



Mattine Warriors

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Teacher's Learning Materials

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d.

	Boo	ok-0		Cow		Milk
Chapter 1				Hen		Egg
0				Bee		Honey
Chapter 3				Chapter 34		
<u>Grandfath</u>	her	Grandmot	her	Sleeping		Moon
Father		Mother		Morning		Sun
Son		Daughter		Chapter 35		
		Daughter		2		3
<u>Chapter 4</u> Ear		Neck		4		1
		NECK		Chapter 38		
Chapter 5	arpopor Poc	ke Lunch ho	w Doncil	Policeman	1	Firefighter
	ai periei, boc	oks, Lunch bo	ix, rencu	Postman		Doctor
Chapter 6				Chapter 39		
Strawberr	у			Shoes		Socks
Chapter 8	(\land)	(Δ)		Shirt		Pent
(✓) (४)	(✓) (∠)	(✓) (४)		Тор		Skirt
(×)	(✓)	(×)		Chapter 42		
Chapter 9	Calu	Carr		Burger	Toffee	lce cream
Balloon	Cake	Сар		Pizza	101100	
Toffee	Gift			Chapter 43		
Chapter 10		- <i>,</i>		-	. Coco co	ola, Pizza, Pasta, Burger,
	nilli, Carrot, 1	lomato		Sandwich,		ia, rasa, rasa, barger,
Chapter 17		F				ok-1
2		5		Chanter 2		
6		4		<u>Chapter 2</u>	2 (b) 4 (b) [(a)
3		1		A. 1. (b), 2. (a)		
Chapter 23		D : 1		B. 1. (e), 2. (a)		
Bird		Bird		C. 1. Irue, 2. I	rue, 3. False	e, 4. False, 5. True
Owl		Owl				Creative Skills
Crow		Crow			2. Irritate,	3. dirty smell, 4. enjoy,
Peacock		Peacock		5. happy		
<u>Chapter 24</u>				<u>Chapter 3</u>	_ · .	
Rat		Cheese				Breakfast, Toothpaste
Rabbit		Carrot		-	•	erms, 4. Bath, 5. Exercise
Cow		Grass		B. 1. (d), 2. (c)		
Monkey		Banana		C. 1. False, 2.	False, 3. Tru	e, 4. True, 5. False
<u>Chapter 28</u>						Creative Skills
Bee		Butterfly		0	owel, 2. Tri	imming nails, 3. Washing
Spider	Grasshop	per	Aadybug	hands		
<u>Chapter 29</u>				Chapter 4		4 .
Sheep		Woollen		A. 1. (a), 2. (b)	, 3. (a), 4. (a)), 5. (b)

B. 1. False, 2. True, 3. True, 4. True, 5. False

Creative Skills

Mummy Dada Dadi

Chapter 5

- A. 1. share, 2. cook, 3. watch, 4. celebrate, 5. work
- **B.** 1. Grand parents
 - 2. Family 4. Father
 - 3. Mother 5. Mother
- .

Creative Skills

1. Using Towel, 2. Trimming nails, 3. Washing hands

Chapter 6

- A. 1. safe, 2. cook, 3. drawing, 4. wash, 5. Pucca
- B. 1. True, 2. False, 3. True, 4. True, 5. False
- **C.** 1. We all need a house to live in. It protects us form heat, cold, rain, wind, thieves and wild animals.
 - 2. When we go to the village, we see small houses. They are made of mud and straw. They are called Kuccha houses.

In cities, we see small, big and large houses. They are made of bricks, rod, cement and steel. They are strong and are called pucca house.

- 3. We sleep in bedroom.
- 4. We use the bathroom for taking bath etc.
- 5. Guest sit in the drawing room.

Chapter 7

Milk, Fruit, Bread

- **A.** 1. (b), 2. (b), 3. (a), 4. (b), 5. (a)
- **B.** 1. grow; healthy, 2. energy, 3. protective, 4. Fruits, 5. meal

Milk

- C. 1. Chicken
 - 2. Appl Banana
 - 3. Brinjal Lady finger
 - 4. Cow Goats
 - 5. Potato Tomato

Chapter 8

- A. 1. False, 2. False, 3. True, 4. True, 5. True
- **B.** 1. (d), 2. (c), 3. (e), 4. (b), 5. (a)

- **C.** 1. We wear different clothes because in different seasons the weather is different and we wear clothes according to the weather.
 - 2. We wear clothes to protect our body from heat, cold, rain, dust, germ and insects bites.
 - 3. We should wear cotton clothes and light coloured clothes in summer.
 - 4. We should wear thick and warm clothes that is woollen clothes in winter. They provide warmth to our body and does not absord the cool air. They protect us from cold.
 - 5. There are some things which we can wear on a rainy day-
 - 1. Raincoat 2. Gumboots
 - 3. Carry an Umbrella

Creative Skills

1. UMBRELLA	2. WOOLLEN
3. COTTON	4. GUMBOOTS
5. RAINCOAT	

Chapter 9

- **A.** 1. bus driver, 2. sweeper, 3. principal, 4. librarian, 5. students
- B. 1. True, 2. False, 3. True, 4. False, 5. True

- A. 1. neighbourhood, 2. neighbours, 3. haircut,4. bank, 5. pharmacy
- **B.** 1. (c), 2. (d), 3. (e), 4. (a), 5. (b)
- **C.** 1. People who live near one another are called neighbours.
 - 2. Different places in the neighbourhood
 - (a) A park (g) Police station
 - (b) A supermarket (h) A fire station
 - (c) A hospital (i) A post office
 - (d) A pharmacy (j) Petrol pump
 - (e) A school (k) Hair saloon
 - (f) A bank
 - 3. A post office is a place from where we post lattres and parcels.
 - 4. A police station is a place where we file the report to the police officer.
 - 5. Neighbourhood is important for us because they are the first person who help us.
- 3

Chapter 11

Nurse	Hospital
Postman	Post house
Police man	Police station

- **A.** 1. clothes, 2. newspaper, 3. doctor, 4. plumber, 5. sweeper
- B. 1. False, 2. False, 3. True, 4. True, 5. False
- **C.** 1. People who help us in our daily life with the work they do are called community helpers.
 - 2. The plumber fits and repairs the leaking taps and water pipes.
 - 3. Cobbler mends our shoes.
 - 4. Milkman brings milk.
 - 5. The doctor treats patients the nurse takes care of the patients.

Chapter 12

(√)	(√)	(√)	(√)
(√)	(√)	(√)	(√)

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (a)
- **B.** 1. pets, 2. gills, 3. forest, 4. plant-eating, 5. Leopard
- **C.** 1. False, 2. True, 3. True, 4. True, 5. True

Chapter 13

- **A.** 1. water, 2. medicines, 3. climbers, 4. strong, 5. shrubs
- B. 1. Rose Marigold
 - 2. Mango Neem
 - 3. Pumpkin Watermelon
 - 4. Tulsi Mint
 - 5. Pea Money plants
- **C.** 1. Each plants differs from other plant in size, shape, colour, smell, place of growth etc.
 - 2. Trees, shrubs, herbs, climbers and creepers are some of the different types of plants.
 - 3. Herbs are very small and weak plants examples - Tulsi, Coriander Shrubs are small to medium - sized woody Plants and smaller than trees. examples - Marigold, Rose
 - 4. Trees are big, tall and strong plants. They have many branches that have leaves, flowers and fruits.
 - 5. Climbers are plants with weak stems. They

cannot stand straight and need support to grow. Exe-Pea, Money-plant etc.

Creepers are weak plants that mostly grow along the ground. Ex- Pumpkin, Watermelon etc.

Chapter 14

Christmas

- **A.** 1. house, 2. Diwali, 3. 25 December, 4. Langar, 5. Ramzan
- B. 1. False, 2. True, 3. True, 4. False, 5. False
- **C.** 1. (d), 2. (c), 3. (e), 4. (a), 5. (b)

Chapter 15

Bus	Bus driver
Aeroplane	Pilot
Ship	Captain

- **A.** 1. (b), 2. (a), 3. (), 4. (b), 5. (b)
- **B.** 1. Aeroplane Helicopter
- 2. Bus Train
- 3. Ship Yacht
 - 4. Letter Newspaper
- **C.** 1. The means of transport are also called vehicles. Different vehicles help us to travel on land, water and in air.
 - 2. Examples are land transport -Bus, Train, Car, Scooter, motorcycle etc.
 - 3. Vehicles that travel on water are called water transport. Examples are ship, yacht, boat etc.
 - 4. Different devices used to communicate with one another are called means of communication.
 - 5. When people talk or write to some-one to share knowledge and ideas, it is called communication Means of communication -
 - (a) Letters
 - (b) Telephones and Mobile phones
 - (c) Television and Radio
 - (d) Newspaper
 - (e) E-mails

- A. 1. feel, 2. air, 3. clothes, 4. resource, 5. Rain
- B. 1. False, 2. False, 3. False, 4. True, 5. True
- **C.** 1. We need air to breathe. Plants and animals also need air.

- 2. Moving air is called wind. Breeze is a soft wind while storm is a strong wind which causes a lot of damage.
- 3. Uses of Air-

(a) Filled up with ballons, balls and swimming tubes.

- (b) Flying kites
- (c) Dry clothes
- (d) To makes fire burn
- (e) Filled in the tube tyres etc.
- 4. Water is an essential resource. We need water to live and grow.

The various activities for which we use water are bathing, drinking, cooking, cleaning, washing, growing and watering plant etc.

5. Rain is the main source of water. Rain water fills rivers, lakes, streams, ponds, seas and oceans.

Chapter 17

- **A.** 1. weather, 2. balance, 3. hottest, 4. rainy, 5. spring
- **B.** 1. True, 2. True, 3. True, 4. True
- **C.** 1. Windy 2. Breezy
 - 3. Hot 4. Windy
 - 5. Car

Test Paper-1

- **A.** 1. parts, 2. healthy, 3. house, 4. mud; straw, 5. calcium
- B. 1. True, 2. False, 3. False, 4. True, 5. False
- **C.** 1. (c), 2. (e), 3. (a), 4. (b), 5. (d)
- **D.** 1. Drawing room 2. A principal 3. Umbrella

Test Paper-2

- A. 1. shoes, 2. Lion, 3. thin; soft, 4. Eid, 5. water
- **B.** 1. True, 2. False, 3. False, 4. False, 5. True
- **C.** 1. (c), 2. (a), 3. (e), 4. (b), 5. (d)
- **D.** 1. Ship 2. Hot
 - 3. Holi

Book-2

Chapter 1

- **A.** 1. (a), 2. (a), 3. (a), 4. (b), 5. (b)
- **B.** 1. (b), 2. (d), 3. (e), 4. (a), 5. (c)

- **C.** 1. The body parts that we can see from outside and touch with our hands are called external body parts.
 - 2. Face (a) Mouth We use our mouth to talk, to eat and to breathe.

(b) Nose - We smell things with our nose. We also breathe through our nose.

(c) Nostrils - These the two holes in our nose.

(d) Cheeks - The parts of our face between our nose and our ears.

(a) Legs = (a) Skin - The parts of our leg below the knee.

(b) Foot - The parts at the very end of our legs that we use to stand up, walk and run.

(c) Hips - The joints that attaches our legs to the rest of our body.

(d) Knee - The joint in the middle of our leg that lets us bend it so we can walk and run.

(e) Toes - Five small digits attached to the end of each of our feet.

- 3. Hand The parts at the ends of our arms where our fingers are located. We use our hands to pick things up, scratch an itch, wave hello and lots more.
- 4. The parts of the body that perform a specific function are called organs. Human being have five sense organs i.e. eyes, ear, nose, tongue, skin.
- 5. Internal parts of the body We have different parts inside our body. These parts are called internal body parts.

(a) Heart - Our heart pumps our blood around our body.

(b) Lungs - When we breathe, the air goes into our lungs.

(c) Brain - This is our "thinking machine" inside our head.

(d) Veins - These transport blood through our body. They are a like little tubes.

(e) Throat - Food goes down by the throat to get to our stomach.

(f) Stomach - Your food goes in the stomach when we swallow it.



(g) Kidneys - The organs that process all our body waste.

(h) Liver - The organ that cleans our blood.

Chapter 2

- A. 1. Protection, 2. Home, 3. Language, 4. Food, 5. younger
- B. 1. True, 2. False, 3. True, 4. False, 5. False
- **C.** 1. There are two types of family.

(a) Nuclear Family (b) Joint Family Nuclear Family - A family consisting of a pair of adults and their children is called small family or nuclear family.

Joint family - Joint family is a large in size consisting of members of three or more generation such as grandparents, parents, siblings, uncles, aunts and cousins living in one home.

2. Importance of Family - Family is the most important in our life because :

(a) Family provides love, protection and guidence.

(b) Family helps to build our self-confidence and self-esteem.

(c) Family provide a sense of belongingness.

3. Members of the family celebrate every festival together. All the family members love and care for each other.

Living together in one home as one unit. All members of the family share responsibility of the household work.

- 4. Families may follow different religion such as Hinduism, Islam, and Christianity etc. All families follow different cultures. They have different food habits and speak different language size of the families may also differ from one another.
- 5. Grand parents share responsibility by doing gardening, going to the market to buy vegetables, etc.

Mother cooks food for everyone, take care of children.

Father goes to the office and support the family financially, helps out other in household work on weekends.

Elder brother; sister help their siblings in school work, keeping their toys and after play. Youngers can help by keeping their room neat and clean and help other members.

<u>Chapter 3</u>

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (b)
- **B.** 1. (c), 2. (d), 3. (e), 4. (a), 5. (b)
- C. 1. False, 2. True, 3. False, 4. True, 5. False
- **D.** 1. Clothes protects us from heat, cold rain and wind. It also protects us from insect bites.
 - 2. People wear bright and colourful clothes during festivals and on special occasions like birthdays and weddings.

We wear loose and comfortable clothes when we exercise. Such clothes help us to move and strech easily.

- 3. We also wear loose and comfortable dress when we go to bed at night. It is called night dress.
- 4. Many people wear special clothes when they go to work. We can guess what work they do by looking at their clothes. Such special clothes are called uniforms. Some artists such a magicians and actors

Some artists such a magicians and actors also wear special clothes. The clothes that they wear while performing their act are called costumes.

5. We can take care of clothes in the following ways -

(a) Eat carefully to avoid food and drink from spilling on clothes.

(b) Wash the clothes with water and soap.

(c) Iron the clothes well after drying.

(d) Keep clothes neatly in your cupboard.

(e) Use napthalene balls or dried neem leaves to keep away insects from damaging the clothes.

<u>Chapter 4</u>

- **A.** 1. An Igloo, 2. Kutcha, 3. Roof, 4. Window, 5. plains
- B. 1. False, 2. False, 3. True, 4. True, 5. False
- C. 1. Pucca house 2. Kutcha house

3. Floor

4. Soldiers/Tent

- 5. Ceilling
- **D.** 1. (c), 2. (e), 3. (d), 4. (b), 5. (a)
- **E.** 1. Our house protect us from many things like heat, cold, rain, wind, storm, wild animals land thieves.
 - 2. There are two types of house
 - (a) Kuccha house
 - (b) Pucca house
 - 3. Pucca houses are strong houses. They are made up of wood, bricks, cement, iron rods and steel. These houses are strong and withstand harsh weather.

Kutcha house are made up of wood, mud, straw and dry leaves. They are not very strong. Some have thatched roofs also.

- Some people live at one place for a very short time. They build houses that can be moved from one place to another. Such houses are called temporary houses.
 Caravan, tent and houseboats are types of temporary houses.
- 5. Most of us live in houses made out of bricks, cement and steel. Wood and glass are used to make doors and windows. Many people use other things to make their houses, such as straw, wood, mud and stones.
- Roof: Covering on the top of the house.
 Ceiling: The part of a room that is over our head.

Wall: It devides the house into rooms.

Door : An opening through which we enter or leave a room on a house.

Window : An opening in the wall that lets in air and light.

Floor : The surface of a house on which we walls.

