



Teacher's
Manual



Our PLANET

(A Book on *Environmental Awareness*)



• Arun Sharma • Anil Gaur



Book-1	.....	2
Book-2	.....	7
Book-3	.....	13
Book-4	.....	22
Book-5	.....	34

Our Planet-1



All About Myself

Do it yourself



Know Your Body

- A. 1. (a) Writing 2. (d) Running 3. (c) Head
- B. 1. see 2. smell 3. hear 4. taste 5. feel
- C. 1. 2 2. 1 3. 2 4. 1 5. 10
6. 1 7. 2 8. 1 9. 2
- D. 1. FOOT 2. NECK 3. CHEST 4. NOSE 5. CHIN
6. HAIR
- E. 1. Write, Clap, Hold
2. Run, Kick, Jump
3. We have five sense organs.
4. Head is the top most part of our body.



My Body Needs Care

- A. 1. (b) twice a day 2. (a) once a day
3. (a) once a day
- B. 1. short 2. clean 3. fresh 4. milk 5. eight
- C. 1. When my teeth are dirty– I use a toothbrush.
2. When my hair is untidy– I use a comb.
3. When my hands are dirty– I use a soap.
4. When my nails are long– I use a nail-cutter.
5. When I am wet– I use a towel.



Types of Family

- A. 1. (d) parents 2. (c) nuclear family 3. (b) joint
 B. Do it yourself
 C. Do it yourself



Celebration Time

- A. 1. (a) 15 August 2. (b) 26 January 3. (d) 2 October
 B. 1. Diwali 2. 25 December 3. thirty
 4. gurudwaras; 5. Bapu
 C. 1. Diwali; 2. Christmas 3. Eid 4. Gurupurab



My School

- A. 1. (d) school 2. (b) classroom 3. (b) teachers
 B. Do it yourself
 C. Book, eraser, sharpener



Food We Eat

- A. 1. (b) Milk 2. (b) Three 3. (d) Pizza
 4. (b) Food 5. (c) Afternoon
 B. 1. healthy 2. morning 3. easy
 4. uncovered 5. bad
 C. 1. Jam, bread 2. egg, chicken 3. apple, papaya



Dresses We Wear

- A. 1. (a) summer 2. (d) sheep 3. (c) rainy
 B. 1. cold; 2. decent 3. rainyday
 4. warm 5. school

- C. 1. (c) 2. (d) 3. (a) 4. (b)
- D. 1. We wear clothes to cover our bodies.
 2. We wear colourful clothes on weddings and birthdays.
 3. We wear uniform at our school.



Houses We Live In

- A. 1. (a) door 2. (a) hut 3. (d) rooms
- B. 1. Bedroom 2. Bathroom 3. Kitchen
 4. Drawing room 5. Dining room 6. Studyroom
- C. 1. Bedroom 2. Drawing room 3. Drawing room
 4. Kitchen
- D. 1. Houseboat 2. Caravan 3. Tent 4. Igloo



Water

- A. 1. (c) Water 2. (c) growing 3. (d) rain
- B. 1. true 2. true 3. true 4. false 5. true
- C. 1. We need water for putting off fire.
 2. We need water for drinking.
 3. We need water for washing clothes.
 4. We need water for bathing.
- D. Do it yourself



The Green World

- A. 1. (d) coconut 2. (a) root 3. (b) green
- B. 1. Mango, Banyan 2. Rose, Cotton 3. Tomato, Grass
- C. 1. e e a 2. o e 3. o s 4. a i o d



Food From Plants

- A. 1. (a) Wheat 2. (c) Orange 3. (d) Coriander

- B. 1. Carrot Radish 2. Potato Ginger
 3. Cauliflower, Broccoli 4. Tomato, Bhindi
- C. 1. Mango, Onion, Banana, Grapes, Apple
- D. 1. p i n a c h 2. n i o n
- E. 1. Pear 2. Cabbage



The Animal World

- A. 1. (a) cow 2. (d) bear 3. (b) fish
- B. 1. (iv) 2. (i) 3. (ii) 4. (iii)
- C. 1. Elephant 2. Lion 3. Parrot 4. peacock
 5. whale
- D. 1. Domestic animals live near our houses or on the farms.
 2. Wild animals live in jungles.
 3. We keep pets for fun and safety.
 4. Whale, crocodile, fish, dolphin and octopus are called the water animals.



Food and Shelter for Animals

- A. 1. (a) Hen 2. (b) Frog 3. (d) Tiger
- B. 1. Rabbit-Carrot 2. Lizard-Insects 3. Dog-Bone
 4. Elephant-Sugarcane 5. Monkey-Banana
- C. 1. STABLE, PEN, KENNEL, SHED, NEST, DEN, WEB
- D. 1. Cow, Horse, Giraffe 2. Pigeon, Mouse, Squirrel
 3. Frog, Spider, Crow 4. Tiger, Crocodile, Lion



Travel and Safety

- A. 1. (b) car 2. (b) steamer 3. (d) aeroplane
- B. 1. BICYCLE 2. SCOOTER 3. CAR 4. TRAIN
- C. Do it yourself

D. Do it yourself



The Sky and The Weather

- A. 1. (d) sun 2. (a) hot 3. (c) rainy
- B. 1. hot 2. smaller 3. hot days 4. cold days 5. seven
- C. 1. Because they are far away from us.
2. In rainy days we enjoy sailing paper boats.
3. Violet, indigo, blue, green, yellow, orange and red are the colours of a rainbow.

