals which are poisonous to human beings.
- 3. If we eat spoiled food, we may fall sick.
- 4. We can prevent food from getting spoiled by preserving it.
- 5. Wastage of food can be controlled by the following ways ;
 - (a) Food grains should be dried properly before storage.
 - (b) Food grains should be periodically exposed to the sun.
 - (c) Food items must be stored in proper moisture free containers and moisture-free places.
 - (d) Only the required quantity of food must be cooked.
 - (e) Serve only as much food as one can eat.

Think and write

1. *This question should be attempted by the students themselves.*
2. My mother preserves the dry fruits and biscuits by storing them in air-tight containers.
3. Food items such as milk, meat and vegetables like potato, cauliflower, etc. get spoiled sooner than others.
4. Food spoil in different ways. It spoils when microorganisms multiply in the food and change the flavour and odour.
5. When the flavour, odour and colour of the food changes, we come to know that food is spoiled, for example, milk gets sour when it is spoiled, stale food stinks, mould grows on bread, etc.
6. Yes/No (students may give any suitable answer)
7. Yes/No (students may give any suitable answer)
8. Yes/No (students may give any suitable answer)
9. Expiry date printed on canned and packed food items means that till that date food will remain fresh and we can consume it without any harmful effect. After this date, the food turns stale and unfit for consumption.
10. During a long journey, my family members carry puri, pickles, fruits, namkeens, biscuits, chips, etc.
11. My mother stores left over food in the refrigerator for later use.
12. Yes/No (students may give any suitable answer).

14. WHO PRODUCES THE FOOD WE EAT

- 1. T 2. F 3. F 4. T 5. T
- 1. meat 2. self-sufficiency 3. grow
- 4. weeds 5. soil

- 1. When farmers produce crops and rear animals chiefly for sale, it is called commercial farming.
- 2. No, all crops do not need same amount of water.
- 3. Livestock farms include cattle and sheep farms (to produce wool and other animal products), poultry and egg farms (where the hens and ducks are reared to produce eggs and meat) and dairy farms (to produce milk and milk products).
- 4. The excessive use of fertilizers causes the loss of natural fertility of soil.
- 5. Soil salinity means presence of salts in the soil. It causes less plant growth and lower crop yield.

Think and write

1. *This question should be attempted by the students themselves.*
2. Farmer needs water for irrigation, fertilizers to improve fertility of soil for better yield, pesticides for killing insects, rodents, etc. and herbicides to control the weeds.
3. Yes, I have read in the newspaper about the farmers committing suicide due to poor economic conditions. This is an issue of major concern today and suitable steps should be taken to support small farmers so that their well-being is ensured.
4. Government has taken a number of steps to ensure the well-being of farmers. Today farmers and government agencies are working together for a better tomorrow. In spite of this, I think government can also provide better loan schemes to them. It can also support small farmers economically by motivating them for alternative farming such as poultry farming, floriculture, pisciculture, etc. It can also give compensation to those farmers who are badly affected due to disasters.

15. CHANGING FOOD HABITS

Activity Pg-74

- 1. Punjab Makki ki Roti, Sarson ka Saag, Butter, Lassi
- 2. Kerala Rice and fish
- 3. Tamil Nadu Idli, Dosa, Uttapam
- 4. Rajasthan Bajre ki Roti
- 5. West Bengal Rice and fish
- 1. T 2. T 3. T 4. F 5. T
- 1. fast 2. third 3. malnourishment
- 4. population 5. man-made
- 1. In our country, every state has some favourite food which is very popular among masses in that particular state. This food is known as traditional food of that state. This food usually contains all nutrients needed for the growth of human body. For example, in Punjab, Makki ki Roti, Sarson ka Saag, Butter and Lassi constitutes the traditional food of this state.
- 2. Fast food is named so because it takes less time to prepare or it is fast to cook.
- 3. The changing food habits have affected the local farmers in the following ways :
 - (a) They find it difficult to sell their product.
 - (b) They are forced to change the crops.
 - (c) They prefer to grow flowers and cash crops such as jute, coffee, orange, cotton, etc. instead of cereals, pulses and vegetables.
 - (d) As they do not grow those crops which can be used as food for their own families, they have to spend more on buying food.
- 4. Famine is a state of prolonged food shortage that results in widespread hunger and death.

5. Food habits among youngsters have changed a lot. Most of the young boys and girls do not stick to traditional food. They have developed a taste for fast food such as burgers, noodles, chips,, etc.