Chapter 5

- **A.** 1. art, 2. built, 3. ventilation, 4. sunlight, 5. health
- **B.** 1. (d), 2. (e), 3. (a), 4. (b), 5. (c)
- **C.** 1. An Ideal house should have doors and windows to let in fresh air and sunlight.
 - 2. Special features of ideal house are -

(a) Ventilation (b) Sunlight (c) Sanitation

- 3. Ventilation is important as it prevents air pollutants which may effect our health. Air enters our home from door or windows, so the house must have enough windows and doors to let the fresh air in and stale air out.
- 4. The waste of water which is not properly managed can cause health problems. A proper sanitation plan is required while building a house.
- 5. Following are the few ways in which we can keep a house clean :

(a) Throw waste in the dustbins.

(b) Dust the furniture to remove dust and diet.

(c) Use disinfectant to clean the kitchen and bathroom floors.

(d) Sweep and mop the floor daily and keep the surroundings clean.

(e) Remove the cobwebs Wash the curtains regularly.

(f) Keep the dustbins covered to keep away flies, mosquitoes and germs.

(g) Open your shoes or wipe your shoes on the doormat before entering the house.

<u>Chapter 6</u>

Medicine	Medical store
Rice	Shop
Letter	Post office
Money	Bank

- A. 1. market, 2. jewellery, 3. 100, 4. hospital, 5. stamps; inland
- B. 1. False, 2. True, 3. True, 4. True, 5. False
- **C.** 1. Bank, 2. Ambulance, 3. Post office, 4. Market, 5. Police station
- **D.** 1. The area or place near or around our house is called neighbourhood.
 - 2. People who live in the same neighbourhood are our neighbours.
 - 3. Our neighbourhood has many different places like markets, parks, shops, houses and buildings etc.
 - 4. Bank : We keep our money and jewellery

safe in the bank. We also deposit and withdraw money when we need it. It also provided financial services to their customers.

Police station : A police station helps to keep the people in his neighbourhood safe. It help to solve our matters. We should dial 100 when we need the policeman's help in an emergency.

5. A market consists of shops selling different things. We buy thing like milk, bread, sugar, medicines, fruits and vegetable from the market.

Chapter 7

- **A.** 1. seat-belt, 2. First-aid; bandage, 3. toys, 4. road; zebra crossing, 5. safety rules
- B. 1. False, 2. True, 3. True, 4. False, 5. True
- **C.** 1. Safety means protecting ourselves. We should follow some rules. These rules that keep us safe are called safety rules.
 - 2. Safety rules follow at home :
 - (a) Don't talk to strangers. Don't eat anything given to you by a stranger.

(b) Don't play with matchsticks, knives, scissors or any other sharp objects.

(c) Do not touch the electric switches and wires with wet hands.

We should always keep our toys in their place after playing or else other may trip and fall.

- 3. List the safety rules on road :
 - (a) We should always walk on the footpath.

(b) We should always cross the road at the zebra crossing.

(c) We should always wear a seat belt while travelling in a car.

(d) We should never put our hands or head out of a moving vehicle.

(e) We should never run or play on the road.

(f) We should always hold our parent's hand while walking on the road or crossing roads.

(g) We should always throw waste in the dustbins.

(h) We should always stand in a queu to get on or down the school bus.

- 4. We should always keep our toys in their place after playing or else others may trip and falls.
- 5. First-aid is the first help given to someone who gets hurt.

A first-aid box contains things such as cotton, band-aid, bandage, scissors, antiseptic soap and ointment. These are used to treat wounds, bruises or to stop bleeding.

D. 1. Ballon, 2. Football

<u>Chapter 8</u>

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (a)
- B. 1. False, 2. True, 3. True, 4. False, 5. True
- **C.** 1. Occupation is the work which a people does to earn a living or money.
 - 2. A cobbler mend or repairs our shoes. A carpenter makes furniture from wood.
 - 3. A plumber repairs leaking taps and pipes.
 - 4. A garbage collector collects garbage from our homes. He keeps our area clean.
 - 5. A green grocer sells fresh fruits and vegetables to us.

<u>Chapter 9</u>

Grapes, Orange, Apple, Tomato, Cherry, Garbage, Cucumber, Strawberry,

- **A.** 1. water, 2. structure, 3. carbohydrates, 4. infections, 5. Food
- **B.** 1. Potatoes, Sugar
 - 2. Meat, Pulses
 - 3. Milk, Vegetables
 - 4. Potatoes, Lady-finger

5. Fish, Chicken

- C. 1. There are different types of food :
 (a) Energy-giving food
 (b) Body-building food
 (c) Protection found
 - (c) Protective food
 - 2. Body-building : The food we eat become a part of us. Thus, one of the most important functions of food is that of building the body. The food eaten each day helps to maintain the structure of the body.
 - 3. The body needs energy to carry out the actives like jumping, walking, playing etc.

Energy is mainly provided to our body through carbohydrates and fats in the food.

- 4. The function of food is to regulate the activities of the body. It includes regulation of such varied activities as beating of the heart, maintenance of body temperature, muscle contraction, control of water balance, clothing of blood, removal of waste products from the body etc. Food also protects us from various infections, diseases and injuries.
- 5. Different people have different food habits. A vegetarian is the lone who eats only food from plant sources and does not eat meat, fish and eggs. A non-vegetarian is the one who eats animal products such as meat, fish and eggs along with plant products.

Chapter 10

- **A.** 1. (b), 2. (a), 3. (b), 4. (a), 5. (b)
- **B.** 1. (e), 2. (d), 3. (b), 4. (c), 5. (a)
- **C.** 1. Creepers, 2. air; water; soil, 3. flowers, 4. stand; grow, 5. Roots
- **C.** 1. Plants need air, water, soil and sunlight to grow.
 - 2. There are some different types of plants :
 - (a) Trees (e) Shrubs
 - (b) Climbers (f) Wild plants
 - (c) Creepers (g) Weeds
 - (d) Herbs (h) Water plants
 - 3. When seeds are planted, they first grow roots. Once these roots take hold, a small plants will begin to emerge and eventually break through the soil. It contains the food the seed needs while it is growing roots and forming into a small part. The three things plants need to grow are light, food and water.
 - 4. **Branches :** It gives rise to leaves. It carries water and food to different parts of the plant.

Fruit: It bears seeds

Flowers: It changes into a fruit.

Leaf: It makes food for the plants.

- Stem : It keeps the plant upright.
- **Root :** It holds the plant into the soil.

- 5. List the uses of plants :
 - (a) Food
 - (b) Utensils and Furniture
 - (c) Medicines
 - (d) Fibres
 - (e) Perfumes
 - (f) Clean Air

Chapter 11

- A. 1. Sparrow; owl
 - 2. Ants; bug
 - 3. Bat; whale
 - 4. Frogs; Salamanders
 - 5. Lizard; Snake
 - 6. Gold-fish; Shark
- **B.** 1. six, 2. Birds, 3. fish, 4. gills, 5. Chicken; Ducklings
- **C.** 1. (d), 2. (a), 3. (e), 4. (c), 5. (b)
- **C.** 1. Animals are of different shapes, size and nature.
 - 2. Birds are the animals that can fly. Their wings help them to fly.
 - 3. The animals like elephant, monkey, deer, bear, horse, goat, cow human being, etc. are called mammals. Bat is a flying mammal. Whale is a mammal that lives in water.
 - 4. Amphibians : The animals that can live both in water and or land are called amphibians. Example : Frogs, toads etc.

Reptiles : The animals that crawl along with the ground are called reptiles. Example : Lizard, Chameleon etc.

- 5. Insects are small animals. We see insects all around us. Animal like honey-bee, ants, bug, butterfly, house-fly are some insects. Their body is divided into three parts. They have six legs. Most insects have wings. Wings help hem to fly.
- 6. A fish lives in the water. The body of the fish is covered with scales. It has fins that help it to swim in water. It also has gills that help them to breathe.

Catfish, goldfish, jellyfish, bluegill, shark and dolphin are some of the common fishes.



Chapter 12

- **A.** 1. (b), 2. (a), 3. (b), 4. (a), 5. (b)
- **B.** 1. True, 2. False, 3. True, 4. True, 5. False
- C. 1. Trains, Cars
 2. Aeroplanes, Helicopters
 3. Ships, Boats
 4. Cycle, Rickshaw
 5. Camels, Yaks
- **D.** 1. W, 2. L, 3. A, 4. L, 5. L, 6. W
- **E.** 1. In early days, people use to walk long miles or else use animals like horses, camels and elephants for travelling.
 - 2. Land transport, Air transport, Water transport are the three different means of transport.
 - 3. Vehicles such as cycles and rickshaws are driven by human beings. Such vehicles only need physical energy of human being and do not need any fuel to move. These are called human-powered vehicles.
 - 4. Animals like elephants, bullocks, horses and camels are used to pull carts and carriages to carry people and goods from one place to another.
 - 5. One of the oldest type of transportation is by boat.

Chapter 13

- **A.** 1. monuments, 2. New Delhi, 3. Tiranga, 4. 24, 5. Rabindra Nath Tagore
- **B.** 1. (c), 2. (a), 3. (e), 4. (b), 5. (d)
- **C.** 1. People in India follow different religions. They speak different languages. They eat different kinds of food and wear different clothes. They also celebrate different festivals. We an say India is a diverse country.
 - 2. Our National flag is the pride of our country. It has bands of three colours. The top colours is saffron, in between is white and the bottom colour is green. On the white band, there is a wheel with 24 spokes which is called the Ashoka Chakra. Our National flag is also called the Tiranga or tricolour. The three colours on the band stands for the following :

(a) Saffron stands for covrage.

(b) White stands for purity.

(c) Green stands for prosperity.

- 3. Our National Anthem was written by Rabindranath Tagore.
- 4. National symbol of India means national identity elements of India. National symbols of India help in making a unique image of it to the world.
- 5. The lion capital of Ashoka at Sarnath is the national emblem of India. It consists of four Asiatic Lions standing back to back on a circular abacus. The abacus has sculptures of an elephant, a horse, a bull and a lion. These are separated by wheel in between.

Chapter 14

- **A.** 1. (b), 2. (b), 3. (a), 4. (b), 5. (a)
- **B.** 1. **Diwali :** Diwali is the festival of lights. People worship goddess Lakshmi, decorate their houses. Children burst crackers.

2. **Dussehra :** This festival marks the victory of Lord Rama over the demon king Ravana. It is also called Vijay Dashmi.

3. **Holi :** The festival of Holi is the celebration of colours. Holi is a spring festival, celebrated in the month of March.

4. **Lohri :** Lohri is celebrated in Punjab. Gidha and bhangra are performed during Lohri.

5. **Christmas :** Christmas is celebrated as the birthday of Jesus Christ. People decorate.

- **C.** 1. True, 2. True, 3. False, 4. True, 5. False
- D. 1. Diwali is the festivals of lights. On this day, people worship goddess Lakshmi. People decorate their houses and wear new clothes. They also exchange sweets. Children burst crackers.
 - Christmas is celebrated as the birthday of Jesus Christ. People decorate Christmas trees and exchange gifts with loved ones. And churches are decorated beautifully. Eid is a festival that marks the end of the Ramzan. Ramzan is the holy month in which Muslims keep fast. On the day of the festival, Muslims gather in large groups at the mosques and offer their prayers or Namaz.

Also a special sweet dish, called Sewaiyan is cooked.

- Gurpurab : Gurpurab is celebrated to mark the birthday of the ten sikh Gurus.
 Lohri : Lohri is celebrated in Punjab. People dance and sing around bonfires. Gidha and bhangra are performed during Lohri.
- 4. This festival marks the victory of Lord Rama over the demon king Ravana. Dussehra is celebrated twenty days before Deepawali. Huge Effigies of Ravana, Kumbhakaran and Meghnatha are burnt in big grounds. It is also called the Vijay Dashmi.
- 5. Ganesh Chaturthi is the festival devoted to the elephant god Ganesha. This festival is celebrated in Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka. People brings idols of Lord Ganesha at home and worship it. They also make sweets called Modak and offer them to Lord Ganesha.

Chapter 15

- A. 1. Land, 2. Crust, 3. continents, 4. rock, 5. ocean
- **B.** 1. (c), 2. (e), 3. (a), 4. (b), 5. (d)
- **C.** 1. Crust, 2. Mantle, 3. Mountain, 4. Core, 5. Weathering
- **D.** 1. Our earth is a beautiful planet. It is covered with land and water. About 74% of the surface of Earth is covered by liquid or frozen water that is why it is also called the blue planet.
 - 2. Layers of Earth : Our Earth is made of three main layers. Outer layer of the earth is called crust. We live on solid outer layer of the earth.

Under the crust lies the mantle. It is made up of hot molten rock. Beneath the mantle is core. This is the deepest and hottest layer of the earth.

3. There are seven very large landmasses on Earth called continents different landforms are found on the earth such as mountain, valley and plains. A large elevated earth surface is called mountain. Hill is a raised area of land but not high and steep as mountain. Low land between hills and mountain are called valley. Large area of flat land is called plains.

- 4. There are different shapes, size and in colour on earth, they made up of different minerals soil is importants resource on the earth that supports plants life and plant provide food for animals and people.
- 5. Weathering and frequent soil erosion results in change in landforms.

Chapter 16

- **A.** 1. (b), 2. (a), 3. (b), 4. (b), 5. (b)
- **B.** 1. False, 2. True, 3. True, 4. False, 5. True
- **C.** 1. Humans, animals and plants need air to breathe. The classification of wind is based on it's speeds.
 - Air has many uses :

 Air is use to fill in tyres and tubes.
 We can fly kites in wind.
 Wind helps to sail a boat.
 Wind moves the fan of the windmill.
 Wind helps to dry wet clothes.
 Air is filled in balls and balloons.
 - 3. Human beings need water for many activities in their daily life. Plants need water to make food. Animals need water to drink and live. Water animals like fish, octopus, whale etc. live in the water itself.
 - 4. Sources of water :

Rain is the main source of water. When it rains, water gets collected in rivers, ponds, lakes, seas and oceans. Some rainwater seeps into the soil. This forms the groundwater. Tube wells, hand pumps help us to get groundwater.

5. We can keep the air clean by :

(a) Growing more trees. Trees help to keep the air fresh and clean.

(b) Walking and cycling instead of driving vehicles run by fuel.

(c) Not to burn the garbage and throw it in the dustbin.

We can conserve water by:

(a) Using bucket and mug to take bath instead of shower.

(b) Closing the taps when not in use.



- (c) Using bucket and mug to wash cars.
- (d) Repairing leaky taps and pipes quickly.
- (e) Collecting rainwater and storing it.

Chapter 17

- **A.** 1. weather, 2. long; short, 3. hot summer, 4. Autumn, 5. February; march
- B. 1. True, 2. False, 3. True, 4. True, 5. False
- **C.** 1. (c), 2. (a), 3. (e), 4. (b), 5. (d)
- D. 1. The condition of air of a place of a given time is called weather.Hot, cold, sunny, cloudy, windy, breeze and rainy are the different types of water.
 - 2. When the weather remains the same for a long time. It is called season. Summer, monsoon, autumn, winter and spring are five main seasons in India.
 - 3. Summer : Summer is the hottest season of the year. Sun rays fall straight on this part of the earth. Days are long and nights are short in summer. In summer, we wear light cotton clothes. It helps us cool.

Winter : Winter is the coldest season of the year. We wear thick wollen clothes to keep ourselves warm. At some places like the mountains there in snowfall. October, November, December and January are the months of winter season.

Autumn : In Autumn, days become shorter and, although it is often warm and sunny during the daytime, it can be cold at night.

Spring : This is the pleasant time of the year when flowers are in full bloom. Trees grow new leaves during spring. It is neither cold or hot season. Day and nights are equal. Feburary and March are the months of spring season.

5. We use simple weather instruments that can enrich the understanding of weather. A thermometer is sued to measure temperature. Wind is observed using a wind vane. A rain guage can measure precipitation.