Our Planet-2



My Body

- A. 1. (d) Jump 2. (a) Heart 3. (c) Brain
- B. 1. brain 2. lungs 3. stomach 4. five 5. teeth
- C. 1. Eyes–Seeing 2. Ear–Hearing 3. Nose–Smelling
4. Tongue–Tasting 5. Skin–Feeling
- D. 1. Head, neck, legs are external body parts.
2. Brain, heart, lungs are internal body parts.
3. Eyes, ears, nose, tongue, skin are our five sense organs.
4. eyes – help us to see; tongue – helps us to taste.



I Love My Family

- A. 1. (a) Small family 2. (d) siblings 3. (a) Cousins
- B. 1. house 2. nuclear 3. surname 4. money 5. respect
- C. Do it yourself
- D. 1. Mother, father and their children make a family.
2. A family which has parents and their one or two children is called small family. A family which has parents, grandparents, uncles and their children is called a big family.
3. Family members have fun on festivals, birthdays and weddings.
4. Do yourself.



Places Around Us

- A. 1. (b) Market 2. (c) Hospital 3. (a) Bank
- B. 1. comfortable 2. market 3. postman
4. ambulance 5. policeman
- C. 1. clean 2. many shops 3. letter box
4. sick 5. thieves



Water

- A. 1. (b) Rain 2. (a) Human 3. (d) Sea
- B. 1. Plants 2. big 3. clean 4. safe 5. waste
- C. 1. Throwing garbage into water bodies.
2. Bathing animals in water bodies.
3. Discharging waste from factories into water bodies.
- D. 1. Drinking, cooking, bathing, washing, cleaning, putting out fire, etc. are various uses of water.
2. Because it is salty.
3. Boiling is the best way to make water clean.
4. Some rainwater goes into the ground. This is called ground water.



House

- A. 1. (a) Hut 2. (d) skyscrapers 3. (b) sloping
- B. 1. houseboat 2. caravan 3. tent 4. igloo
- C. 1. architect 2. mason 3. carpenter
4. plumber 5. electrician 6. painter
- D. 1. We need a house to live in.
2. Permanent houses are made of bricks, cement, steel and glass.
3. Because sloping roofs allow snow and rainwater to fall off easily.
4. Do yourself.



Clothes

- A. 1. (a) summer 2. (b) warm 3. (d) silkworm
- B. 1. True 2. False 3. True 4. True 5. True
- C. 1. Because they are light and keep us cool.

2. Because they keep us warm.
3. Clothes are made of different materials like cotton, wool and silk.
4. Because uniforms suit their jobs.



Useful Plants

- A. 1. (a) Wheat 2. (d) Almond 3. (a) Tulsi
- B. 1. Carrot, Radish 2. Potato, Arvi 3. Cabbage, Spinach
4. Cauliflower, Broccoli
- C. 1. Sugarcane 2. Rose and Jasmine
3. Jajoba 4. Babool 5. Bamboo



Useful Animals

- A. 1. (d) Cow 2. (b) Cat 3. (a) candles
- B. 1. Cow–Milk, Goat–Meat, Hen–Eggs, Bee–Honey, Sheep–Wool
- C. 1. camels 2. good 3. dog 4. tonga 5. kind
- D. 1. Cow, goat, buffalo give us milk.
2. Because pets give us fun and safety.
3. Some animals carry us or carry things for us. These animals are called ‘beasts of burden’.
4. Animals provide us with clothing, food, medicine and also help with many economic needs of human beings.



Travel Time

- A. 1. (c) Delhi 2. (a) Boat 3. (d) Aeroplane
- B. 1. travelling 2. within the city 3. port
4. expensive 5. rocket
- C. 1. Car, Auto rickshaw, Bus;
2. Ship, Steamer, Boat
3. Aeroplane, Helicopter, Rocket.

- D. 1. We need transport to travel from one place to another.
2. Delhi, Kolkata, and Bengaluru cities have metro rail.
3. Ships, streamer and boats are the main means of water transport.
4. In deserts, camel is the ship of the desert. Elephants are used to carry load and logs in thick forest. Mules are used in hilly areas.



Keeping Safe

- A. 1. (c) blades 2. (a) footpath 3. (d) Zebra
B. 1. UNSAFE 2. SAFE 3. UNSAFE
4. UNSAFE 5. SAFE
C. 1. Because it is harmful for us.
2. We should not board or get down from a moving bus because it is harmful.
3. If someone get hurt, inform your teacher to give immediate medical help.