Think and write

1. *This question should be attempted by the students themselves.*
2. No, they had never relished the Chinese food, burgers, cold drinks, tinned foods, etc. when they were of my age.
3. On special occasion, I enjoy eating idli, dosa, burger, chow min, ice-cream, sweets, etc.
4. No, people of two different states do not eat the same kind of food.
5. No. I can not remain without food for a day. I will feel hungry.

16. NUTRITION DEFICIENCY DISEASES

- 1. T 2. T 3. T 4. F
- 1. proteins 2. diet 3. diet 4. A
- 1. The essential nutrients which should be present in our food are carbohydrates, fats, proteins, minerals and vitamins.
- 2. A balanced diet is the one which include all nutrients in the required amount, to give energy, to build the body, to repair the worn out parts, to protect us from diseases and to promote health. In addition, it should contain enough water and roughage.
- 3. Children need more nutrients as they grow more rapidly. They need protein for the growth of muscles. They need mineral salts for the growth of bones and teeth. They also need vitamins to protect themselves from diseases and infections.

4. The symptoms due to deficiency of vitamin B are
- (a) Dry and cracked lips
 - (b) Redness of tongue
 - (c) Sores at the angles of mouth of lips
 - (d) Loss of sensation in the limbs

Prevention :

We must include food rich in vitamin B, such as sprouted pulses, green leafy vegetables, whole grain, gram and milk in our diet.

17. TASTING FOOD AND DIGESTION

- 1. T 2. F 3. T 4. F 5. T
- 1. taste 2. eating 3. salivary glands
- 4. glucose 5. Insulin
- 1. Tongue is the organ for taste. The tip, sides and back of our tongue are covered with little bumps. These are called taste buds. The taste bud at the back of our tongue pick up bitter tastes, those at the sides and front find salty tastes and those at the very front look out for sweet tastes. Sour taste is sensed by the sides and further back.
- 2. When we chew food, salivary glands pump out saliva which get mixed with the food and make it soft and mushy.
- 3. Pancreas release insulin (a chemical that regulates blood sugar level in the body).
- 4. Patients suffering from weakness are given glucose drip to provide them an instant energy and to make them feel better.

Think and write

- 1. We taste food with the help of taste buds present in our tongue.

2. The food in our mouth breaks down into a simpler substance called glucose with the help of teeth and salivary gland.
3. Glucose is a simpler substance which provides energy to do various activities.

18. FOOD FOR PLANTS AND ANIMALS

- 1. F 2. T 3. T 4. F
- 1. nutrients 2. stomata 3. herbivorous
- 4. food chain
- 1. Stomata are the tiny openings present on the leaves.
- 2. Manure helps to retain water in the soil and also to maintain the fertility of the soil.
- 3. Parasitic plants get their food from other plants.
- 4. Food chain is a complex balance of life. It shows how animals eat other animals or plants to survive.

Think and write

1. Cuscuta and rafflesia are parasitic plants other than mushroom.
2. Pitcher plant is a plant that eats insects.
3. Animals depend on plants for their food directly or indirectly.
4. All animals do not eat the same food.
5. Yes, some animals eat other animals.

19. OUR SHELTER AND NEIGHBOURHOOD

- 1. F 2. F 3. T 4. T
- 1. farmers 2. planners 3. sloping
- 4. yurt 5. caravans
- 1. We need a shelter to protect ourselves from cold, heat, rain, snow and wind as well as from thieves.

2. A neighbourhood is a large family where many people live together.
3. People live together in groups because they are dependent on one another.
4. People build different houses because climate, building material available and economic status used to build houses are different for different places.
5. High rise apartments are common in heavily populated areas where land is scarce and expensive.

Think and write

1. Yes.
2. People live together in hamlets, villages, colonies and neighbourhood because they are dependent on one another.

20. SOCIAL BEHAVIOUR OF INSECTS

- 1. T 2. F 3. T 4. T
- 1. six-sided 2. antennae 3. beeswax
- 4. nest 5. tunnels
- 1. A worker bee dances a figure 8 pattern up the honeycomb to show the location of the distant nectar. The more rapidly the bee dances, the nearer is the food located.
- 2. The three categories of bees, i.e., the queen, drones and workers have their own assigned work to do. Laying egg is the only work of the queen. Drones are present in colony during the summer and help in reproduction. The workers perform variety of jobs such as cleaning the hive, feeding the young ones, producing wax, protecting from enemies and receiving nectar.
- 3. An ant colony may have hundred, thousands or millions of members.