Test Paper-1

A. 1. external body parts, 2. love, 3. costumes, 4. kutcha, 5. school

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- **B.** 1. True, 2. True, 3. False, 4. True, 5. False
- **C.** 1. (d), 2. (e), 3. (a), 4. (b), 5. (c)
- D. 1. Igloo 2. A farmer
 - 3. The Post Office

Test Paper-2

- A. 1. energy, 2. Coconut, 3. Insects, 4. trade, 5. New Delhi
- B. 1. True, 2. False, 3. False, 4. True, 5. False
- **C.** 1. (c), 2. (e), 3. (a), 4. (d), 5. (b)
- **D.** 1. Mountain3. Lizard2. National Emblem

Book-3

Chapter 1

- **A.** 1. family, 2. responsibility, 3. nuclear, 4. Extended, 5. grandparents
- B. 1. False, 2. True, 3. True, 4. False, 5. False
- **C.** 1. A family is a group of people who are related to one another. It includes a mother, father, children and grand parents.

Types of family structures :

- (a) Nuclear Family
- (b) Single Parent Family
- (c) Extended Family
- 2. Nuclear Family : This family type consists of mother, Father and children. Children in nuclear families receive strength and stability from the parents.

Single parent family : The single parent family consists of one parent raising one or more children on this own. Often, a single family is a mother with her children, although there are single fathers as well.

- 3. Extended family : This family includes many relatives living together and working toward common goals, such as raising the children and keeping up with the household duties. Many extended families include cousins, aunts or uncles and grandparents living together.
- 4. Family values : As we live in a family, we go through many things. We enjoy, share, work, play and take care of one another. It teaches

us values and principles to live our lives as a good human being.

There are some values a family :

(a) We should be kind, polite and helpful towards others.

(b) We should never cheat others. Always be honest.

(c) We should respect all people for whoever they are.

(d) We should never lie and always be good to our friends and family.

(e) We should take personal responsibility of some works.

 Members of a family are related to one another. They are called relatives. It is represented like a tree called the family tree. While studying or making a family tree, you must remember the following :

(a) A family tree represents many generations of people. A generation includes people in the family who were born around the some time.

(b) A family tree shows grandparents on the top. They represent the first generation of a family tree.

(c) Parents, uncles and aunts represent the second generation. The second generation follows the first generation.

(d) Children belong to the third generation. The third generation follows the second generation.

Chapter 2

- **A.** 1. (b), 2. (a), 3. (b), 4. (a), 5. (b)
- B. 1. orphanages, 2. special care, 3. hear; spea, 4. Physically, 5. Louis Braille
- **C.** 1. Any person who might need extra help because of a medical, emotional, or learning problem is called a special person.

Someone who is physically challenged has a problem with their body that makes it difficult for them to do things that other people can do easily. So they have special needs.

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- 2. Some people cannot see, hear and speak. Some people cannot move or walk properly. Some one who is physically challenged has a problem with their body that makes it difficult for them to do things that other people can do easily.
- 3. Mentally challenged people are those who suffer from mental disorder. Mental illness is a general term for a group of illnesses that affect the mind or brain. A person with a mental health condition may experience difficulty concentrating, which can sometimes be a result of medication.

Here are some way to take care for mentally and physically change.

(a) We can help them to cross the road.

(b) We can talk to the deaf and dumb people in sign language.

(c) We can read out books or newspapers to people who are visually impaired.

(d) We can help them to fetch things.

(e) We can walk them to the park and (f) enjoy with them.

(g) We can play games with them.

4. Methods that empower special people :

Braille : The Braille system is away of writing things. It is named after Louis Braille, the french man who invented it. The system is used by blind people to read and write.

Hearing aid : It is a hearing device which helps people who cannot hear properly listen to sounds.

Crutches and walking sticks : A crutch is a stick whose top fits round or under the user's arm, which someone with an injured foot or leg uses to support their weight when walking.

Sign language : A sign language means communicating using facial expressions, gestures and movements of the body. A sign language helps those who can not hear and speak to communicate with others.

5. Homeless people who have no fixed home

and have lost their parents at an early age are known as orphans.

There are special homes where such people live. It is called orphange.

Chapter 3

- **A.** 1. occupation, 2. Nurses, 3. Menders; fitters, 4. Sarva Shiksha Abhiyaan, 5. leisure time
- B. 1. True, 2. 000, 3. False, 4. False, 5. True
- **C.** 1. looks after the sick
 - 2. dries buses and cars
 - 3. teaches in a school
 - 4. stitches clothes
 - 5. builds houses
- D. 1. Grocers, 2. Carpenters, 3. Masons, 4. Dancers, 5. Stationers
- E. 1. People do work to earn money to fulfill their basic needs which is called their occupation.
 Every person ears money for their basic needs of life. People earn money by doing some work.
 - 2. Those people who provide usefull services to the society.

(a) Policeman who catches theives and work for our safety.

(b) Teachers who teaches us.

(c) Doctors who treat patients.

(d) Nurses who look after the sick people and assist doctors.

(e) Fireman who help us to extinguish the fire.

(f) Postman who carries and delivers letters.

(g) Drivers who drive the vehicles, school buses and vans.

(h) Watchman who guard the buildings and public places.

3. Sellers : Sellers are people who sell different things. Example :

(a) Stationers who sell notebooks, pencils, diaries etc.

- (b) Green Grocers who sell fruits vegetables.
- (c) Florists who sell flowers.

Makers : They are the people who make or produce different things. Example :

(a) Tailors who stitch clothes.

(b) Carpenters who make furniture.

(c) Bakers who bake cakes, biscuits etc.

- Menders and fitters : Menders and Fitters repair different things we use. Mechanics, Electricians, Plumbers, Cobblers.
- 5. There are many children in our country who want to go to school but cannot because their parents do not have enough money to send them to school. Instead they are sent to work to earn money. Since they are not educated they earn money by cleaning cars, selling things on strects, working at small restaurants and working a laboures in factories. This practice is called child labour. The government has launched a programme called the Sarva Shiksha Abhiyaan.

<u>Chapter 4</u>

- A. 1. achievement, 2. Outdoor, 3. indoor, 4. video, 5. Local
- **B.** 1. False, 2. True, 3. True, 4. False, 5. True
- C. 1. Indoor games : Ludo, chess, carrom, billiards, Chinese checker.
 Outdoor games : Cricket, hockey, tennis, badminton, golf.
 - People played games since ages ago. Such games are called traditional games. Example : Chess, Kabaddi, Ludo some games are played only in certain regions. These are called local games. Example : Bull fighting, cook fighting, horse riding.
 - 3. The games like badminton, squash, tennis or chess, the opponent are represented by individuals. These games are called individual games. In some games like soccer football, cricket, hockey and basketball, the opponents are represented by group of people that form the team. These are called team games.
 - 4. Our ancestors played outdoor games that kept them fit.

Skipping rope, kite flying, hops cotch,



Kabaddi, Chuppan-Chhupai or hide and seek.

5. Sport is the occupation of professional players. Som sports persons play cricket, football, hockey, tennis, table tennis, badminton and boxing. They earn their living by playing these sports.

Chapter 5

- **A.** 1. (b), 2. (a), 3. (b), 4. (b), 5. (a)
- **B.** 1. True, 2. True, 3. False, 4. True, 5. True
- **C.** 1. Roots lies below the surface of the soil and hold the plant firmly in place. Its main function is to absorb water and nutrients for the plants. It store food and nutrients and provide support.

Stem can be green or brow and can be thin or thick. It holds the plant upright. It carries water and minerals from the roots to the leaves and takes the food back down the plant to be distributed and stored. It supports the branches, leaves, flowers and fruits and connects them with the roots.

2. Roots of many plants are eaten as food beetroot, radish, carrot etc. Stem of many plants are eaten as food potato, ginger etc. Leaves : Spinach, lettuce, cabbage etc.

Flowers that we eat are broccoli and cauliflower.

Fruits : Orange, mango, apple etc.

Seeds : Some fruit seeds we eat are pomegranate, banana, fig etc.

- 3. Green leaves prepare food for plant through the process of photosynthesis that's why leaves are called food factory of plants. In the process of photosynthesis leaf prepare food material in the presence of sunlight, water, carbon dioxide and green pigment called chlorophyll present in the leaf. There are large number of minute opening present on the leaves, called stomata, through which gaseous exchange takes place between the atmosphere and the plant body.
- 4. Flowers are the most attractive part of a plant. Each flower types have a different

physical structure, colour and scent from those of other flower type plants. Petals and the flowers smell attract insect and bees to pollinate the flower. Flowers used for making perfumes used for decoration, for making garlands, flower that we eat are broccoli and cauliflower.

5. The necessary ingredients plants need to make their food are : Sun light, sufficient water, Adequate air and temperature, Rich soil, space.

<u>Chapter 6</u>

- A. 1. True, 2. False, 3. True, 4. True, 5. False
- **B.** 1. Green leaves contain green pigment called chlorophyll which helps them to make their own food. That is why they are often called 'food factories' or the kitchen of the plants.
 - 2. A leaf has many parts :
 - (a) Leaf blade or lamina
 - (b) Margin
 - (c) Mid-veins
 - (d) Side veins
 - (e) Stomata
 - (f) Petiole
 - (g) Base
 - (h) Apex
 - 3. Green leaves make food for the plant by combining the carbon dioxide gas present in the air with sunlight and water.
 - 4. Leaves are of different shapes, sizes and colour:

Shape : Leaves of different plants have different shapes. They may be round, triangular, broad, long, heart shaped or needle like.

Size : Some leaves are big and broad. Some leaves are of different colours.

Colour : Most leaves are green in colour. Some leaves are of different colours.

5. There are five ways in which leaves are useful to us:

(a) Plants release oxygen which we breathe. Moreover, It keeps the air clean. (b) Some leaves like neem and tulsi are used as medicines.

(c) Roofs of mud houses in villages are made of palm, Khus and coconut leaves.

(d) Leaves of henna (mehandi) are used by women to make beautiful designs on their legs and arms.

(e) Leaves of peppermint are used to add flavour to sweets.

Chapter 7

- A. 1. False, 2. False, 3. True, 4. True, 5. True
- **B.** 1. Carnivores, 2. Herbivores, 3. Birds, 4. Amphibians, 5. Snakes, worms
- **C.** 1. tiny animal
 - 2. omnivores
 - 3. water animal
 - 4. glide on the ground
 - 5. amphibian
- **D.** 1. Different types of animals live in different places. Animals are of various types in size, shap, the way they move, the food they eat etc.

Size : Animals very in size from very small to large.

Big animals : Some animals are big in size ex- elephants, giraffes.

Small animals : Dogs, rabbits, goats, cats duck and parrots are small animals.

Tiny animals : Ants, worms, mosquitoes, flies and ladybirds are some tiny animals.

2. Different shapes Animals

- 1. With four legs and horses, deer, dogs compact bodies
- 2. With hollow bones birds and feathered wings
- 3. Many legs small insects bodies divided into three parts.
- 4. With long bodies snakes, worms without feet.
- 5. With hollow bones birds and feathered wings.
- 3. Animals are found everywhere on our planet. The place where they live most of

their time is called their habitat.

They can be grouped into different categories:

Land animals

Water animals

Animals that live both on land and in water.

4. Animals movement:

(a) Some animals like snail and snake glide on the ground, while others like spiders, cockroaches and ants crawl.

(b) Water animals swim to move in water.

(c) Birds fly from one place to another with the help of their wings.

(d) Some animals like rabbits and frogs hop.

(e) Some animals like cheetahs and deer run.

5. Categories of animals according to their food habits:

Herbivores : These animals eat plants. With their teeth, they can bit and chew plants. ex : deer, cows, elephants.

Carnivores : These animals eat the flesh of other animals. The animals which it kills and eats is called its prey. ex : tigers, lions, frogs etc.

Omnivores : These eat both plants and flesh of other animals ex : bear, mouse, crow etc.

<u>Chapter 8</u>

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (a)
- B. 1. False, 2. True, 3. True, 4. False, 5. True
- **C.** 1. Beak

Wings

Breast

tail

claw

Birds are beautiful animals that can fly. Their body is divided into three parts head, breast and a tail. They have two pairs of limbs. The claw and the wings. Birds have claws but no hands. Their wings are covered with feathers.

Different kinds of feathers
 There are three kinds of feathers
 (a) Flight feathers



(b) Body feathers.

(c) Down feathers.

3. Types and purpose of beaks of eagle, sparrow and parrot.

Shape of the beak

Purpose of the beak

This shape helps

- Eagle It has a strong, sharp and hooked beak
- Sparrow It has a small pointed beak
- Parrot It has a sharp and curved beak

eagle to catch animals as it flies This shape helps it to pick small grains This shape helps crack nuts and seeds and to tear fruits.

4. Different purpose of feet of woodpecker, and crane :

Woodpecker: Purpose of the feet:

It has two toes in front and two at the back. It has long cured claws. This shape helps them climb and hold on the trees.

Crane: Purpose of the feet:

It has long legs and the four toes are spread. This helps them to walk near the banks of there rivers and lakes to eat fish.

5. Most birds build nests to lay eggs and protect their babies. They use grass, straws, twigs, and leaves to built their nests. They use their beak to build nests. For ex- Tailor bird, etc.

Chapter 9

- A. 1. plants, 2. nutrients, 3. Carbohydrates, 4. Milk, 5. Iron
- B. 1. True, 2. False, 3. True, 4. True, 5. False
- **C.** 1. Those who do not eat meat or fish are called vegetarian.

Those who eat meat or fish or both are called non vegetarian.

 We cannot survive without food as it gives energy for proper functioning of four body.
 Food contains nutrients that novrish our body. Different types of nutrients in different quantities. These nutrients are carbohydrates, proteins, vitamins, fats, minerals. No single food contains all the nutrients in the desired quantities so- we need to eat balance diet for proper functioning of body. A diet that have proper proportions of carbohydrates, fats, proteins, vitamins, minerals, and water necessary to keep good health is called balanced diet.

- Carbohydrates : Carbohydrates are one of the main types of nutrients. It provide energy for the body, mainly for the brain and the nervous system. For example : apples, banana and grapes, potato and pumpkin and milk, wheat, maize, rice etc.-Fats : fats also provide energy for the body. The act as reserve energy when carbohydrates are not available. For ex - oil, butter, nuts, coconut, ghee, chees, cream etc.
- Proteins : Proteins is important for the maintenance and repair of the body.
 Vitamin : Vitamin helps to form and main tain healthy teeth, bones and skin. Water helps to regulate the body temperature.
- 5. **Minerals :** The body needs many minerals such as calcium, iron, sodium, potassium and many others. We need all minerals in to stay healthy in desired quantity. Our body needs calcium to maintain healthy bones and teeth. Calcium we get from milk, milk protects etc. iron is also a mineral which helps in the formation of blood. Iron rich food includes red meats, dried fruits, green leafy vegetables.
- 6. Dietary fiber or roughage is the indigestible portion of food derived from plants. Fiber is obtained from fruits, vegetables and the outer covering of cereals and pulses. Water and fiber help to clean the digestive system by removing waste from the body. Water helps to regulate the body temperature.

- **A.** 1. (b), 2. (a), 3. (b), 4. (b), 5. (a)
- B. 1. True, 2. False, 3. True, 4. True, 5. False
- C. 1. stilt, 2. skyscrapers, 3. ice-blocks, 4. mopping, 5. mosquitoes
- **D.** 1. It is very important to keep your house neat and clean.

(a) A house should always have door and windows to let in fresh air and sunlight.

(b) A windows should have nettings to keep mosquitoes and flies away.

(c) The floor should be regularly swept and mopped. Disinfectants can be used while mopping the floor.

(d) Rotten food and leftovers often attract flies and insects. It is to be thrown to keep the kitchen clean.

(e) All the garbage in the house should be properly cleared and disposed off in enclosed bins and kept outside for the garbage collector to collect it.

2. Kuccha houses are made of mud, straw, bamboo sticks and reeds.

Pucca houses are made of bricks, concrete, cement, mortar, steel etc.

- 3. Houseboats are houses built on a boat so they can float on water. Houseboat is a great tourist attraction that's why people build houseboats.
- 4. Our houses must have a good drainage system to carry away the dirty water. Dirty water is the breeding house for mosquitoes and germs.
- 5. Yes, a house should have an open space.