Our Beautiful Earth

- A. 1. (b) Plain 2. (b) Desert 3. (d) Ocean
B. 1. Plains 2. hard rocks 3. cooler
4. sand 5. banks
C. 1. Plain 2. Mountain 3. Valley
4. Lake 5. Seas and Oceans
D. Do it yourself
E. 1. Because hills are made up of hard rocks and it is cooler than plains.
2. Because there is very little water in the deserts.
3. Waterfall looks beautiful from a distance.
4. The shape of a valley is like "V".
5. A peace of land surrounded by water on all sides is called an island.

6. Plain, Hills, Mountain, Plateaus, Desert, Valley and Islands are the landforms on the earth surface.



Sides and Directions

- A. 1. (c) Four 2. (c) Four 3. (d) East
B. 1. True 2. False 3. True 4. False
C. Do it yourself



Time

- A. 1. (a) Morning 2. (b) Evening 3. (d) Night
B. Do it yourself
C. 1. 31 2. 31 3. 31 4. 31 5. 30 6. 30
D. 1. 60 minutes 2. 60 seconds 3. 24 hours
4. 7 days 5. 4 weeks



Seasons

- A. 1. (a) Summer 2. (a) Winter 3. (d) Seven
B. 1. summer 2. monsoon 3. winter
4. spring 5. monsoon
C. 1. May, June 2. July, August 3. December, January
4. March, April
D. Do it yourself
E. 1. The condition of air around us is called weather.
2. When the weather remains the same for a long time, it is called season.
3. There are four seasons in our country.
4. Spring season is the queen of the seasons. In this season flowers bloom and new leaves grow on plants during this time.

Our Planet-3



Our Body

- A. 1. (a) Head 2. (d) Heart 3. (c) tongue
- B. 1. uppermost 2. thirty two 3. front 4. dark
- C. Do it yourself
- D. 1. Because brain helps us to think and remember. It also controls all the functions of the body.
2. Our mouth helps us to eat food, drink water, speak and sing.
3. We breathe in air through our lungs.



My Family

- A. 1. (c) small family 2. (a) twins 3. (d) school
- B. 1. True 2. True 3. True 4. False 5. True
- C. 1. Parents and their children make a family.
2. Some families are big and some are small. They are different types of families.
3. Children stay with only one parents, either a father or a mother. Such a family is known as a single-parent family.
4. All the members of a family celebrate functions together. Relatives and friends meet each other on weddings, birthdays, festivals and vacations.
5. Like the branches of a tree, our family members are the branches of our family tree.



Food We Eat

- A. 1. (c) carbohydrates 2. (b) proteins 3. (b) vitamins
- B. 1. energy 2. proteins 3. digestion 4. salad 5. plants
- C. 1. Baking 2. Frying 3. Frying 4. Steaming
5. Frying 6. Roasting

- D. 1. We need food to stay alive.
2. Proteins help our body to grow well.
3. Cooking makes food soft, tasty and digestible.
4. A balanced diet is one that contains proteins, carbohydrates, fats, vitamins and mineral in the right amount.
5. Plants and animals are the main sources of food.



Our Shelter

- A. 1. (a) Hut 2. (d) Skyscraper 3. (c) Kerala
B. 1. d 2. a 3. b 4. e 5. c
C. 1. Pucca houses 2. villages 3. South India
4. Maharashtra 5. trees
D. 1. Kutcha houses are made of mud, straw, bamboo sticks and leaves.
2. Pucca houses are made of bricks, cement, steel and mortar.
3. Because it protects them from standing water, insects and wild animals.
4. Some people decorate the floors of their houses with coloured rice flour, flower petals and wet plains. This kind of decoration is called rangoli.
5. Do it yourself.



Water

- A. 1. (c) dehydration 2. (c) Ocean 3. (d) Ice
B. 1. growing 2. rain 3. safe 4. gaseous 5. waste
C. Do it yourself
D. 1. Bathing, drinking, cooking, cleaning, washing, putting out fire, etc. are the various uses of water.
2. Rain, pond, lake, well, hand pump, tube-well, etc. are the various sources of water.
3. We cannot use sea water because it is salty.



Travel Time

- A. 1. (a) Delhi 2. (b) Mumbai 3. (d) Aeroplane
- B. 1. False 2. False 3. True 4. True 5. True
- C. **Means of land transport** **Means of water transport** **Means of air transport**
- | | | |
|------------|------------|---------------|
| 1. Car | 1. Ship | 1. Aeroplane |
| 2. Bus | 2. Ferry | 2. Rocket |
| 3. Bicycle | 3. Steamer | 3. Helicopter |
| 4. Train | 4. Boat | |
- D. Do it yourself
- E. 1. We need means of transport to go from one place to another.
 2. Land transport means of move on land. In Delhi and Kolkata are cities of main means of land transport.
 3. Boats, steamers and ships are the means of water transport.
 4. Helicopters are used to carry goods during wars, floods and earthquakes.
 5. Petrol, diesel and CNG (Compressed Natural Gas) are the most commonly used fuels.