4. Ants and bees are called social insects because they live together for many years, supporting and caring for one another and promoting their progeny.
5. Ants communicate with one another by touching with their antennae. They also secrete chemicals called pheromones which have distinctive smell and taste, in order to pass on to other ants information regarding food, enemy, etc.

Think and write

** This question should be attempted by the students themselves.*

21. NATURAL DISASTERS

- 1. T 2. F 3. F 4. T 5. T
- 1. course 2. body 3. rains
- 4. shaking 5. animals
- 1. A disaster is a sudden event that has very unfortunate consequences for those affected by it. Disaster causes large scale loss of life and property.
- 2. Effects of disasters :
 - * Natural disasters like earthquake, flood, storms, etc. have immediate effect – they destroy houses, roads, physical and social infrastructure, production facilities and crops.
 - * Continuing disasters have slow effect like deforestation, desertification, soil erosion and create pressure on urban centres.
 - * Disasters disrupt physical as well as economic activities.
- 3. In case of an earthquake, the following safety measures should be followed
 - (i) Rush to the nearest open space away from trees, electric wires and poles.
 - (ii) If you are driving, move the vehicle to the side of the road away from power lines and stop. Avoid taking any fly over.

- (iii) If you are in a stadium, theatre or auditorium, stay inside. Do not rush out towards the exit. Stay in your seat and cover your head with your arms and keep calm.
 - (iv) When the quake stops, move out of the building in an orderly manner. Help the elderly and disabled people and children to exit the building first.
4. Factors causing flood are as follows :
- (i) It occurs when water flows or rises above and beyond its natural course and covers land that is normally dry.
 - (ii) It is caused by heavy rainfall or melting of snow draining into the river faster than the river can discharge water into the sea.
 - (iii) It occurs when dams or embankments collapse, water overflows and gushes around with great force and floods the neighbouring area.

Think and write

1. Yes. The damage occurred due to earthquake on 26th January 2001 in Gujarat. About 7.8 lakh houses were destroyed due to it.

22. TIMES OF EMERGENCY

- 1. T 2. F 3. F 4. T
- 1. saving 2. rescue 3. community members
- 4. burnt area 5. calm, do not panic
- 1. We can help the people affected by a natural calamity in following ways :
 - (a) We can encourage and inspire people to face the problems.
 - (b) We can relay the message of the natural calamity to as many people as possible.

- (c) We can help people to move to safer places.
 - (d) We can help doctors and army jawans in rescue work.
2. Community help is important because during natural calamities, it is the community who knows exactly what the resources are and how they can be used. They know who lives where and how they may have been affected. The timely action and help of the community have often saved many lives and properties.
 3. Community members are life-saving assets in the event of a disaster. They encourage people and inspire them to face the problem. They help people to move to safer places. They collect clothes, medicines, packed and preserved food items, candles, etc. and send them to the affected people.
 4. Organisations that help victims of a disaster are : Red Cross Society, The United Nation Disaster Management Team (UNDMT) consists of ILO, FAO, WHO, UNICEF and UNESCO. United Nations Development Programme (UNDP) provides finance to rehabilitate affected people.
 5. First aid prevents further harm. It preserves life, prevent the victim's condition from worsening and promotes recovery.
- 1. If a bus catches fire, I will help people to come out from emergency gate. I will also call the fire station.
 - 2. If the roof of a kuchcha house in our neighbourhood falls during rain, I will provide them shelter in my house and will try to cover the roof of their house with tent or tirpal.
 - 3. If my neighbourhood get flooded, I will shift people, their animals and belongings to safer place. I will make arrangements for food, shelter, drinking water and medicines for the affected people. I will call doctors, police, etc. for the necessary help.

Think and write

1. Community members, local people, fire brigade, doctors, police, various NGOs come forward to help the people in the event of a disaster.
2. Yes, Emergency Relief and Development Organization is an organization which helps people in an emergency. Some other organizations are Hope International and WHO (World Health Organization).

23. WATER IN OUR LIFE

- 1. F 2. T 3. T 4. F 5. T
- 1. water 2. lower 3. water
- 4. grind
- 1. Water is a prerequisite for the existence of life.
- 2. Water is lifted with the help of a pulley, a rope and a bucket or with the help of a water wheel.
- 3. Farmers need water for irrigation.
- 4. Farmers use water from canals to irrigate their fields. At some places, farmers use the age old method of pulling water from the wells.