(a) Our houses must have open spaces in front or back of our house and balconies also to get enough sunlight and clean air.

(b) We must keep our house and its surrounding clean from garbage. Garbage attracts germs carrying insects which can spread diseases.

(c) We can also use wire netting on doors and windows to keep mosquitoes, flies and other insects away.

Chapter 11

- A. 1. 1 cm, 2. south, 3. mountains, 4. symbols, 5. landscapes, 6. north
- B. 1. False, 2. False, 3. True, 4. True, 5. False
- C. 1. Plans, 2. Map, 3. Green, 4. Symbols, 5. Sketch
- **D.** 1. Besides directions and scale, symbols colours and legend are the other important elements of a map.

Green colour is used for forests, brow for mountains and blue for water.

- The show details of a relatively small area such as a room, a part of some house or a building. These maps are called plans. Where as a sketch is a rough drawing of a place. It use no scale. However, it uses symbols indicating different landmarks. With the help of a sketch, It is easy to locate places.
- 3. Symbols used for monuments, places of worship, hospitals, traffic signals etc. are examples of such symbols.
- 4. Symbols on a map are helpful in locating different place :
 - (a) Public Telephone
 - (b) Petrol pump
 - (c) Hospital
 - (d) First Aid Post
 - (e) Eating place
 - (f) Light Refreshment
 - (g) Resting place
 - (h) Thorough road
 - (i) Thorough side roads
 - (j) Park this side
 - (i) Parking Lot Scooter and Motor cycle
 - (l) Parking lot cycle
 - (m) Parking lot cas
- 5. Symbols and colours tell you about different things shown on a map. Green colour is used for forests, brown for mountains and blue for water.
- 6. Scale which indicates the distance between two places. The distance of about 100 km. Can be shown by 1 cm on a map.

Chapter 12

A. 1. False, 2. True, 3. True, 4. True, 5. False

- **B.** 1. fuel, 2. air transport, 3. Ambulance, 4. Draught, 5. diesel
- **C.** 1. Horse cart, 2. Fire Engine, 3. Postal Van, 4. Sledges, 5. man-powered
- D. 1. People travel reasons:(a) People travel from their homes to their place of work.

(b) Children travel from their homes to their schools everyday.

(c) People travel from one place to another to meet their friends and relatives.

(d) People travel to different place for a holiday.

(e) People also go to the market, bank, hospital, railway station, airport.

2. Invention of the wheel:

The wheel was invented by humans in the New Stone Age or Neolithic Age. The first wheel was made of wood. The idea of the wheel come to their mind when they saw a log rolling down a slope for the first time. This lead to the invention of the wheel.

3. Different means of transportation :

The means of transportation are devided into three types : Land transport, water transport, air transport.

Land transport : Land transport include vehicles that move on land. ex - rickshaw, bullock carts etc.

Water transport : They travel on the surface of water. ex - steamer, boats, ships etc.

Air transport : There are the latest and most advanced means of transport. ex - Aeroplanes, helicopters etc.

- 4. There are some special vehicles that are used for some specific purposes only. For example -
 - (a) Police van
 - (b) Fire engine
 - (c) Ambulance
 - (d) Postal van
- 5. Cycles, cycle rickshaws, horse carts or tongas and bullock carts do not need fuels. They are man-powered and cause no pollution.

Chapter 13

- **A.** 1. (b), 2. (b), 3. (a), 4. (b), 5. (a)
- B. 1. Short Message Service
 - 2. Subscriber Trunk Dialing
 - 3. International Subscriber Dialing Facility

- **C.** 1. Advertisement, 2. Newspaper, 3. gestures; facial express, 4. post office, 5. internet
- D. 1. True, 2. True, 3. False, 4. True, 5. True
- **E.** 1. When you talk to a person and share ideas, views and feelings, you are communicating.
 - 2. Personal communication takes place between two people.

Telephone communication is the quickest means of communication. It is also the most direct means of communication. People living in different parts of the world can talk to each other using a telephone.

- 3. Mass Communication : In this method, a large number of people are involved. Radio, TV, newspaper, magazines, books, advertisements and the internet are the means of mass communication that often reach out to a vast population.
- 4. Types of mass communication :

Radio and television : They communicate important messages in the form of news and wheather - related information.

Newspapers : These are perhaps the cheapest means of the mass communication.

Magazines and books : Magazines and books are also means of mass communication.

Advertisements : They create mass awareness by telling us about the various products in the market.

Internet : It conveys information through computers. With the help of the Internet, we can get different types of information from anywhere in the world at anytime.

5. People who cannot talk or hear, use certain signs and gestures to communicate. They use these signs and gestures as codes to form a signs language. To develop a good understanding of a sign language, we need to study the lip movements as well as gestures of people who use it.

<u>Chapter 14</u>

A. 1. kilns, 2. Potter's wheel, 3. Clay, 4. Glazing, 5. Husk; sand; water

- **B.** 1. **Kiln :** Pottery is made from clay. When it is wet, it can be moulded into different shapes. It is then baked in special ovens called kilns.
 - 2. **Earthen Pots :** Earthen pots are used to store drinking water during summers.
 - 3. **Glazing :** Glazing is a method of applying some substance as a coating on products to make them smooth and waterproof.
 - 4. **Potter's wheel :** The potter's wheel has a round, movable surface made of wood mounted on a spindle.
- **C.** 1. People chose to make pots used for different purposes such as eating, drinking, and cooking.
 - 2. Pottery is one of the oldest forms of art. It involves the use of clay, and potter's wheel and kiln to create pots, pitchers, bowls and other types of vessels.

Pottery is made from clay. When it is wet, it can be moulded into different shapes. It is then backed in special ovens called kilns.

3. Methods of making pottery wares :

Selection and collection of clay : The right kind of clay in the right amount is necessary for pottery. Some kind of clay may be suitable for one type of pots and may not be suitable for another. Clay is the basic building material in pottery. Substances like husk and sand can be added.

Kneading : The next step is mixing clay with water and kneading it for sometime. The clay is pressed and squeezed repeatedly to get good texture. This also keeps the clay free from air bubbles.

4. Giving shapes to the dough :

(a) Hand-building method : In these methods, people use their hands to give different shapes to the clay dough :

- 1. The slap building method
- 2. The pinch pot method
- (b) Wheel method
- (c) Decorating and glazing
- (d) Baking
- 5. Some types of pottery:

- (a) containers to store curd(b) Diyas to light(c) Kulhars to drink tea
- (d) Clay toys
- (e) Statues

Chapter 15

- **A.** 1. dipping; soaking, 2. designs, 3. stiching, 4. shawl, 5. needle work
- **B.** 1. (d), 2. (e), 3. (c), 4. (a), 5. (b)
- **C.** 1. There are two ways of making clothes cotton and wool.
 - 2. There are many ways in which clothes can be designed :
 - (a) Embroidery
 - (b) Tie and dye
 - (c) Batik
 - (d) Vegetable Printing
 - (e) Bloc printing
 - (f) Crochet Patterns
 - 3. Three unstiched clothes :

Sari : Sari is worn by women different parts f India. The style of wearing sari is different though.

Lungi and dhoti : Lungi and dhoti are unstiched clothes worn by men. Lungi is called vesthi in Tamil Nadu and mundu in Kerala.

Turban and dupatta : Men wrap an unstitched piece of clothes on their head known as turban or pagdi.

- 4. A special machine called loom is used to weave clothes. There are power looms and handlooms. Power looms work on electricity while handlooms are manwal.
- Knitting : In this method, a piece of cloth is knitted with the help of a pair of knitting needles, knitting machine help to fasten the process. for example : socks, sweater.
 Crochet Patterns : Crochet is a needle work technique performed using a crochet hoot plus fiber or other similar material.

Chapter 16

20

A. 1. Rain, 2. wells, 3. Filtering, 4. water cycle, 5. clean

- **B.** 1. True, 2. True, 3. False, 4. True, 5. True
- **C.** 1. Oceans and seas comprise 97% of the water found non Earth. The most important source of water on the Earth is rain. We get water from ponds, lakes and rivers is called fresh water. Apart from these, water found under the ground is groundwater. We can get them by digging wells in some areas, hand pumps are used to draw water from the wells.
 - 2. Water from the rivers, lakes and ponds get heated by the sun and changes to water vapour. The water vapour rises up, and changes again into water in the form of tiny droplets. Tiny droplets of water combine to form clouds. When the clouds become heavy with these droplets, they fall process of water changing into water vapour and then again into water and falling as rain is called water cycle.
 - 3. Method to conserve water:

(a) Turn off the taps while you brush your teeth.

- (b) Use bucket and mug to have a bath.
- (c) Repair leaking pipes and taps.
- (d) Practise rain water harvesting.

(e) Do not throw water left in your water bottle. Use it to water the plants.

- (f) Use of bucket and mug to wash vehicles.
- 4. There are some points use water :
 - (a) We need water to drink.

(b) We also need water to cook food, wash, clothes bathe and water our plants.

- (c) Water is needed to grow crops.
- (d) Water is used to generate electricity.

(e) River, seas and oceans are used for transportation of goods from one place to another.

(f) Water bodies are also sources of fish and many sea food items.

(g) Water bodies are used for water sports like rafting swimming, surfing etc.

5. When we store water, we must take care of the following things :

(a) We should use clean containers and bottles to store water.

(b) Containers and bottles used to store water need to be cleaned regularly.

Test Paper-1

- **A.** 1. nuclear, 2. crutch, 3. Drapers, 4. Tailor bird, 5. sport person, 6. sunlight
- **B.** 1. Braille, 2. Machani, 3. Playing Games, 4. Outdoor games, 5. amphibians, 6. beak
- **C.** 1. (d), 2. (f), 3. (a), 4. (e), 5. (b), 6. (c)
- D. 1. Golf 2. Leaf 3. Habitat

Test Paper-2

- A. 1. nourish, 2. boat, 3. landmark, 4. sledges, 5. mud, 6. Earth
- **B.** 1. Adequate, 2. Wheel method, 3. Elephants, 4. Cardinal points, 5. Newspaper, 6. Eskimos
- **C.** 1. (d), 2. (f), 3. (b), 4. (c), 5. (a), 6. (e)
- D. 1. Batic 2. Ambulance 3. Stilt house

Book-4

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (b), 6. (a)
- B. 1. Ears, 2. sight, 3. Nose, 4. taste, 5. Skin, 6. Deaf
- **C.** 1. False, 2. True, 3. True, 4. False, 5. True, 6. True
- **D.** 1. Sense organs allow us to observe and understand the world around us.
 - 2. Tongue is the organ for taste. It is a msucular organ. There are taste buds on the tongue which tell us different type of tastes such as bitter, salty, sweet and sour. Tongue not only helps to chew the food and in speech.
 - 3. Skin is the largest organ of our body which is found all over the body. It helps us to sense temperature change such as hot, cold, warm etc.
 - People who cannot see are blind, can not hear are deaf and cannot speak are mute. They all are specially-abled people.
 - 5. Albert Einstein was the Mathematician/Physicist who had a learning disability and did not speak until

age 3. He had a very difficult time doing maths in school. It was also very hard for him to express himself through writing.

6. Visually impaired people have a stronger sense of touch and hearing.

Chapter 2

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (b), 6. (b)
- **B.** 1. Occupation, 2. local, 3. Chikankari, 4. cobbler, 5. stethoscope, 6. contractor
- **C.** 1. False, 2. False, 3. False, 4. True, 5. False, 6. True
- D. 1. The word 'Occupation' is used mostly to refer to the specialised and established kind of work. It is meant an instrument of livelihood.
 - 2. Some occupation like cleaning houses, collecting garbage, washing clothes, etc. which do not require any skills are done by local workers.

Certain occupation like weaving, masonry, carpentry, pottery, bass or copper craft etc. are passed on from one generation tot he next. These skills are usually localised withing a family, village or a region.

- 3. Phulkari of Punjab, Jodhpuri Jootis, Kantha work of West Bengal, Assam silk, Pashmina shawl, Kolhapur sandals, Madhubani Painting of Bihar, Chikankari of Lucknow are examples of localised skills.
- A profession is an occupation which is based on specialised traing and knowledge. Some jobs need traing that the person should develop a skill.
- 5. Skilled people have different skills with which they do different kinds of work. They are called skilled people.
 - (a) A tailor stitches and repaires clothes.
 - (b) A carpenter makes furniture.
 - (c) A potter makes pots.
 - (d) A doctor diagnosis and treats patients.
 - (e) A driver dries vehicles.
- 6. People use different tools and machinse for doing their work. ex - The potter uses the potter's wheel to make beautiful pots. The doctor uses a stethoscope for checking his patients.

Chapter 3

- **A.** 1. (a), 2. (b), 3. (a), 4. (a), 5. (a)
- **B.** 1. Recreation, 2. fairs, 3. wild, 4. second, 5. animals, 6. operations
- C. 1. Recreational activities are often done for enjoyment, amusement, or pleasure and are considered to be "Fun".
 People like to have fun. A balance between work and play is important. Recreation

refreshes our mind, body and soul.

- 2. Indian Fairs : India is famous for its kind of festivals fairs, most of the fair held in India are either religious fair or celebration of change of seasons. A fair is also called a mela. India is a land of fairs and festivals, every month there is festivals with fair held at different regions of India, some of the big religious fairs in India are Pushkar Fair, Baneshwar fair Gangasagar Fair, Tarnetar Mela, Chaitre Chaudash mela, Nagaur fari, and many monsoon festivals or fairs.
- 3. The zoological parks are basically zoos with capitive wildlife, Allen Forest zoo, Mysore zoo, Lucknow zoo and Sanjay Gandhi Jaivik Udyan.
- 4. Amusement Parks : An amusement park is a park that features various attractions, such as sides and games, as well as other events for entertainment purpose.

Theme parks : A theme park is a type of amusement park that bases its structures and attractions around a central theme, often featuring multiple areas with different themes.

- 5. There are so many adventure camps and sports in India. You can engage in paragliding, rock climbing, trekking, cave exploration or any other activity. Adventure sports refer to performing activities that have a certin amount of thrill and danger involve. Skiing, mountaineering, rafting, bungee jumping have garnered a huge number of followers and are praticed all across the globe.
- 6. There are some other recreational activities :

(a) Watching programmes like dramas, dances, music, movies, etc.

(b) Celebrating birthdays and festivals.

(c) Visiting a library, monument or museum. Recreation allows us to have fun and teaches us many useful things.

Chapter 4

- **A.** 1. Chameleons, 2. Soldiers, 3. fertilize, 4. moist, 5. friendly, 6. breed
- B. 1. Cobra Beetles
 - 2. Horse Cow
 - 3. Dog Cat
 - 4. Rabbit Lizard
 - 5. Ants bees
 - 6. Peacock Peagon
- C. 1. Horses Pulling carts
 - 2. Dogs Bomb or drug sniffing
 - 3. Seals For security
- **D.** 1. (c), 2. (a), 3. (e), 4. (f), 5. (b), 6. (d)
- **E.** 1. They live and hunt for food together. Animals maintain their groups for the following reasons :
 - (a) Hunt efficiently
 - (b) Care for their babies
 - (c) Companionship
 - (d) Protect themselves against enemies
 - (e) Get warmth from each other's bodies
 - 2. Some animals are shy and some are vibrant. When we go near to them, they run away or hide, or else they pounce on us to do friendship. But still we should not disturb them. Lizard, squirrel, mouse, deer, birds, cockroach, rabbit are considered shy animals.

Some animals are friendly. They befriend us easily. Dog, cat, elephant, dolphin, horse etc. are friendly animals.

 Some animals are very helpful to each other. Water dikkops eat insects which otherwise bother crocodiles.

A type of fish called remora, ride on top of turtules. They feed on the parasites on the bodies of their host animals. Birds and monkeys warn deer, zebras, of the coming danger by different sounds.

4. Animals have different body coverings to protect themselves.

There are basically four type of animals covering : for, feathers, scales, and shells. Fur is the hair that covers some animals. Scales are the hard plates that cover the bodies of some animals. Feathers cover a bird's body. They help them fly. A hard protective outer covering that protects some animals is called shell.