Communication

- A. 1. (d) Six 2. (b) Telegram 3. (c) fax machine
- B. **To send messages to an Individual** **To send messages to masses**
- | | |
|--------------|---------------|
| 1. Telephone | 1. Radio |
| 2. Mobile | 2. Newspaper |
| 3. Postcard | 3. Television |
- C. 1. We send and receive messages through different means of communication.
 2. Letters, telephone, mobile phones and computers are known as personal means of communication.

3. The main difference between a landline and cell phone is the way they make calls. A landline has a wired connection that connects it to the telecommunication network and uses wire telephone lines to transmit calls. Cell phones, on the other hand, use radio waves to call transmit call.
4. Mass communication means sending messages and giving information to a large number of people at the same time. Newspaper, radio and television are the main means of mass communication.
5. We can send videos, pictures, letters and books from one computer to another using the internet. The internet can also used to get weather reports and the latest information from all over the world.



Games We Play

- A. 1. (d) Chess 2. (c) Football 3. (b) active
- B. 1. fresh 2. Indoor games 3. good
4. earn money 5. fair
- C. 1. Ludo, Carrom, Chess 2. Cricket, Hockey, Football
- D. Do it yourself
- E. 1. Painting, playing, watching television, listening to music and reading story books. Doing these things in our free time is called recreation.
2. Indoor games are played inside the house.
 Outdoor games are played outside the house.
3. Rules increase our chances of predictability. When things become predictable, system becomes stable.



Safety First

- A. 1. (c) knives 2. (b) three 3. (d) injured
- B. Do it yourself

- C.**
1. Swimming tube is a ring that you put around your waist to keep you afloat when you learn to swim.
 2. A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations.
 3. A fire brigade is a public or private organisation that provides emergency fire fighting and rescue services for a specific geographical area.
 4. An ambulance is a self-propelled vehicle specifically designed to transport critically sick or injured people to a medical facility.
- D.**
1. Because you or someone could trip over them.
 2. Because you may get an electric shock.
 3. The first help that an injured person gets is called first aid.



Taking Care of Others

- A.**
1. (c) Brain
 2. (d) see
 3. (c) Blind
- B.**
1. We should take care of the sick.
We should give them medicines on time.
 2. We should offer our seats to them in buses or trains.
We should respect them and do shopping for them.
 3. We should help them in reading and writing.
We should help them in daily works.
 4. We should help them in road crossing.
The lame man may need someone to help near a pool.
- C.**
1. Some people cannot see, some are deaf, some are dumb and cannot speak such people are called differently abled people.
 2. Braille is a system of reading and writing for blind people using raised dots. They feel and identify the letters by touching the raised dots with their fingers.
 3. Some children lose their parents, they are known as

orphans. Many children on the streets roam around alone, who do not have parents. Such children also need special care. For such children special homes are made which are called orphanages.



Locating A Place

- A.** 1. (b) Four 2. (a) north 3. (d) south
- B.** 1. four 2. east 3. west
4. directions 5. directions
- C.** 1. The simplest way to locate a place is by naming the directions. There are four major directions; north, south, east and west. The directions between the major directions are called the sub-directions.
2. A plan is a detailed drawing of a small area. Whereas map is a drawing of a large area.
3. A scale on the map tells us how to find distances.



Animals-Food and Feeding Habits

- A.** 1. (a) Cow 2. (b) Bear 3. (d) Vulture
- B.** 1. H 2. O 3. C 4. C 5. O
6. H 7. C 8. H
- C.** 1. VULTURE 2. COW 3. CROCODILE
4. FROG 5. ELEPHANT
- D.** 1. Animals need food to get energy, to grow and to keep themselves healthy.
2. Carnivores have long, sharp and pointed teeth to tear the flesh.
3. Elephant's trunk help them to break off branches and leaves and push them into their mouths. Elephants also use their trunks to suck up water.



Textiles

- A. 1. (a) Saree 2. (d) Kashmir 3. (c) Kerala
- B. 1. three 2. women 3. Punjab
4. Himachal Pradesh 5. white uniforms.
- C. 1. Lehanga-choli or ghagra-choli
2. salwar-kameez or Churidar-kurta
3. Mekhela-chadar
4. Jyensyem
- D. 1. We wear clothes for protection and warmth. We do it to decorate and express ourselves, and show our status.
2. Lehanga-choli-, mekhala-chadar, jyensyem, mundu, etc are few popular dresses of women in India.
3. Doctor, nurses, soldiers, police officers and school children wear uniforms.



Festivals We Celebrate

- A. 1. (d) 1947 2. (b) 1950 3. (c) 2 October
- B. 1. Diwali 2. Dussehra 3. Eid
4. Christmas 5. Guruparv 6. Holi
- C. 1. (b) 2. (c) 3. (d) 4. (e) 5. (a)
- D. 1. Because India became a republic on this day.
2. People decorate their house with lights, clay lamps, diyas and candles so this day is called the 'festival of lights.'
3. Holi is called the 'festival of colours' because people spray coloured water and gulal on each other.