Think and write

1. Two riverside cities in India are : Delhi (near Yamuna) and Haridwar (near Ganga).
2. We need not go anywhere to fetch water because water reaches our home taps through water pipelines.
3. Yes, we get drinking water in our homes.
4. My grandfather had to go far off places to fetch water. He had to walk for an hour to fetch a pitcher of water.
5. Yes/No (Students may provide any suitable answer).

24. PLANTS AND ANIMALS IN WATER

- 1. water 2. sea foods 3. stem
4. gills
- 1. A place where land meets the sea is called sea side.
2. Five plants that we find in ponds, lakes or rivers are – sea weed, algae, water hyacinth, duckweeds, water lily.
3. Five water animals are fishes, vole, otter, ducks and water rats.

Think and write

1. Yes, I have seen green plants covering the entire surface of a pond or a part of a river. These plants are called blue-green algae.
2. Frogs are found in ponds during rainy season. Mammals such as voles, water rats and otter and birds such as kingfisher, herons and flamingos and water fowls (ducks and swans) are found in rivers and lakes. Fishes, lobsters, starfish, sea urchins, shrimps are found in seas.

25. FLOATATION AND SOLUBILITY

- 1. F 2. T 3. T 4. T
- 1. volume 2. volume of litres
3. weight in comparison with water 4. dense
- 1. Piece of wood floats in water because it is less dense than water whereas a needle sinks because it is dense than water.
2. When a substance mixes with water, a solution is formed. Water in which the substance is dissolved is called the solvent.
3. Oil paints are used on outer walls of buildings because oil does not dissolve in water as they have different densities. So, during the rainy season, the paint does not get washed off from the walls.
4. Sugar is mixed with water to form sugar solution.

Think and write

1. Painters clean their brushes using kerosene after painting for the best care of brushes. They do not clean with water because oil present in paint does not mix with water and so it can't be washed off properly.
 2. If the trader had loaded the donkey with the bags of sand, sand would have absorbed the water thus increasing the overall weight of the bags. Due to this, donkey would have to carry more weight than before.
- Cork - F Salt - M Potato - S Ink - M
Milk - M Stone - S Paper boat - F Pencil - F
Coin - S Oil - F Sugar - M Plastic ball - F

26. STAGNANT WATER

- 1. flow 2. female anopheles
3. malaria 4. Chloroquine
- 1. We should not allow water to stagnate because it is the breeding place of mosquitoes which are very dangerous insects.
2. Female mosquitoes bite because they need human blood for the development of eggs in their bodies.
3. Symptoms of malaria are :
(a) high fever followed by shivering, headache, muscular pain and nausea
(b) acute weakness
Prevention of malaria :
Chloroquine, a common drug is used to treat malaria.
4. Dengue fever is a flu-like illness spread by the bite of an Aedes aegypti mosquito.

Think and write

1. We find more mosquitoes in pond water.
2. Dengue, brain fever, yellow fever are the diseases caused by malaria.
3. More people get affected by malaria in rainy season.

4. Yes, we can reduce or kill mosquitoes by pouring some oil on stagnant water. The oil coats the surface of water and suffocates the environment inside due to which mosquitoes are present in water fail to develop.

27. FUELS FOR VEHICLES

- 1. T 2. T 3. F 4. T 5. T
- 1. no 2. fossil 3. jet
- 4. non-renewable 5. Natural gas
- 1. Fuels are important sources of energy. Fuels are burnt to give heat and light. Fuels are used to cook food, power engines and produce electricity.
- 2. Fuels obtained from plants and animals that were buried under the earth million of years ago are known as fossil fuels.
- 3. No, I wouldn't prefer to buy a vehicle that runs on petrol or diesel because it causes air pollution.
- 4. Fuels are used to move engines used in scooter, cars, buses, trucks, tractor, aeroplanes and ships. Fuels such as kerosene is primarily used as domestic fuel.
- 5. Fossil fuels are non-renewable sources of energy because once they are used, they can not be regenerated in short time because they take million of years to form.

Think and write

1. No, all vehicles do not use petrol.
2. Diesel, CNG, white petrol and LPG are some other fuels that are used for vehicles.
3. LPG is used for the following purposes other than cooking
 - (a) LPG is used as fuel especially for vehicles
 - (b) LPG is used as an aerosol propellant and refrigerant to avoid damage to ozone layer.
 - (c) LPG can be used as a back-up in generating the energy for the household.