5. Animals are part of the food chain and keep ecosystem in balance.

Fur, scales, feathers and shells are some of the body coverings found in animals.

6. Many animals have either a hard shell, thick skin, dry and hard scales, horns, spices and sharp claws.

Porcupine's spines can injure enemies that go approach them.

Tiny creatures like stick insects have body shapes or colours that match their surroundings. It helps them to hid from their enemies.

Zebras have black and white stripes on their bodies. This makes it more difficult for their enemies to spot them.

Cobras, wasps and scorpions use poison or sting to protect themselves.

A pangolin or a hedgehog roll up into a ball to protect itself.

The shells of snails protect them from their enemies.

Chapter 5

23

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (b), 6. (a)
- **B.** 1. minerals, 2. one, 3. rangoli, 4. taproot, 5. Petals, 6. male
- C. 1. Perennials : Examples are rose and lily.
 - 2. Storage roots : Examples are carrots and sweet potatoes.
 - 3. Edible flower : Examples are Lavender and roses.
 - 4. Non-flowring Plants : Examples are ferns, moss, mushroom.

- 5. Biennials : Examples are carnation, sweet william.
- 6. Aerial roots : Example are Banyan tree, orchids, etc.
- **D.** One word for the following :
 - 1. Banyan tree, orchids
 - 2. Mangroves
 - 3. Stamen
 - 4. Carpel
 - 5. Storage foods
 - 6. Petals
- **E.** 1. Primary function of roots.

The root performs many primary functions which are:

Fixation : the root fixes plant firmly in the soil.

Absorption : The root hairs absorb water and raw food materials (mineral salts) from the soil.

Conduction : The root sends water and mineral salts in to stem and leaves.

Storage : A certain amount of food is stored in the root which is utilized as it grows. In many plants like radish, turnip, carrot and sweet potato the root is modified for storing food.

Preventing soil erosion : roots help to bind the soil particles and prevent hem from being blown away by wind or water.

- 2. Biennials have a life span of two years. They grow to a full size in the first year and produce flowers and seeds in the second year. Carnation, sweet william, canterbury bells and hollyhock are examples of bnnials. Perennial have a life span more than two years. They bloom every year. Examples are rose and lily.
- 3. Use of flowers :

(a) Flowers are gifted as bouquets on special occasion like weddings, birthdays, anniversaries etc.

(b) Flowers like cauliflowers and baroccoli are eaten as vegetables.

(c) Flowers are used to decorate houses and doorways.

(d) Flowers are used to make floral patterns called rangoli.

(e) Extracts of flowers like rose and hibisus are used to make drinks.

(f) Flowers are also used to make medicine and cosmetics.

(g) Sweet smelling flower are used to make fragrance, perfumes, soaps and lotions.

(h) Women wear flower bands on their hair.

4. Parts of flower : A flower has the following parts :

Petals : These are the colourful parts of the flower. The petals attract bees and butterflies with their bright colour.

Sepals : These are green leaf like structures that protect the flower in bud the stage.

Stamen : It is the male part of a flower. It is made up of the another and the filament. The anthers carry the pollens.

Carpel : This is the female part of a flower. It consists of the stigma, style and ovary with ovules.

5. **Types of roots :** Plants have two types of root systems :

Taproot and fibrous root.

Some plants have one main root with many small roots growing from the main root. Such a root is called taproot. Example : Carrot, radish etc.

Some plants have many small roots, growing from the based of the stem. These are called fibrous roots. Example : Grass, wheat etc.

There are other special types of root systems : Aerial roots, storage roots and Breathing roots.

Some roots hang from the branches. They support the heavy branches. These are called aerial roots. Example : Banyan tree, orchids etc.

Some roots are carrot, radish, turnip, beetroot etc. are called storage roots and also Mangroves have such breathing roots.

6. Edible plants stems are one part of plans

that are eaten by humans. Most plants are made up of stems, roots, leaves flowers and produce fruits containing seeds some examples of plant parts -

Roots : beets, carrots, radishes, turnips, rutabages, ginger, parsnip.

Stems : Asparagus, rhubarb, broccoli stem, bamboo shoots, sugar cane, potato.

Leaves : Spinach, lettuce, Kale, Swiss chard, arugula etc.

Chapter 6

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (a)
- **B.** 1. False, 2. True, 3. True, 4. False, 5. False, 6. True
- **C.** 1. maize, sown, cart, farmer, Cashewnuts, evaporation
- D. 1. Parts of plants we use for food include. Leaves and stems : Celery, lettuce, spinach etc. Roots-Potatoes, carrots, beetroot, radish, etc. Seeds : Wheat, rice, pulses, ground nuts (Peanuts), walnuts, almonds, etc.

Food from plants are packed with many nutrients such as vitamins, minerals and antioxidants. Dietary fibre is found only in plants.

2. Poultry farming is the process of raising domesticated birds such as chickens, ducks, turkeys and geese for the purpose of farming meat or eggs for food.

More than 50 billion chickens are reared annually as a source of food, for both their meat and their eggs.

3. Plants that are grown in a large area and can be harvested extensively for profit are called crops. The process of growing crops is called cultivation.

To grow crops, the soil is ploughed. Seeds or plants seedlings are sown in the field. The seedlings start to grow. Many weeds also grow along with the seedlings which has to be removed by the farmers. Farmers must water or irrigate the crops and kill crops pests by spraying pesticides and insecticides.

Once the crops are mature, the farmer will

harvest them. Farmers need natural resources such as land, air, nutrients, water and sunlight to grow crops.

- 4. Once the crops are ripened, they are to be harvested fruits and vegetables are packed in wooden or carton boxes. Cereals and pulses are paced in gunny bags. The packed food is sent to the wholesale market by the farmers. This packed food items are sold in bulk to the retailers. The retailer sell it to the local market shopkeepers. We buy these food items from local market shopkeepers.
- 5. **Variety of food items :** We eat a variety of food items like cereals, fruits, vegetables, spices, beverages, etc.

Cereals : Cereals are the grains that are in the grass family : wheat, rice, corn, barley and many others. Cereals are known as the seeds of plants.

Pulses : Pulse crops are one of the sustainable crops a farmer can grow. Pulses are seeds of some plants that we eat and are also called dals. Moong, black gram (urad) masoor etc.

Pulses are the major sources of protein in the diet.

Fruit and vegetables : Vegetables and fruits are an important part of a healthy diet, and variety is as important as quantity. Example oranges, lemons etc. They are called citrus fruits, walnuts, cashewnuts and almonds are examples of dry fruits.

6. Groundnut, sesame, coconut, soybean, mustard and sunflower are the some oilseeds. The seeds are crushed to get oil.

<u>Chapter 7</u>

- **A.** 1. Langar, 2. Mid-day, 3. prasad, 4. Vegetarian, 5. outdoors, 6. wedding
- **B.** 1. True, 2. False, 3. True, 4. True, 5. False, 6. False
- **C.** 1. Food is an important part of Indian festivals. Not even a single festival is celebrated without a feast. In India, each festival has a special dish associated with it.
 - 2. Ghevar is eaten in Rajasthan during Teej.



Sweet rice is cooked on Pongal in Tamil Nadu.

Special cakes with fresh fruits and dry fruits are prepared on Christmas.

Gujiya is prepared in northern India during Holi.

During pujas, puris, halwa are eaten as prasad.

Sevyan is prepared by Muslims on Eid. Pithas are pancake prepared in Bihu. Sesame sweets are made on Makar Sanskranti.

3. Social and health benefits of eating together:

People of all ages eat better when they share a meal with others. They tend to eat more fruits and vegetables and other nutrient-rich foods. They also eat less junk and fried foods.

Eating togetehr gives young children the chance to learn more words and how to communicate better. Other benefits for kids and teens include healthier eating into adulthood and healthier body weight.

The benefits of eating together are greatest if you don't eat in front of the TV and other screens.

- 4. When a large number of people eat together, it is called community eating. People from different families and different religions eat together in a community or a group. It gives us a feeling of brotherhood and teaches us about equality and sharing.
- 5. A canteen is a place in a factory shop, or college where meals are served to the people who work or study there.

A number of person who eat together, and for whom food is prepared in common; especially, persons in the military or naval service who eat at the same table.

6. **Langar :** Langar is a community meal for free of Sikh religion. Though langars are prepared everyday in Gurudwaras, they are specially prepared on special occasions such as Gurupurabs and Baisakhi. In a Langar, all people high or low, rich or poor, male or female all sit in the same row or line to share and enjoy the food together.

Bhandara : People of all ancient cultures have the concept of food as a worship offering. Free vegetarian meals are served to people in temples or places. This is called bhandara.

<u>Chapter 8</u>

A. 1. (a), 2. (b), 3. (a), 4. (b), 5. (a), 6. (b)

- **B.** 1. **Enamel :** It is the outermost layer of the tooth. Enamel is the hardest substance in the human body, yet it can be damaged by decay if teeth are not cared for properly. It covers the crown.
 - 2. **Pulp :** It is the soft tissue found in the center of all teeth where the never tissue and blood vessels are. If tooth decay reaches the pulp, you usually feel pain.
 - 3. **Molars :** Used for grinding, these teeth have several cusps on the biting surface.
 - 4. **Crown :** It is the top part of the tooth, and the only part you can normally see. The shape of the crown determines the tooths function.
 - 5. **Canines :** Sometimes called cuspids, these teeth are shaped like points and are used for tearing food.
 - 6. **Incisors :** The sharp, chisel-shaped front teeth (four upper, four lower) used for cutting food.
- **C.** 1. The tongue is one of the muscular sense organ present inside our mouth. Tongue is vital for chewing and swallowing food, a swell as for speech.
 - The teeth are the hardest substances in the human body. The teeth gives shape to our face and also help to chew the food.
 Parts of tooth : A tooth is divided into two parts-crown and root.

Crown : It is the top part of the tooth, and the only part you can normally see. The shape of the crown determines the tooth's function.

Root : The part of the tooth that is fixed in

bone. The root makes up about two-thirds of the tooth and holds the tooth in place.

4. We have two sets of teeth. The first set of the teeth is called milk or temporary teeth. The second set is called permanent teeth.

The first tooth appears when the baby is 6-7 months old. By the age of 2 years, a child has a set of 20 milk teeth. These begin to fall off one by one and a new set of 32 permanent teeth replaces them. By the time a child is 12 years old, he has 28 permanent teeth. Four more teeth called wisdom teeth grow between the age of 12 and 21.

4. Teeth are of four main types : incisors, canines, premolars and molars.

Incisors : The sharp, chisel shaped front teeth (four upper, four lower used for cutting food.)

Canines : Sometimes called cuspids, these teeth are shaped like points and are used for tearing food.

Premolars : These teeth have two pointed cusps on their biting surface and are sometimes referred to as biscuspids. The premolars are for crushing and tearing.

Molars : Used for grinding, these teeth have several cusps on the bitting surface.

- 5. If we do not brush our teeth properly, germs grow on the food struck in the teeth. These germs make holes called cavity in our teeth.
- 6. Some points that we can keep our teeth healthy:
 - (a) Brush your teeth at least twice a day.

(b) Brush your teeth with proper small, round, circular movements.

(c) Massage your gums with your finger.

(d) Change your toothbrush every three months.

(e) Avoid eating too many sweets and chocolates.

(f) Visit a dentist every six months if needed.We must keep our teeth healthy in and good condition.

<u>Chapter 9</u>

- **A.** 1. beak, 2. long, 3. strong, 4. swallow, 5. respirations, 6. talons
- **B.** 1. **Climbing birds :** Woodpeckers and parrots have two toes in the front and two at the back.
 - 2. **Wading birds :** Cranes & duck have long thing legs with spread out toes. It helps them to wade through mudely water without their feet sinking in the soft mud.
 - 3. **Scratching birds :** Hens and Pigeons scratch the ground to pull out worms. Their sharp and hard claws have three toes in the front.
 - 4. **Swimming birds :** Duck and swans have webbed feet. They use it like paddles that help to push water while swimming.
 - 5. **Carnivorous :** Lion & Tiger are carnivorus animals. They have a set of teeth that are very different from herbivores.
 - 6. **Herbivorous :** Herbivores have teeth that are highly specialized for eating plants. Cow and Goat ex.
- **C.** 1. False, 2. True, 3. True, 4. False, 5. True, 6. True
- D. 1. All the animals eat different kinds of food. The type of food they eat is called their eating habits. Depending on the type of food they eat, they have different types of teeth. The shape of an animals teeth tells us what kind of food it eats.
 - 2. Elephant have very long incisors. They are called tusks. They also use their tusks to protect themselves from their attackers.
 - 3. Birds do not have teeth. They have beaks that help them to eat their food. Beaks are of different shapes, sizes and colours.
 - 4. Birds also use their beak to hold objects, kill their prey, fight, search for food, clean their feathers, protect themselves, make their nests and feed their young ones. Beaks have two holes on the top of the beaks. They are called nares, which are used for respirations.
 - 5. Claws are important for the bird to walk,

climb, land land and catching its prey. Claws can be important for birds of prey. They need to have talons in order to hunt other animals. Birds use their claws to hold food and protect themselves. Birds have two to four toes on each foot.

6. Different types of claws of the birds :

(a) **Preying birds :** Eagles, vultures, etc. have sharp, curved claws called talons. They use their prey.

(b) **Scratching birds :** Hens and Pigeons scratch the ground to pull out worms. Their sharp and hard claws have three toes in the front.

(c) **Wading birds :** Cranes & Ducks have long thin legs with spread out toes. It helps them to wade through muddy water without their feet sinking in the soft mud.

(d) **Perching birds :** Crow, sparrows perch on branches of trees. They have three toes in the front and one at the back. They use their claws to grip the branches firmly.

(e) **Flightless birds :** Flightless, fast running birds, have three toes on each foot. They ostrich is the only two-toet birds.

(f) **Climbing birds** : Woodpeckers and parrots have two toes in the front and two at the back.

(g) **Swimming birds :** Duck and swans have webbed feet. They use it like paddles that help to push water while swimming.

Chapter 10

- **A.** 1. (b), 2. (a), 3. (a), 4. (b), 5. (b), 6. (a)
- **B.** Examples of each :
 - 1. Aerial animals: Birds, Insects
 - 2. Arboreal animals: Monkey, koalas
 - 3. Terrestrial animals: Lion, Tiger
 - 4. **Amphibians:** Frogs, toads
 - 5. Aquatic animals : Fish, Crabs
 - 6. Noctural animals : Foxes, Bats
- **C.** 1. (f), 2. (b), 3. (a), 4. (e), 5. (c), 6. (d)
- **D.** 1. The environment in which an animal lives is called its habitats. A habitat is a place where living things live and how they survive in

that area. Animals have basic needs for air, water, food, shelter, and space.

2. Different types of animals :

Animals that live entirely on land are called terrestrial animals. ex-lion, tiger, goat etc.

Animals which lives in water for most or all their life are called aquatic animals. ex- fish, crabs etc.

Animals that can naturally fly, glide, or soar in the air are called aerial animals. ex- birds, insects etc.

Animals who spend majority of their lives in trees are called arboreal animals. exmonkey, koalas, parrots etc.

Animals that live partly on land and in the water are called amphibians. ex- frogs, toads, seals etc.

3. The environment in which an animal lives (its habitat) must provide water, food, shelter, and space. It home must also make the animal feel protected from predators, harsh weather, and other threats.

Animals homes come in a variety of shapes and sizes and can be found from the deepest depths of the ocean to the very top of a mountain. Some animal homes are easy to see, while others are camouflaged to protect them from predators. The structure of an animals home depends on the type of animal, the environment it lives in, and what it needs to survive. Some homes are for just one animal or for a mother and her babies. Other homes are for a large group of animals to all live together.

4. Different types of animal home.

(a) **Barns and houses :** Domesticated animals are ones that live with humans. The most common animals that live in houses are dogs and eats. Some animals that live with humans are too big or too messy to live in a house. Animals like horses, cows goats, sheep, and pigs can be pets, but they usually live in bwms.

(b) Webs : Spider spin webs to live in. Webs

are also perfect traps for catching insects for spider to eat.