Weather and Seasons

- A. 1. (b) Noon 2. (d) loo 3. (c) spring
- B. 1. True 2. False 3. False 4. True
- C. 1. Summer, Monsoon, Winter
- D. 1. The main factors that bring changes in the weather are the sun, wind, cloud and rain.
2. Because the rays of the sun are slanting.
3. There are three main seasons in India-summer, monsoon and winter.



Space

- A. 1. (c) Sun 2. (b) Moon 3. (d) astronomers
- B. 1. True 2. False 3. True 4. True 5. True
- C. 1. Rakesh Sharma 2. Kalpana Chawla
3. Sunita Williams
- D. 1. Because moon has no air and water.
2. A group of stars that forms a special pattern is called a constellation. E.g., Ursa Major, Scorpio, etc.
3. Because they are far away from us.

Our Planet-4



Plants World

- A. 1. (c) Chlorophyll 2. (b) stomata 3. (a) taproot
4. (a) and (b) both
- B. 1. Chlorophyll 2. Photosynthesis 3. Carbon dioxide
4. Fibrous roots 5. Stomata
- C. 1. Plants produce all of the food that animals, and humans eat.
2. Chlorophyll is a pigment found in the cells of leaves which is activated in the presence of light and is the substance that colours plants green. Chlorophyll is contained in leaves and has the property of capturing light energy.
3. Do it yourself
4. Tap roots and fibrous roots.
• Tap roots are large and fleshy in appearance. They grow deep into the ground in search of food.
• Fibrous roots lie close to the surface of the soil. They collect precipitation before it sinks deep into the ground.
5. Photosynthesis is the process by which plants make sugar from sunlight, water and carbon dioxide.



Animals World

- A. 1. (a) Duck 2. (b) Crow flocks 3. (b) Cats and dogs
4. (a) cattle egrets
- B. 1. Pride 2. Murder or flocks 3. Parliament
4. Colony
- C. 1. Animals live in groups to catch their prey easily and protect themselves from predators.
2. Rabbit, deer and hare are shy by nature.
3. Cows, pigeons and dogs are friendly by nature.

4. A little fish, remora lives attached to a shark and eats small creatures that live on the shark's body.
5. Animal ears can be unbelievably large like the African elephant or very tiny like gerbil's ears. E.g. Long ears of hares help them to increase their range of hearing to avoid predators.



Our Surrounding

- A. 1. (a) sun 2. (c) oxygen 3. (b) touch-me-not 4. (a) gills
- B. 1. Stomata 2. Sunflower 3. Gills
4. Skin 5. Photosynthesis
- C. 1. • We can see beautiful flowers, trees, animals, our friends and other people around us. These are all living things.
- We can also see the air, water, soil, buildings and vehicles, these things do not have life in them. They are non-living things.
2. Animals and humans move to find food, shelter or to avoid danger.
3. Living things need food to grow and stay alive.
4. Green plants make their own food with air, water and sunlight.
5. Plants have tiny pores on their leaves called stomata which help in breathing.



The Human Body

- A. 1. (b) cells 2. (a) Brain 3. (c) cardiac 4. (a) Mouth and teeth
- B. 1. Ribcage—protects heart and lungs.
2. Skull—protects the brain
3. Skeletal muscles—support the skeleton
4. Saliva—helps to soften the food
- C. 1. The human body is made of millions of tiny things called cells.

2. Our brain helps us that what we should do and what we should not.
3. Skeletal system is made up of bone, cartilage, ligaments and tendons.
4. Trachea, bronchl, bronchioles, alveoli are the organs of the respiratory system.
5. The blood vessels consists of arteries, arterioles capillaries, venules and veins.



Nutrients in Food

- A. 1. (b) Carbohydrates 2. (a) Iron 3. (c) growth and repair
 4. (a) balanced diet 5. (b) pizza and burger
- B. 1. Proteins 2. Water 3. Carbohydrates 4. Fat
- C. 1. Food helps us to grow and to fight diseased.
 2. We eat a large variety of food items. Five different components in our food are called nutrients.
 3. The fibrous material of the fruits, vegetables and other food which cannot be digested by the body is called roughages.
 4. A diet containing all the essential nutrients in required quantities is known as a balanced diet.
 5. We can preserve food for a long time by many techniques, such as, boiling canning, salting, refrigerating and freezing.



Air

- A. 1. (b) oxygen 2. (b) ears 3. (c) heavier 4. (a) Compressed
- B. 1. (F) 2. (T) 3. (T) 4. (T)
- C. 1. 78 percent nitrogen, 21 percent oxygen, 0.9 percent argon and 0.03 percent carbon dioxide present in air.
 2. Oxygen gas is part of the air we use to breathe.
 Oxygen is essential for all aerobic organisms; common medical uses include oxygen therapy.

3. The air inside a balloon is squeezed into a very small space. This is called compressed air. Compressed air is a popular form of power because it is clean, easy to use, and easy to transport.
4. Air has mass and space.
5. Yes, air carries sound and smell.