28. THE SPIRIT OF ADVENTURE

- 1. T 2. T 3. T 4. F 5. T
- 1. Sputnik – 1 2. stations 3. stars
4. astronaut 5. fifth
- 1. The spirit of adventure means to do something challenging and to achieve your goal with full determination and without any fear of the obstacles on the way.
- 2. Artificial satellites are the man-made satellites. India have put a number of such satellites in the space and these are being put to a variety of uses such as communication, meteorological research, etc.
- 3. Mountaineers use climbing ropes to tie around their waists to protect themselves if they fall. On snow and ice slopes, mountain climbers ascend with the help of ice axes and a set of metal spikes attached to the bottom of climbing boots.
- 4. Neil Armstrong was the first man to land on moon.
- 5. Bachendri Pal is the first Indian woman and fifth woman in the world to scale Mount Everest. Her first exposure to mountaineering was at the age of 12 years, when during a picnic, she along with her several schoolmates climbed to a 13,123 feet high peak. Afterwards, she joined NIM. There she was declared best student and Everest material. She made herself rough and tough by regular practice and by keen determination.

Think and write

1. The heavenly bodies during the day is Sun and during night are – moon and stars.
2. Yes, we see sun, moon, stars and satellites apart from the planets in the sky.
3. Yes, the man-made things we see in the sky are satellites.
4. Yes/No (Students may provide any suitable answer)
5. Kanchanjunga is the highest peak in India.

29. OUR GREAT HERITAGE

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- 1. Dilwara Temples Near Mount Abu, Rajasthan
- 2. Basilica of Bom Jesu Goa
- 3. Khajuraho Khajuraho, Madhya Pradesh
- 4. Victoria Memorial Kolkata
- 5. Sabarimala Sri Kerala, Dharmasastha Temple
- 6. Mahabodhi Temple Bodhgaya, Bihar
- 7. Char Minar Hyderabad, Andhra Pradesh
- 8. Chhatrapati Shivaji Mumbai, Maharashtra Terminus
- 9. Brihadeswara Temple Thanjavur, Tamil Nadu
- 1. T 2. T 3. F 4. T
- 1. earthquake 2. paintings
- 3. Fatehpur Sikri 4. wonders
- 1. Ashoka pillar, Buddhist Stupas, Ajanta and Ellora caves, Fatehpur Sikri, Taj Mahal, Qutab Minar, Hawa Mahal, Amber Fort, Jantar Mantar, Gol Gumbaz, Daria Daulat Bagh, Char Minar are some of the monuments in our country which are very old and which have been visited by people for their architectural value and cultural importance.
- 2. Historical buildings and monuments are a great source of learning about our past. We come to know about the people, their lifestyle and many other fascinating facts about the life in those days.
- 3. It is important to protect historical buildings and monuments because they tell the glory of our magnificent past.
- 4. Heritage is our legacy from the past, what we live with today and what we pass on to future generations. These are places of historic, scientific and cultural importance. These buildings are declared by the government as public property and are known as heritage buildings.

Think and write

1. "I have enforced the law against killing certain animals and many others, but the greatest progress of righteousness among men comes from the exportation in favour of non-injury to life and abstention from killing living beings."
2. Two qualities of Emperor Ashoka are :
 - (a) He was brave
 - (b) He was kind
3. Yes/No (Students may provide any suitable answer)
4. When we visit a heritage building or a monument, we try to know the following things :
 - (a) Who built it?
 - (b) What material used to built it?
 - (c) How old it is?
 - (d) Story behind it.
 - (e) Importance in present time.

30. THE SPIRIT OF ADVENTURE

- 1. F 2. T 3. F 4. T
- 1. acute shortage of water 2. weeds
3. harvesting 4. wheat
- 1. Small fields are ploughed with the help of animals while large fields are ploughed using tractors nowadays.
2. Farmers use combine machine to harvest and thresh the crops.
3. Water is supplied to the fields with the help of tube wells, electric pumps or canals. Farmer use various method of irrigation depending on the availability of water. Sprinkler irrigation is used where large area is to be watered with less quantity of water. Drip irrigation is useful in areas having acute shortage of water.

4. Farmers use metal or mud containers to store grains.
Large amount of grains are stored in silos.

Think and write

1. Yes, I get wheat and rice throughout the year in the market.
2. Vegetable and fruits we get in summer are gourd, bitter gourd, cucumber, jack fruit, watermelon, lemon, mango, etc.
3. Vegetable and fruits available in winter are lettuce, sarso, pea, cauliflower, cabbage, radish, ginger, carrot, apple, guava, banana, orange, etc.
4. Apart from vegetables and fruits, knives are used to cut bread, cheese, butter, fish and meat in the kitchen.