(c) **Hives :** Bees, wasps and yellow jackets make wax inside their bodies, then they use the wax to build home called hives. A hive makes a good home for a whole colony.

(d) **Caves :** Lion, tigers, bears, wolves and bats make their home in cave. Cave that makes good homes are not just found on dry land. Many animals that live in the water, especially eels, like to live in underwater caves. Some fish and sharks like to find an underwater cave to catch a quick nap in.

(e) **Burrows and Holes :** Many animals dig into the ground to make their home. Foxes, rabbits, prairie dogs, and ants all live underground.

(f) **Shells :** Many animals with soft bodies actually carry their homes with them. These homes are called shells and the hard exterior of the shells help protect the animals inside. Most animals such as snails, crabs, and turtles have 'build on' shells.

(g) **Nests :** Birds make nests to lay their eggs in. Nests can be built in the branches of a tree or on the ground.

(h) **Hollow Logs :** Animals that live in the woods, such as bobcats, mink, foxes, others, skunks and weasels often like to make their homes in hellow logs.

(i) **Tree Hollow :** Squirrels, owls, porcupines, and raccoons all like to make their home in the hollow of a tree.

- 5. Domestic animals live with humans. Animals that live in houses are dogs and cats. Animals like horses, cows, goats, hens, sheep and pigs live in a farm. Farm animals live in shelters built by man. A horse lives in a stable, a cow and a buffalo live in a shed. A hen lives in a coop.
- 6. Nocturnal animals are active at night time and then sleep during the day. Such animals are called noctural animals. There are many examples of nocturnal animals, including hedgehogs, foxes, owls, bats and aardvarks.

Since they are awake when it is dark outside, their bodies have adapted only in the night. They hide in their shelters during the day to avoid heat.

Chapter 11

- A. 1. earth, 2. under, 3. falling water, 4. reservoirs, 5. chlorine, 6. bath
- **B.** 1. Water needs to be cleaned before drinking because it has dust particles and germs in it.
 - 2. Dams are walls built across rivers to control the flow of water.
 - 3. The tanks get filled during the rainy season because tanks are large reservoirs of water. They are a common source of irrigation.
 - 4. Rainwater seeps into the ground and collects as Groundwater.
 - 5. Turn off the tap while brusting your teethan average tap or tap throws approximately 10 liters of water every minute.
 - 6. Boiling water is the cheapest method of water purification.
- **C.** 1. False, 2. False, 3. True, 4. True, 5. False, 6. True
- **D.** 1. Rivers flow from the mountains, hills. Rivers that are filled with rainwater are called rain fed rivers. These rivers have water in the rainy season but dry up in summeres. When glaciers melt. It turns into water. This water flows down as rivers. These rivers are called snowfed rivers. These rivers carry water throughout the year. The place where a river begins is called its source. River flow down mountains, to the plains and then into the sea.
 - 2. There are three main and natural sources of water rain water, surface water and groundwater.

The main source of freshwater in the rain. Rain water fills ponds, lakes, rivers seas oceans, etc. It also seeps into soil. Surface water is found in lakes, river and reservoirs.

Groundwater lies under the surface of the land, where it travels through and fills openings in the rocks. The rocks that store and transmit groundwater are called aquafiers. 3. There are three ways of conserving water :

(a) Turn of the Tap while brushing your teeth. An average tap or tap throws approximately 10 liters of water every minute.

(b) Turn off the tap while washing your hand. Do not leave the tap running while you're scrubbing your hand.

(c) Bathing - using a bucket and mug to take a bath instead of shower.

4. Since we do not get rain throughout the year, we need to store water.

Water storage is a broad term referring to storage of both potable water for consumption, and non potabe water fro use in agriculture. We need water for irrigating fields, household needs, industrial activities etc. The electricity produced using the power of falling water is called hydroelectricity.

Tanks : Tanks are large reservoirs of water. **Canals :** Canals are channels to divert water from rivers to fields for irrigation. Indira Gandhi canal and Sutlej Yamuna link canal, Buckingham canal are some example.

Dams and reservoirs : Dams are walls built across rivers to control the flow of water. Dams are also used for generating electricity. Bhakra Nangal Dam, Krishna Raja Sagar Dam, Indirasagar Dam and Hirakud. Dam are some dams of our country.

5. Potable water is drinking water. It has to be safe enough to be consumed by humans with a minimal risk of short term or long term harm.

Water is made potable by boiling and other methods of purification. Water from water bodies is sent to water purification plants to make the water clean and then supplied to houses. We get this water is our taps at our houses. We should purify and filter the water before drinking it. There are methods of water purification.

6. Water being such a scarce resource and with

many areas fighting with water shortages and droughts. Saving water and using it more efficiently has become an absolute necessity.

Chapter 12

- **A.** 1. (a), 2. (b), 3. (a), 4. (a), 5. (b), 6. (a)
- **B.** 1. True, 2. True, 3. False, 4. False, 5. True, 6. False
- **C.** 1. Waste is any material which is no longer useful as it has served its purpose or at the end of the process has no further use and it is generally discarded.

Household waste should be disposed off properly. It should not be thrown in open areas. Such areas become breeding grounds for insects and spread diseases.

2. The three 'R's :

Waste management can be done by following the tree 'R's Reduce, Reuse and Recycle. They all help to cut down on the amount of waste we throw away. They conserve natural resources, landfill space and energy.

3. Methods of waste disposal : There are different way by which can dispose waste.

(a) **Land fills :** Open ground outside the city where garbage is dumped and covered with soil are called land fills.

(b) **Composting :** Decomposition of biodegradable wastes lead to formation of compost. Composting is one of the most useful solutions.

(c) **Incinerators :** Big furnaces where garbage is burnt are called incinerators. They cause air pollution due to smoke released.

(d) **Recycling :** Recycling is the most environmentally friendly method because it doesn't add any waste material. The most common recyclable items are plastic, paper, glass and aluminum.

- 4. The green bin is meant for biodegradable wastes. The blue bin is for non-biodegradable wastes.
- 5. There are many ways of reducing waste.(a) We should use paper on both sides.



(b) We should avoid packaged food.

(c) We should use cloth napkins instead of paper napkins.

(d) We should use washable plates and cups instead of disposable ones.

(e) We should buy goods that are durable and long lasting.

6. The last stage of the waste hierarchy is to recycle. To recycle something means that it will be transformed again into a raw material that can be shaped in to a new item. There are very few materials on the earth that cannot be recycled.

Recycling means to convert used good into products which can be used for other purpose. Certain things which are recycled nowadays are:

(a) Old notebooks, books and newspaper.

(b) Toys, buckets, baskets and containers made of plastic.

(c) Bottle, tubes, bulbs and mirrors made of glass.

(d) Metals like iron, brass, copper and aluminium.

Chapter 13

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (b), 6. (a)
- **B.** 1. oxen, 2. camel, 3. Reindeer, 4. Donkey, 5. Elephants
- **C.** 1. (d), 2. (c), 3. (a), 4. (b), 5. (f), 6. (e)
- **D.** 1. W, 2. L, 3. A, 4. A, 5. L, 6. W, 7. A, 8. L
- **D.** 1. The history of transportation begins from the human era and continued to change over a period of time. The first means of transportation was the human foot. People used to walk large distance to reach places.
 - 2. Around 3500 BC, the first wheeled vehicles were used. As a means of transporting small loads, wheels were attached to carts and chariots. Around the same time constituting to transportation history, people developed the simple logs into controllable river boats with oars to direct the vehicle.
 - 3. Transportation history took a drastic

change with the introduction of wheels. Because of the discovery of the wheel smaller devices like wheel barrows came into use. Existing means of transportation were continuously improved thereafter.

The history of transport is largely one of the technological innovation. Advances in technological have allowed people to travel farther, explore more territory, and expand their influence over large and larger areas. Even in ancient times, new tools such as foot coverings, skis, and snowshoes lengthened the distances that could be travelled. As new inventions and discoveries were applied to transport problems, travel time decreased while the ability to move more and larger load increased.

4. Animals plays an important role in the mode of transport in India. When animals are used for transportation of people and goods. It is called animals powered transport.

Oxen are used for pulling carts. They are also used by farmers to carry farm used for pulling carts and riding. Camels can live without water for many days. They are used for travelling and carring goods in the deserts. Camel is called the ship of the desert.

5. They help us in many ways, we should take good care of them.

(a) All the animals should be given proper food diet and water. They should be allowed to take sufficient rest.

(b) We should never overlood them.

(c) We should never hit them badly.

(d) The animal shelters must cleaned frequently.

(e) They should be taken to the veterinary doctors for regular check ups. We should get them vaccinated properly and regularly.

6. When animals are used for transportation of people and goods, it is called animals-powered transport. Land transport is diided

into two types : Road Transport and Rail Transport. Transport can also be grouped as personal or public.

Chapter 14

- A. 1. structure, 2. clay, 3. moulds, 4. natural, 5. Flyover, 6. Draw
- B. 1. False, 2. False, 3. True, 4. True, 5. False, 6. True
- **C.** 1. **Mason :** The mason uses a trowel, hammer, mallet, etc to make the pillars, walls and roof.
 - 2. **Plumber :** The plumber uses pilers, wrench, spanner, screwdrive, pipe-cuteer, pincer and hammer to fire the pipes and taps.
 - 3. **Electrician :** The electrician uses a screwdriver, wrench, soldering iron, pliers, clippers, to fit electrical wires.
 - 4. **Painter :** The painter uses rollers, spray paint guns, ladders and paint brushes to point.
 - 5. **Carpenter :** The carpenter uses saw, plane gimlet, and chisel to make the doors and windows.
- **D.** 1. Infrastructure is the term used to describe the facilities which support modern human life.

These are the main items, water supply, sewage plants, housing, roads, cable networks, food supply facilities, schools, hospitals, airports, community meeting places, business and government building, bridges, railways. In fact, everything that modern life needs in the way of built facilities.

2. Process of making bricks :

Bricks are the basic building components. They are long lasting and easily available cheap. Bricks are made of clay. Huge ovens in which bricks are baked are called kilns. The basic steps are :

Step 1 : Clay is removed from the ground by a process called winning.

Step 2 : Lump of clay are ground into a fine powder.

Step 3 : It is then mixed with water and kneaded to get soft dough.

Step 4 : This dough is then put into brick moulds.

Step 5 : They are then neatly piled in lines to dry.

Step 6 : After about two weeks, they are put in brick kilns and baked for about 36 hours at a temperature 1100°C. This process is called firing.

Step 7 : The bricks once ready are allowed to cool down.

- 3. Bridges are important in infrastructure that help people and vehicles cross from one side to the other. In cities, flyovers are made to ease traffic.
- 4. Heavy machines like excavator, backhoe loader, crane, dump truck and bulldozer are used for construction. There are ten tools use by workers trowel, Hammer, Wrench, Screwdriver Saw, roller, Ladders, Pincer, Clippers.
- 5. Different type of bridges :

(a) **Arch bridge :** An arch bridge is made of steel, concrete and bricks. It has a semicircular structure.

(b) **Beam bridge :** A beam bridge is made of flat concrete or metal and held at ends by piers.

(c) **Cantilever bridge :** This bridge is made of steel or concrete. It consists of two beams called cantilevers.

(d) **Suspension bridge :** This bridge is suspended with cables and attached to concrete and steel.

(e) **Living bridge :** Living bridge is natural bridge. It is formed by the roots of a type of rubber tree.

(f) **Draw bridge :** This bridge can be moved to give way for the large ships to pass under it. It is built on busy waterways.

(g) **Temporary bridge :** This bridge is made of logs, wooden, planks, bamboo and ropes. This bridge can only be used by people who wants to cross over on foot.

6. In cities, flyovers are made to ease traffic. Fallen trees were used as bridges to cross streams and rivers with the invention of steel, bridges took a whole new level. Steel is a light and strong material.

Chapter 15

- A. 1. sun, 2. moon, 3. 150, 4. cosmology, 5. Mercury, 6. revolution
- **B.** 1. **Universe :** The universe is composed of all forms of matter and energy.
 - 2. **Solar system :** Our solar system is a part of the Milky Way Galaxy. It was formed around 4.6 billion years ago.
 - 3. **Meteor :** A meteor is a heavenly body that passes across the sky which we call as a shooting star.
 - 4. **Satellite :** A satellite is a heavenly body that revolves around a planet.
 - 5. **Satellite :** A satellite is a heavenly body that revolves around a planet.
 - 6. **Asteroid :** The asteroid belt occupies the region between the orbits of Mars and Jupiter. Asteroid are small bodies that orbit the sun and are irregular in shape.
- **C.** 1. The branch of science that studies the universe is known as cosmology or astronomy.
 - 2. Our solar system is a part of the Milky Way Galaxy. It was formed around 4.6 billion years ago.

The sun and other celestial bodies, the eight planets, five dwarf planets, moons, and billions of small bodies are a part of the solar system.

3. Planets are heavenly bodies that move round the sun. They do not have light of their own. They reflect the sun's light. One complete circle round the sun is called its revolution. Each planet has a fixed path of its own. This path is called the orbit. The Earth's orbit is elliptical in shape.

The planets can be seen in the night sky with a telescope. These are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

4. Meteors : A meteor that falls through the

Earth's atmosphere and lands on the Earth's surface is known as a meteorite.

Comets : A comet is a small body that orbits the sun. They display a visible coma and sometimes a tail when they come close to the sun. Halley's comet is a well known comet. It can be seen after every 75 years.

Asteroid : The asteroid belt is between the orbits of Mars and Jupiter.

5. The moon is a natural satellite of the Earth. The Earth's moon 3,84,403 kilometres away from Earth. It completes one revolution round the Earth in 27.3 days. Artificial satellites help in communications,

weather forecasting detecting underground water and mineral resources.

6. Some famous constellations are Ursa Major, Ursa Minor, Orion and Cassiopeia.

Test Paper-1

- A. 1. taste buds, 2. training; knowledge, 3. leisure, 4. remora, 5.00, 6.00
- **B.** 1. Birthday, 2. Nose, 3. Contractor, 4. Fair, 5. Carpel, 6. Chameleons
- **C.** 1. (e), 2. (c), 3. (d), 4. (b), 5. (f), 6. (a)
- **D.** 1. Albert Einstein2. Mushroom3. Cereals

Test Paper-2

- A. 1. muscles, 2. flesh; plants, 3. worms, 4. arboreal,5. Rainwater, 6. Green bin
- **B.** 1. Air transport, 2. Arch bridge, 3. Meteorite, 4. Dentin, 5. Rodents, 6. Web
- **C.** 1. (e), 2. (d), 3. (a), 4. (f), 5. (c), 6. (b)
- **D.** 1. Meteor 2. Cantilever bridge 3. Molars

Book-5

- A. 1. Parents; Grand parents; Sister; Uncle; Aunt,
 2. Care; support, 3. migration, 4. parents; children, 5. members, 6. Urban
- **B.** 1. (a), 2. (a), 3. (a), 4. (a), 5. (b), 6. (a)
- **C.** 1. True, 2. True, 3. True, 4. True, 5. False, 6. False
- **D.** 1. Several factors have brought about changes in the family structure. Some of them are :

Job : Some might get a job in another city and move out.

Accommodation : The house might not be large enough to accommodate the growing family.

Lifestyle changes : People may want to shift their homes to another place for a better lifestyle.

Calamities : Natural calamities might destroy homes and cause people to shift to new place.

- 2. When social, economic and natural factors force people to shift from one place to another, t is called migration, and migrations are caused by variety of factors including economic, social and political factors.
- 3. There are various types of families : Nuclear, large, joint and single parent.
- 4. Joint families break up and from nuclear families because conflicts regarding family property, its income and expenditure, uniqual distribution of work at home and personal clashes between women lead to the break up of joint families.
- 5. There are two types of migration :

1. Voluntary migration (Unforced)

2. Compulsive migration (Force)

1. Voluntary migration : When people move by their own will, like as - job, Accommodation, break-up in relationship, lifestyles changes.

2. Compulsive migration : Calamities, War.

6. There are both positive and negative effects of migration :

Positive : Better job, Better space and life style, Better facilities.