Sources of Water

- A. 1. (c) Rain 2. (a) crops 3. (b) Boiling
- B. 1. Satluj 2. Krishna 3. Ganga
- C. 1. We need water to survive and for our daily activities.
2. Rivers, lakes, streams, reservoirs, oceans and rain are the main sources of water.
3. Many dams harness the energy of falling water to generate electric power. This type of electricity is called hydro-electricity. Dams also hold water for drinking and crop irrigation and flood control.
4. Rainwater is collected in these tanks or ponds. This rainwater is also collected on roofs of building and allowed to flow into a deep hole dug in the ground. This method is called rainwater harvesting.
5. (a) It can be used for irrigation.
(b) It can be use for public water supply.
(c) It is also used for hydropower plants.
(d) For flood control.
(e) For recreational purpose.



Our Clothing

- A. 1. (c) cotton clothes 2. (a) silkworm
3. (b) sheep's wool 4. (c) handloom
- B. 1. We get it from sheep-wool.

2. It comes from silkworms-cocoon
 3. It is made from synthetic fibre-nylon cloth
 4. It spins on looms-cotton thread
- C.
1. We wear clothes to protect our body against heat, cold rain and insect bites.
 2. In winter season, we wear thick, dark coloured clothes made of wool, fur or leather.
 3. Cotton, silk, wool and synthetic fibre are used to make cloth.
 4. Do it yourself.
 5. The wooden looms that are handled by hand are called handlooms. The looms that have motors to run are called power looms.



Our Shelters

-
- A. 1. (a) Assam 2. (b) Igloos 3. (c) cloth and plastic
- B.
1. We need to live in a house because it protects us from rain, storm, heat, cold and enemies.
 2. Houses in cities are mostly pucca houses, which are strong and permanent houses. A pucca house has a strong base so that it can bear minor earthquakes. The base holds the weight of the entire construction.
 3. Houses in rainy areas are built on stilts to protect people living in them from snakes, damp soil and flood which occur at a possibility of one per year. In areas which receive heavy rainfall it tends to flood. So houses are built on stilts for away from the flood waters.
 4. Bungalows, storey apartments and multi-storeyed houses are found in cities.
 5. Duplex and Skyscrapers.



A Clean House

- A. 1. (b) D 2. (a) wall 3. (c) both (a) and (b)
4. (c) meal
- B. 1. False 2. False 3. True 4. True
- C. 1. An Ideal house should have separate bedrooms, neat and clean bathrooms, a drawing room, a neat and clean kitchen with covered drains, windows and ventilators and a courtyard.
2. Windows allow air and sunlight to enter the house.
3. Doors and windows have wire-netting. It keeps flies and mosquitoes away and dust doesn't get inside easily.
4. Do it yourself.
5. Sunlight provides vitamin D, which keeps our bones healthy and strong.



The Environment

- A. 1. (b) Carbon dioxide 2. (c) non-living things
3. (a) plant more trees 4. (c) Germs
5. (a) Tree 6. (c) Soil pollution
- B. 1. Plants and animals 2. air, water and soil
3. Three-fourths 4. soil pollution;
5. non-biodegradable
- C. 1. True 2. True 3. False 4. True 5. True
- D. 1. Air pollution occurs when gases, dust particles, fumes or odour are introduced into the atmosphere in a way that makes it harmful to humans, animals and plants.
2. Any change or modification in the physical, chemical and biological properties of water that will have a detrimental consequence of living things, is water pollution.

3. We can help in saving our environment by following the three R's. These are Reuse, Reduce and Recycle.
4. We will have to save our forests and trees. Trees are our helpers and friends. Trees are useful to us in many ways.
 - We should not cut trees.
 - We should not waste paper.



Means of Communication

- A. 1. (b) 1.5 lakh 2. (b) Modem
 3. (b) Print media 4. (a) 148 million
- B. 1. • On the radio we can listen music, news, debates, plays and commentaries of various games like cricket and hockey. It is very useful for people who are illiterate. India has many radio stations, like All India Radio (AIR), Radio Mirchi, Radio City and Red FM.
- On the television (TV), we can listen and watch news, movie, songs and entertainment programmes. Television is the most popular means of mass media today.
2. • Mobile is used for talking to the people at distances. We can carry it along with us anywhere.
- A pager is a one way communication service. The message sent is displayed on the screen.
- C. 1. True 2. False 3. False 4. True
- D. 1. Postal Services, Telegraph Services, Telecommunications, Courier Services, Electronic Method, Internet, Radio and Television are the modes of communication in India.
2. The Indian postal services are excellent compared to other countries. We can buy postcards, inland letters, envelopes and postage stamp from a post-office.
3. A very convenient method to send fast messages, data, photo, etc. is internet.
4. Internet,
5. Television, radio, newspapers, magazines and internet.