Negative : More working hours, shaky value system and relationships and more expectations from family members.

Chapter 2

- **A.** 1. (a), 2. (a), 3. (a), 4. (b), 5. (b), 6. (a)
- B. 1. True, 2. False, 3. False, 4. True, 5. False, 6. False
- C. 1. (A) Single player games : Some games are

played with one opponent or a partner. These are known as single-player games. ex- chess, billiards and golf etc.

(B) **Team games :** Some games are played as a team, A group of players from two team. ex- cricket, hockey, football.

2. There are two categories of games :

(A) Indoor games

(B) Outdoor games

Indoor games : Chess, carom, ludo

Outdoor games : Lawn tennis, Cricket, hockey

3. There are various local games of India :

(A) **Kho-Kho :** Kho-kho is a run and chase game. It consists of two teams, 9 player play at a time.

(B) **Kabaddi :** Kabaddi is contact team sport. Played between two teams of seven players, the object of the game is for a single players on offence, referred to as a raider.

(C) **Wrestling :** A wrestling is a physical competition, between two competitors, and is one of the traditional martial arts of India.

(D) **Boat race :** Boat race festival in Kerala is one of the most awaited festivals of Kerala, which is celebrated during the harvest festival season of Onam.

- 4. **Kabaddi :** Kabaddi is an Indian origin game, there are team of seven members. Each are on opposite halves of a field of 10 m × 13 m. in case of men and 8 m × 12 m in case of women. Each has three extra playersheld in reserve. Teams take turns sending a "raider" to the opposite teams half.
- 5. Hockey is a national games of India. It is a fast fame played between two teams against each other. Each team has 11 players. Our country has been the world champion of hockey in 1928 and had won 6 gold medals in the Olympics games. The period between 1928 to 1956 is known as the golden era of Indian hockey.

The brilliant Indian hockey players knew well the magic of playing hockey and won the heart of everyone.



6. Only studying and not playing anything makes us dull. Playing sports and games helps to keep our body fit and strong. It helps in maintaining the body health and thus keeps mind peaceful, sharp, and active with improved concentration.

It boots the body and mind power and energy level. It gives everyone a nice break from monotonous life.

- D. 1. Table Tennis
 - 2. Judo
 - 3. Kabaddi (Ha-do-do)
 - 4. Cricket
 - 5. Field Hockey
 - 6. Bull Fighting

Chapter 3

- **A.** 1. (a), 2. (a), 3. (a), 4. (a), 5. (b), 6. (b)
- **C.** Reason for the following sentences :
 - 1. Smoking also can destroy your lungs tissue. This decreases the number of air spaces and blood vessels in the lungs, resulting in less oxygen to critical parts of our body.
 - 2. We have two lungs, it's easy to feel them put your hands on your chest and breathe in very deeply. You will feel your chest getting slightly bigger. Now breathe out the air, and feel your chest return to its regular size. You've just felt the power of your lungs.
 - 3. Exercise helps maintain a healthy blood pressure and improves circulation when we take part in vigorous exercise like biking, running our lungs require more air to give the cells the extra oxygen they need. So, keep our lungs healthy.
 - 4. The louder the sound, the bigger the sound wave. The outer ear, which is what you see on the side of your head, collects the sound wave. The soundwave travels down the canal toward your eardrum. The vibrations make the fluid in the inner ear move.
 - 5. There are enough alveoli in just one lung to cover an area roughly the size of tennis court.

The alveoli are where the crucial gas

exchange takes place. The air sacs are surrounded by a dense network of minute blood vessels, or capillaries, which connect to the heart.

- 6. Our lungs are protected by our ribs cage, which is made up 12 sets of ribs. These ribs are connected to our spine in our back and go around our lungs to keep them safe.
- **D.** 1. Our lungs make up one of the largest organs in your body, and they work with our respiratory system to allow us to take in fresh air, get rid of stale air, and even talk.
 - 2. We have two lungs, we can feel its easy by action, put your hands on your chest and breath in very deeply. You will feel your chest getting slightly bigger. Now breathe out the air, and feel your chest return to its regular size you've just felt the power of your lungs.
 - 3. Breathing air is necessary for keeping humans and many animals alive. And the two parts that are large and in charge when it comes to breathing? If we guessed the lungs.
 - 4. Above the trachea (windpipe) is the larynx, which is also called the voice box. Across the voice box are two tiny ridges called vocal cords, which open to make sounds.
 - 5. When we exhale air from the lungs, it comes through the trachea and larynx and reaches the vocal cords. If the vocal cords are closed and the air flows between them, the vocal cords vibrate and a sound is made.
 - 6. The best way to keep our lungs healthy is not to smoke, exercise is good for every part of our body, and especially for our lungs and heart.

<u>Chapter 4</u>

35

- **A.** 1. (b), 2. (a), 3. (a), 4. (b), 5. (b), 6. (a)
- B. 1. stomach, 2. vegetables, 3. fast food
- **C.** 1. (e), 2. (a), 3. (0), 4. (0), 5. (d), 6. (b)
- **E.** 1. The food is digested with the help of digestive juices secreted from the walls of the stomach. The juices contain an acid that helps in digestion of food.

2. **Small intestine :** The food then passes into small intestine. It is a long pipe where the food is digested live secretes bile that helps digest the food further. The nutrients from the digested food is then absorbed by the blood. The undigested food is sent to the large intestine.

Large Intestine : In the large intestine water is absorbed back into the body. The solid waste or faeces is sent out from the body through the anus.

- 4. The tongue has taste buds that can sense different tastes. The tongue can sense four types of tastes sweet, sour, salty and bitter.
- 5. When we eat the food, food is broken down into simpler form and absorbed by our body to release energy.
- 6. We have different types of teeth. These teeth are:

(a) Incisors - help bite pieces from food.

(b) Canines - help tear the food.

(c) Premolars and molars - help to chew and grind the food.

Creative Skills

TONGUE, MOUTH, PANCREAS, STOMACH, GALLBLADDER, ESOPHAGUS, LIVER

Chapter 5

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (a), 6. (b)
- **B.** 1. Smell, 2. Sounds, 3. Touch; Smell, 4. Hairs, 5. Feet, 6. Compass
- C. 1. eardrum, 2. smell, 3.00, 4. Cockroach, 5. arms, 6. eyes
- D. 1. Bats are nocturnal animals, being blind for the most part; They squeak as they fly. The squeaking sound bounces off and comes back to the bat after hitting an object. This helps the bat to know the positioning of its prey.
 - 2. Underwater animals communicate by making sounds.
 - 3. Blood hounds are a bread of dogs that have an excellent sense of smell. They can catch and follow a scent trail. This is how track criminals.

- 4. We call some people 'eagle-eyed' because the phrase 'eagle eyed' means with good eyesight.
- 5. A catfish has tiny hair on their bodies that are extremely sensitive to vibrations. So much so, it is believed that the catfish can detect earthquakes day in advance being crushed.
- 6. Pigeons have something like on inbuilt compass which allows them to find their way using the knowledge of the Earth's magnetic field and the position of the sun. That is why they were used to carry massages from one place to another in ancient times.
- E. 1. Sniffer dogs Pangolins
 - 2. Bats
 - 3. Eagle Owl
 - 4. Snakes Cockroach

<u>Chapter 6</u>

- **A.** 1. (b), 2. (b), 3. (b), 4. (b), 5. (a), 6. (a)
- **B.** 1. (a), 2. (e), 3. (b), 4. (f), 5. (d), 6. (c)
- **C.** 1. Short notes :

Mahout : Mahout use elephants to earn money. A mahout trains the elephant. He takes care of elephant in everyway.

Sapera : Snake charmers or saperas earn living by making snakes dance to the tunes of their instrument called beens.

Madari : Madari's train monkeys to perform various act to earn their living. Kalandars trained sloth bears to dance in the court of Mughal emperors.

- 2. People hunt wild animals for food and other products.
- 3. Endangered animals are those are at a risk of being extinct.
- 4. When we conserve and protect the natural habitat of wildlife species, we enrich our planet, educates the people and raises awareness regarding. The importance of protecting these wild-life species.
- 5. Indian Animals in Danger : Bengal Tinger, Gharial, Red Panda

Bengal Tiger : The Bengal tiger is actually the national animal of India. It is a beautiful, big cat that has yellow or light orange fur with dark brown or black stripes.

Gharial : The gharial is the longest of all living crocodiles in the world.

Red Panda : The red panda looks like a mix of a cat and bear that lives in forests. Its existence is threatened by poaching and because its home to trees is being cut down. Some animals are Asiatic lion of Gir forest, one-horned rhino of Assam, India elephant of Kerale, Royal Bengal tiger of the Sundarbans lion tailed macaue, gharial, snow leopard of the Himalayas, flying squirrel, Indian Giant squirrel and bison.

6. Pollution of air, water and soil has endangered wildlife. Factories and vehicles release toxic in to the air. Use of DDT has killed several birds. Factory wastes are released in to rivers, lakes and seas.

Pesticides and herbicides are disposed off at farmlands. All this has resulted in the death of money animals.

Chapter 7

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (a), 6. (b)
- **B.** 1. True, 2. True, 3. True, 4. False, 5. True, 6. False
- **C.** 1. Stem : Rose and Sugarcane Root : Carrot and turnip Leaf : Bryophyllum
 - 2. The stigma releases a sweet substance called nectar. This attracts the insects when an insect sits on a flower to suck nectar, it transfer pollens stuck on its body to the stigma. The transfer of pollen grains from the anther to stigma of a flower is called pollination.
 - 3. The different agents of pollination are : Insects, Wind, Water, Grazing, animals, Birds etc.
 - Grain and dry fodder yield are pooled from various references. Mean dry fodder yield ha-1 × area cultivated estimated or potential dry fodder production. Crop

residue yield varied for each crop depending on genotype and environmental factors.

- 5. Carnivorous plants are plants that derive some or most of their nutrients from trapping and consuming animals or protozoans. Carnivorous plants have adopted to grow in places where the soil is thin.
- 6. The practice of growing plants on a large scale for food is called agriculture.

Process of agriculture :

(a) Tilling the soil

- (b) Applying fertilizers
- (c) Sowing seeds
- (d) Irrigate
- (e) Crop protection
- (f) Harvesting

Tilling the soil : The soil is ploughed to make loose.

Applying Fertilizers : Manures and fertilizers are added to the soil so that the crops give a good yield.

Sowing seeds : Seeds are sown by hand or seed drill.

Irrigate : Water is given to the crops for betterment growth.

Crop protection : The crop need to be protected from pests, disease and weeds. Chemicals are also sprayed to destroy weeds are insects.

Harvesting : When the crops are ready, they are harvested. The process of cutting and collecting the nature crop is called harvesting.

<u>Chapter 8</u>

- **A.** 1. (b), 2. (a), 3. (b), 4. (b), 5. (b), 6. (b)
- **B.** 1. True, 2. False, 3. False, 4. True, 5. True, 6. True
- **C.** 1. Forests were important the early man because they are a valuable natural resource. They have been a constant source of livehood. It covers almost one third of the world's land surface.

2. A large group of tribes known as Tribals live in the forests.

The new forest Rights Act in 2008 granted the Tribals the right to monitor, a minister and use the forest under collective ownership. This enables them to sell their products what grows in the forest.

- 3. Forest provide us with timerb, paper rubber, resins, gum, food medicines etc, forest give out oxygen and absord carbon dioxide and forest causes rainfall and prevent soil erosion and drought.
- 4. There are some useful products we get from forests paper, gum, timber, rubber, resins, food, medicines etc.
- 5. Deforestation leads to increasing level of air pollution, increasing level of poisonous gases in the environment, increasing soil and water pollution, increasing environmental heat, and many more.

The negative effects of deforestation cause many health disorders and most importantly lungs and respiratory problems.

- 6. Conservation of forests is essential for life on earth.
- Planting of trees is called afforestation Indian government supplies saplings and encourage planting of trees. Van Mahotsava is celebrated every year.
- Government has set up national parts and bioreserves which help in the conservation of different species of both plants and animals.
- Cutting of trees in forest reserved are illegal.

Chapter 9

A. 1. (a), 2. (b), 3. (b), 4. (a), 5. (b), 6. (b)

3	5
7	1
6	8
9	2
10	4
	7 6 9

E. 1. Rabi, 2. Kharif, 3. Zaid, 4. Kharif, 5. Kharif, 6. Zaid, 7. Rabi, 8. Rabi, 9. Rabi, 10. Zaid

- F. 1. Farming is growing crops or keeping animals by people for food and raw materials. Farming is a part of agriculture. Various stages of farming : Preparing the soil Sowing seeds Irrigation Adding fertilizers Harvesting
 - 2. The soil is prepared first and made loose by ploughing. This process is known as tilling.
 - 3. **Irrigation :** Irrigation is the process by which water is supplied to the growing crops in the field. Wells, tube wells, pond, lakes, rivers, dams and canal are the sources or irrigation.
 - 4. Insecticides and Pesticides are sprayed on the crops to destroy pests.
 - 5. Harvest is the process of gathering ripened crops from the fields. Harvesting is done using a scythe, sickle or reaper. The grain is separated from the stalk.

The farmer sells the crop to buyers.

6. Crops grown for food are called food crops. Mustard, sunflower are example of food crops. Crops grown for commercial purposes are called cash crops. Jute, cotton, rubber are examples of cash crop.

Crops based on seasons : Crops are classified as rabi, kharif and zaid based on what seasons they grow.

Rabi crops : These crops are sown in the start of winter and harvested in spring.

Kharif crops : Kharif crops are sown in the beginning of July and harvested in October. Kharif crops are also called monsoon crop.

Zaid crops : Zaid crops are grown in a short season between kharif and Rabi season in the months of March to July.

- **A.** 1. (b), 2. (a), 3. (b), 4. (b), 5. (b), 6. (a)
- **B.** 1. We eat food because food satisfies our hunger.

Our body needs energy to function :

(a) Food provides us the energy required to do work.

(b) Food helps our body to grow. Food protects us from diseases.

- 2. We eat different types of food. A food item that gives nutritional value and help to keep our body healthy is known as a nutrient. There are three main categories of nutrients : Carbohydrages, Vitamins, Proteins
- 3. A diet, which comprises abequate amounts of necessary nutrients required for a healthy growth and development of our body. A balanced diet includes both sufficient and nutritious food to ensure good health.
- 4. If we do not eat a balanced diet, our body lacks one or more nutrients and we fall ill. Deficient of energy giving (carbodydrates and fats) and body-building (Proteins) food cause Protein-Energy Malnutrition or PEM.

Vitamin Deric Vitamin A Night b Vitamin B Beri-be complex Vitamin C Scurvy Vitamin D Rickets	VitaminDeficiency diseaseVitamin BNight blindnessVitamin BBeri-beri pellagracomplexScurvyVitamin CScurvyVitamin DRickets	Symptoms of the disease Cannot see in dim light Muscle and nervous disorders Red skin lesions Bleeding of the gums, teeth falling out, pain in the joints, wounds not healing properly. Soft and deformed bones, bow- shaped leg, pigeon-type chest
		and bending of the spine.

5. Food gets spoiled when it is left out in the open for some time.

Storage of food : Before being stored, harvested grains are made free of moisture.

Fumigation : Fumigation is the process of spraying the vapours of chemicals to kill pests and germs that damage the crops.

Cold storage : There are some food items like fruits and vegetables need to be stored at low temperatures.

6. Food can be prevented from getting spoilt. Some methods we can preserve food :

Drying : Microbes cannot grow in the absence of water. Hence food like fruits are dried. For example - grapes become raisins on drying.

By adding salt and sugar : Addition of salt or sugar preserves food. Pickles can be preserved for long time by this method.

Canning and vacuum packing : Food is canned which prevents the growth of microbes and preserves food for a long time.

Freezing : Food items like fruits, vegetables, meat and fish is stored at low temperature. The low temperature prevents the microbes from multiplying thus preventing food from getting spoiled.

Pasteurisation : The milk is heated to a high temperature for about 30 minutes and then it is quickly cooled. Heating kills the bacteria. The low temperature are prevents bacteria from multiplying.

- **C.** 1. Night blindness 2. Scurvy
 - 3. Rickets 4. Beri-Beri, Pellagra
 - 5. Beri-beri, Pellagra 6. Scurvy

- **A.** 1. (a), 2. (b), 3. (a), 4. (a), 5. (b), 6. (a)
- **B.** 1. **Kalpana Chawla :** Kalpana Chawla was the first American woman of Indian origin to go into space. Her first flight to space was on space Shuttle Columbia in 1997 as a mission specialist. Unfortunately, in 2003, Kalpana Chawla was part of the space shuttle Columbia

disaster and lost her life along with other astronauts while returning to earth.

- 2. **The sun :** The sun is the largest thing in our solar system. It makes up 98 percent of the matter in the solar system.
- 3. **The Moon :** The Moon is the nearest neighbour of our earth. It is much smaller than the Earth. It revolves around the Earth.
- 4. **The Stars :** We see stars in the sky at night. Stars are giant balls of gases. They are for away from us. That is why they look so small. The sun is the nearest star to our planet earth.
- 5. **Neil Armstrong :** On July 20, 1969, the American space mission Apollo 11 landed on the Moon. Neil Armstrong, Edwin Aldrin and Michael Collins were it. Neil Armstrong was the first man to walk on the moon.
- 6. **Sunita Williams :** Sunita Williams is the woman who holds the record for the longest single space flight (195 days). She also holds the record of seven space walks which total up to 50 hours and 40 minutes. She hold the 5th rank when it comes to experienced space walkers.
- **C.** 1. **Astronauts :** A person who is trained to travel in to space is known as an astronaut.
 - 2. **Space suit :** A space suit is a special garment worn by astronauts when they go in to space. This suit has a helmet, gloves and boots.
 - 3. **The Celestial bodies :** The natural bodies in the sky are called celestial bodies or heavenly bodies.
 - 4. **Full moon :** It decreases in size gradually from a full moon to crescent shaped and then disappears. It again increase till it becomes a full moon.
 - 5. **Space craft :** A space craft is a vehicle used for going into the space.
 - 6. **Phases of the Moon :** The different shapes of the moon that we see are called the Phases of the Moon.
- **D.** 1. Space exploration is sending people or machines in to space to visit other planets

and objects in space.

- 2. Space is the empty area that exists much above the earth. The space is where the sun, earth, moon, stars and other planets are located. Some of the different kinds of celestial bodies are planets, moons, stars, comets, meteors, asteroids and galaxies.
- 3. The moon has no light of its own. The light we see is sunlight reflecting from the Moon's surface. At any time, half of the moon is lit up by the sun while the other part is in the dark.
- 4. On the surface of moon, the astronauts had to get used to the reduced gravity. They could jump very high compared to on Earth.
- 5. Because of its size, it has a strong gravitational pull. It keeps the Earth, the stars, the moons and the other planets in line. Without the gravity of the sun, the earth would go spinning off into space.
- 6. Rakesh Sharma was the first Indian to go into space. Kalpana Chawla was the first American woman of Indian origin to go into space.

Sunita Williams, an American astronaut of Indian origin, was the first woman to stay in space for 193 days.

- **A.** 1. (a), 2. (b), 3. (a), 4. (b), 5. (a), 6. (b)
- **B.** 1. It has a small entrance to prevent escape to heat.
 - 2. There are different types of houses. Some houses are made of different materials like roads, bricks, cement, mud and wood. Some houses have sloping roofs and some have flat roofs. Some houses are single storeyed while others are multi-storeyed.
 - 3. Soft clay is poured in to a mould and baked in a kiln to make bricks. Most bricks are made by machines these days. Before the brick is baked, they are dried to remove the excess moisture.
 - 4. Stilt houses are made in flood area stilt houses are made on platform supported by bamboo pillars. These house remain high

above the ground and safe from the flood water.

- 5. A well planned house has some Important features:
- There should be wire nettings in the doors and windows so that mosquitoes and flies should not come in.
- The drains in and around the house should be covered so that germs do not spread diseases.
- Houses should be kept neat and clean by dusting and cleaning it regularly.
- The house should be bright and airy with big windows to let in fresh air and sunlight.
- There should be proper electrical and plumbing fitting for easy use.
- All the rooms should be made in wellplanned design.
- 6. A bungalow is a large one or more than one storeyed house. Bungalows often have a veranda (Porch), at the front and or back, which is a covered area to sit.
- C. Pucca and Kutcha house :
 - 1. Pucca house are strong houses. They are made up of wood, bricks, cement, iron rods and steel. These houses are strong and withstand harsh weather. They are usually seen in towns and cities.

Kutcha house are made up of wood, mud, straw and dry leaves. They are not very strong. They are not very strong. Some have thatched roof also. They easily get destroyed in storms. A hut is a kutcha house.

2. Caravan and Houseboat:

A caravan is a house on wheels. People who keep moving from one place to another live in caravans. Houseboat are houses built on al boat so they can float on water. House boats are a great tourist attraction. Houseboat are seen on Dal lake in Kashmir and on the backwaters of Kerala.

3. Flat and bungalow:

Flat : A multi-storeyed building has many

houses built on several floors. They are called flats.

Bungalow : A bungalow is a large one or more than one storeyed house.

4. Igloo and Stilt house :

Igloo : In extremely cold countries, people live in houses made of snow. These people are called Inuits and their house made of snow is called an Igloo. The inner walls are lined with animal skin to keep it warm. The floor is also covered with thick animal fur. It has a small entrance to prevent escape of heat.

Stilt house are made in flood-prone area. Stilt houses are made on platform supported by bamboo pillars. These houses remain high above the ground and safe from the flood water.

- 5. Wooden and Cemented house :
 - **Wooden house :** In cold and forested region of India, people build wooden house.

Cemented house : Pucca houser are made from cement ex- flats, bangalows.

6. Single storey and multi storey :

Single storey : A bungalow is a large single storeyed house.

Multi storeyed building has many houses built on several floors. They are called flats.

- **A.** 1. (a), 2. (b), 3. (a), 4. (a), 5. (a), 6. (a)
- **B.** 1. **Natural disaster :** A natural disaster is a natural phenomenon that causes major loss of life and property, leaving people and animals injured, orphaned and homeless. Floods, huricanes, volcanic eruptions, cyclones, earthquakes and droughts are some natural disaster.
 - 2. **Epicenter :** The point on the Earth's surface is called the epicenter.
 - 3. **Crater :** A crater is a large hole made by something hitting the ground with force.
 - 4. **Vent :** Hot lava flow out from the surface through a vertical funnel called vent.



- 5. **Fault lines :** The surfaces below which the plates move are called fault lines.
- 6. **Magma :** Magma is molten rock that is formed in very hot conditions inside the earth.
- C. 1. True, 2. False, 3. False, 4. False, 5. False, 6. True
- D. 1. See the answer (B 1)
 - 2. When an earthquake occurs, the ground shakes. Earthquake is a sudden movement of a portion of the Earth surface toppling everything on its surface.
 - 3. Stilt houses should made in floodprone areas. Always switch off the main electric switch to avoid electrocution. Avoid moving or driving through flood waters.
 - 4. (a) As soon as you feel the tremors, run out of the building to an open area. If you are not able to run out, sit under a table.

(b) If you are outside during an earthquake, stay away from building, trees, street light and power lines.

(c) Do not enter a building for some time even after the earthquake stops, as damaged portion of the building may collapse, even after the disaster.

(d) Do not use a lift. Always use the stairs in earthquake.

5. Volcanoes can be of three types : active, dormant, and extinct.

Active volcanoes: Example - Mount Erebus in Antarctica and Barren Island in the Andaman sea of India are the active volcanoes.

Dormant volcanoes : Example - Mount kea in Hawaii, Mount Rainier in United States and Mount Kilimanjaro in Africa are dorment volcanoes.

Extinct volcanoes : Mount Ashitaka in Japan, Aconcagua in Argentina and Mount Buninyong in Australia.

6. **Rescue and relief :** Arrangements are made to evacuate people. Helicopters are used to rescue the victims.

Immediate relief such as food, shelter,

clothing, water and medical services are provided to the pron areas. Rehabilitation of displaced victims is done. Rescue operation also includes finding shelter for them and providing them clothing and other necessities.

- **E.** 1. **Floods :** Some parts of India receive very heavy rainfall during the monsoon. Heavy rains cause rivers to swell up and overflow in to the neighbouring area causing floods.
 - 2. Relief and Rescue operations :

Arrangements are made to evacuate people. Helicopter are used to rescue the victims, Rehabilitation of displaced victims is done. Rescue operations also include finding shelter for them and providing them clothing and other necessities.

- 3. **Cyclones :** A heavy rain along with and air mass wind that rotate around a strong center is called a cyclone.
- 4. **Earthquake :** Earthquake is a sudden movement of a portion of the Earth surface toppling everything on its surface.
- 5. **Volcanoes :** Volcanoes can be of three types active, dormant and extinct.
- 6. Floods preventive measures :

- **A.** 1. (a), 2. (a), 3. (b), 4. (a), 5. (a), 6. (a)
- **B.** 1. True, 2. True, 3. True, 4. True, 5. True, 6. True
- C. 1. Water is the most essential source of life on the earth as we need water in every walk of life like drinking, cooking, bathing, washing, growing crops, plants, etc.
 - 2. Surface water comprises water from rain that fills up large water bodies, e.g. rivers, lake, oceans and seas.
 - 3. **Groundwater :** When it rains, some water seeps through the soil. It gets collected above the layer of bedrocks and forms groundwater. IT is safe for drinking. Wells, hand pumps and tube well are dug to obtain groundwater.

Surface water comprises water from rain that fills up large water bodies, e.g. rivers, lakes, oceans and seas.

4. Here are some tips to conserve water :

Close the tap while brushing your teeth. Repair leaking taps and water pipes. Wells should be covered to save them from pollution.

Rainwater can be use to flush toilets and water plants.

- 5. Rainwater harvesting can be employed. It is a technique of collecting rainwater and saving for use in future. We need to create rainwater tanks to store water. The collected water is used for irrigation of vegetable gardens, washing clothes, bathing, etc. Rainwater aids in environmental conservation and prevents groundwater from being depleted.
- 6. Aquatic animals :

Salt water habitat : mainly animals like fish, crabs, prawns and starfish live in water.

Freshwater habitat : Many animals like fish, snakes and frogs live is freshwater.

Aquatic plants : Some aquatic plants remain submerged under water, while some float on its surface. Water hyacinth, duckweed and water lettuce are floating plants.

Chapter 15

- **A.** 1. (b), 2. (b), 3. (a), 4. (b), 5. (a), 6. (a)
- B. 1. True, 2. True, 3. True, 4. False, 5. True, 6. True
- **C.** 1. If you add milk with water. It mixes with the water. It is said tube miscible.
 - 2. Lighter substances float in water and heavier ones sink. The heaviness and lightness of a substance is its density.
 - 3. Many substances dissolve in water that is why it is also called the universal solvent.
 - 4. When two liquids can be mixed to form a solution they are called "miscible". If two liquids cannot be mixed to form a solution they are called "immiscible".
 - 5. Some few solutions Milk, vegetable oil, sugar solution.

6. Lighter substances flout in water and heavier ones sink.

This is because the nail is unable to displace the amount of water equivalent to its weight. Similarly, an empty plastic bottle floats on water. However, when you fill it up with water, the bottle sinks. This is because it is unable to displace that much volume of water.

- **D.** 1. **Solution :** The mixture of solute and solute and water in which they dissolve is called the solvent. The mixture of solute and solvent is called a solution.
 - 2. **Density :** The heaviness and lightness of a substances is its density. Density is a measurement of how much matter is packed into a certain volume. The substance that is denser than water sinks. Whereas the substance less denser than water, floats.

Different liquids such as oil, water, sugar solution, etc, have different densities.

- 3. **Miscible :** When two liquids can be mixed to form a solution they are called miscible.
- 4. **Solvent :** Salt or sugar are solutes and water in which they dissolve is called the solvent.
- 5. **Solute :** Substances that dissolve completely in water are said to be soluble.
- 6. **Miscible liquids :** If you add milk with water. It makes with the water. It is said to be miscible liquids.

- **A.** 1. (a), 2. (b), 3. (b), 4. (a), 5. (b), 6. (a)
- **B.** 1. (e), 2. (d), 3. (f), 4. (a), 5. (c), 6. (b)
- **C.** 1. **Sanchi Stupa :** Sanchi Stupa located in Madhy Pradesh, is the oldest stone structure in India. It was commissioned by king Ashoka. It is simple dome-shaped brick structure built over the relics of the Buddha.
 - 2. **Charminar :** Charminar is the historic monument located at the heart of Hyderabad, west-central Telangana state, south-central India. The minar was built in

1591 CE and is a valuable monument and mosque in the city. The minar is located in the east bank of the Musi river and is one of the famous structures in India.

3. **India Gate :** The India Gate was designed by Sir Edwin Lutyens and it is considered as the national monument of India.

India Gate, officially named as Delhi Memorial, monumental sandstone arch in New Delhi, dedicated to the troops of British India who died in wars faught between 1914 and 1919.

India Gate, which is located at the eastern and of the Rajpath is about 138 feet (43 metres) in height.

4. Qutub Minar is one of the tallest minarests located in New Delhi. The height of the tower is 72.5 metres, and it has 379 steps leading to the top. It is made of red sandstone.

Its construction was started by Qutb-ud-din Aibak and completed by his successor, Iltutmish. The minar is decorated with the Arabic inscriptions and the pillars also has Brahmi inscriptions. This is a 12th century monument and is listed as UNESCO world heritage site.

- 5. Victoria Memorial : Victoria memorial building in Kolkata, West Bengal, India, which was built between 1906 and 1921. It is dedicated to the memory of Queen victoria and is now a museum and tourist destination under the auspices of the Ministry of culture.
- 6. **Gateway of India :** The gateway of India in Mumbai stands over looking the Arabian sea. It is a monument built during the British Raj in Mumbai. It is located on the water front in South Mumbai. The structure is a basalt arch, 26 metres high. It was build to mark the arrival of king George V and his queen to India.
- **D.** 1. The monuments are the source of information of India's historical and cultural heritage.

- 2. Shah Jahan built Taj Mahal in the memory of his beloved wife Mumtaz Mahal.
- 3. India Gate, officialy named as Delhi Memorial, originally called All-India War Memorial, monumental sandstone arch in New Delhi, dedicated to the troops of British India who died in wars fought between 1914 and 1919. India gate, which is located at the eastern end of the Rajpath is about 138 feet (42 meteres) in height.
- 4. It is built of red sandstone. The forts massive red standstone walls, which stand 75 feet (23 metres) high, enclose a complex of places and entertainment halls, projecting balconies, baths and indoor canals, and geometrical gardens, as well as an ornate mosque. The entrance of the gate leads through a long covered bazar called the Chatta Chowk.
- 5. Maharaja Sawi Pratap Singh in the form of the crown of Lord Krishna. It resembles a honeycomb with its 953 small windows.
- 6. Preservation of Monuments :
- We should not write name or scribble on the wall of these monuments.
- We should not litter around these places.
- We should not scratch the walls of such structures.

Test Paper-1

- **A.** 1. migration, 2. Cricket, 3. ribcage, 4. buds, 5. hearing, 6. Stamen
- **B.** 1. Tribals, 2. Mahouts, 3. Lizards, 4. Large Intestine, 5. Lungs, 6. mixed doubles
- **C.** 1. (c), 2. (e), 3. (a), 4. (f), 5. (b), 6. (d)
- **D.** 1. Catfish2. Small intestine3. Fertilization
 - Test Paper-2
- **A.** 1. harrow, 2. Kharif, 3. fats, 4. Mars, 5. Kuchaa, 6. earthquake
- **B.** 1. Electricity, 2. Solution, 3. Gateway of India, 4. Threshing, 5. Rabi, 6. Bodybuilding foods
- **C.** 1. (c), 2. (e), 3. (a), 4. (b), 5. (f), 6. (d)
- D. 1. Volcano 2. Igloo
 - 3. Gateway of India



Teacher's Learning Materials