Means of Transport

- A.** 1. (a) Metalled roads 2. (b) Asia 3. (c) 100 km
4. (a) Helicopter
- B.** 1. Thane to Mumbai
2. Rajdhani Express, Shatabdi Express
3. Jet Airways, Spice Jet
4. elevated tracks and underground tracks
- C.** 1. Roadways, railways, airways and waterways.
2. Do it yourself
3. Road are two types—metalled or unmetalled
4. • High flexibility in terms of transport jobs and changed plans.
• Fewer idles and waiting periods.
• Relatively low transports times for short and medium distances.
5. First railways was made in India in 1853.



Importance of School in Our Life

- A.** 1. (a) nation 2. (c) knowledge 3. (c) five storeys
4. (a) Saturday
- B.** 1. The school is a place where we get total education.
2. A school library is the store house of knowledge. Habit of reading can be cultivated in a library.
3. Laboratory is the place where various kinds of practical works are carried out by the students.
4. (a) Modern Higher Secondary School is far away from dust, noise and smoke of the city.
(b) It has a grand building.
(c) It has a playground, a canteen and a hall.
5. School is important because it is tool to help prepare us for

life. It prepares us to be the future caretakers of our nation. It teaches us the basic skills of educations as well as about people, place and nature.



Safety first

- A. 1. (b) careless 2. (b) zebra crossing
3. (d) green walk sign
- B. 1. False 2. True 3. False 4. True
- C. 1. We can avoid accidents, if we are careful and follow the safety rules.
2. Cross the road when all the traffic is cleared or stopped.
3. Children should cross only when the crossing supervisor has signalled it as safe.
A pedestrian should cross only on the zebra crossing when cars have stopped for this.
4. Red means stop, yellow means wait and green means go.



Important National Festivals

- A. 1. (b) 15th August
2. (a) India became free from the British rule
3. (a) A grand parade is held at kartavya path;
4. (c) 2nd October
- B. 1. 26th January 1950 is one of the most important days in Indian history as it was on this day the constitution of India came into force and India became a truly sovereign state. On this day India became a totally republican unit.
2. India celebrates Independence Day on August 15 each year. India became an independent nation on August 15, 1947, so it is celebrated annually to remember this date.
3. On the Independence day, the Prime Minister hoists the national flag on the Red fort and gives speech.

4. We celebrated Gandhi Jayanti on 2nd October to pay tribute and honour to Mahatma Gandhi who fought for the freedom of India.



Locating Maps

- A. 1. (a) Scale 2. (d) Blue 3. (b) large scale maps
4. (c) north 5. (a) Direction
- B. 1. (c) 2. (a) 3. (e) 4. (b) 5. (d)
- C. 1. A map has certain components which help us in understanding it.
2. A small scale map like the map of India shows a larger area.
3. Directions help us to know the location of a place.
4. (i) brown (ii) blue (iii) green (iv) sandy yellow
5. We need maps to know the proper location of a place.
6. Distances on a map are shown in cms. Usually the scale is 1 cm = 1 km.
7. A scale of a map helps us to calculate the distance between two points on the ground.



Our Earth

- A. 1. (d) Sun 2. (b) round 3. (a) rotation
4. (b) Imaginary 5. (a) 365 days
- B. 1. True 2. True 3. False 4. False 5. True
- C. 1. There are eight planets in the sun's family. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune
2. The shape of earth is sphere.
3. The two main movements of the Earth are the rotation of the Earth around its axis, and the revolution of the Earth, or orbital motion, around the Sun.
4. The Earth experiences days and nights as a result of the earth's spinning on its axis. As the earth spins, the part that

is facing the sun experiences day, while it is night for the part facing away from the sun.

5. There are mainly five seasons, namely summer, winter, monsoon, autumn and spring.



Conservation of Natural Resources

- A.** 1. (d) All of these 2. (a) Coal 3. (b) hydrocarbon
4. (d) electricity 5. (c) recycle
- B.** 1. True 2. True 3. False 4. True 5. False
- C.** 1. Natural resources are material provided by the Earth that humans can use to make more complex (human made) products.
2. Two types of natural resources are available on earth.
3. Renewable energy relies upon resources that are quickly replenished by natural processes, while non-renewable energy uses resources that are finite in supply. Common forms of renewable energy include solar, wind and geothermal energy. Fossil fuels and nuclear power are forms of non renewable energy.
4. Solar Power, Wind Power, Water, Biomass energy, are the examples of renewable resources.
5. • Write on both sides of paper.
• Drink from glass or reusable hard, plastic cups instead of throwaway paper or throwaway plastic ones.
• Use cloth towels and napkins instead of paper towels and napkins.
• Turn old clothes into new clothes by trading with a friend.
6. Do it yourself.
7. Fossil fuel is a general term for buried combustible geologic deposits of organic materials, formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.



Villages and Their Local Governments



- A. 1. (c) agriculture 2. (b) three tier system
3. (d) sarpanch 4. (a) municipal councillors
- B. 1. Municipal Corporation
2. Mayor
3. Mayor
4. Municipal Corporation of Delhi
- C. 1. Village Panchayat, the Panchayat union council, the district panchayat.
2. A city, town or other district possessing corporate existence and usually its own local government.
3. • They solve the disputes of village people as individual or groups.
• Gram panchayat implements the official programme given by the authorities.
• Conduct regular meetings and keep records for various departments.
• Collection of taxes, like house tax, service tax etc.
• Looks after general welfare e.g. road light, bazar community facilities, etc.
4. • To run a primary or lower basic school through the medium of a productive craft, thus combining cultural and technical education.
• To maintain a library and a reading room.
• To run a night school for adults.
5. Mayor is the head of Municipal corporation.

Our Planet-5



Reproduction In Plants

- A.** 1. (a) Flower 2. (b) Monocot 3. (a) Banana
4. (a) Rose 5. (c) Assam
- B.** 1. Germination is the process of seeds developing into new plants.
2. Seed dispersal is the movement or transport of seeds away from the parent plant.
3. A new plant grows from a vegetables part, usually a stem, root or leaf. This is called vegetative reproduction or asexual reproduction.
4. Reproduction is the process by which plants produce young ones like themselves.
- C.** 1. Carrots, Apples 2. Garlic, Onion
3. Broom, Eurphorbla 4. Sugarcane, Bamboo
5. Fems, Mosses 6. Potato, Turnip
- D.** 1. Reproduction is the process by which living things make young ones like themselves. There are two types of reproduction in plants.
(a) Reproduction through Seeds—The major steps in such type of reproduction are :
• Pollination • Fertilization • Seed formation
• Dispersal of seeds • Germination
(a) Reproduction through different parts of plants—New plant begins form of the following parts :
• Leaf • Root • Stem
2. The conditions necessary for seed germination include :
• Optimum temperature • Oxygen
• Adequate supply of water • Sunlight
• Moisture content • Soil

3. Animals disperse seeds in several ways. Some seeds are found inside fleshy fruits that are eaten by an animals. The fruits is digested by the animal, but the seeds pass through the digestive tract, and are dropped in other locations. Some animals bury seeds, like squirrels to save for later, but may not return to get the seed. It can grow into the new plant. Birds also help to disperse seeds to other areas through their droppings.
4. (a) Dispersal by wind–The seed which are dispersed by wind are smaller that have structures like wings or hair or feathers. These seeds are very light. The seeds of orchid are almost as fine as dust.
 (b) Dispersal by water–Many aquatic plants and plants that live near water have seeds that can float are carried by water. Plants living along streams and rivers have seeds that float down stream, and therefore germinate at new sites.
5. Many plants are not produced by seeds. Instead, a new plant grows from a vegetative part, usually a stem, root or leaf. This is called vegetative reproduction or asexual reproduction.



Plants and Animal Products

- A. 1. (a) makes the food 2. (d) all of these
 3. (a) dead things 4. (b) Pitcher plant
- B. 1. Green plants 2. Scavengers
 3. Pitcher plant 4. Leaves
- C. 1. Green plants are the only living things that prepare their own food. Leaf is the part of a plant that serves primarily as the plant’s food making organ. The food making process in the leaf is called photosynthesis. A leaf needs water, carbon dioxide, sunlight and chlorophyll to complete photosynthesis process. Water + Sunlight + air = Starch (Glucose)

2. Plants like yeast, mushrooms, mould and rust do not contain green chlorophyll. These plants take their food from their environment in the following ways :
 - They get their food from the dead and decaying plants and animals. They are called saprophytes.
 - Some plants depend on other living things. They are called parasites.
3. Carnivorous plants usually live in nitrogen poor soils. Carnivorous plants have specialized features that allow them to access nutrients by trapping and digesting insects. Pitcher plant and venus fly trap are carnivorous plants.
4. Animals are grouped by either the mode of ingestion, the mode of digestion or the type of food that they consume.
5. A food chain shows how all living things get their food. Some animals eat plants and some animals eat other animals. For example, a simple food chain links the trees and shrubs, the giraffes (that eat trees and shrubs) and the lions (that eat the giraffes). Each link in this chain is food for the next link.



Animal Senses

- A. 1. (b) Eagles 2. (c) Snakes 3. (d) Dog 4. (b) Bats
- B. 1. Monkey 2. Leopards 3. Eagle 4. Bear
5. Whale
- C. 1. As a human uses five sense organs, touch, taste, see smell and hear, Animals also used their senses.
2. Lizard is a reptile and it is cold blooded so cannot maintain its body temperature. Their body temperature changes with environment temperature. Change in temperature affects their behaviour. So they become inactive during winter, and undergo winter sleep.
3. Some people kill animals because they want to use the animals for food or clothing, while other people kill animals because they find it challenging and fun. Humans are apex

predators, or predators at the top of the food chain that have few predators of their own.

4. A dog's sense of smell is a million times stronger than a person's sense of smell. A dog can use its super nose to track a scent that is nearly four days old.
5. Do it yourself.



The Adivasis

- A. 1. (a) mountain and hilly areas 2. (d) tribes
3. (b) jowar 4. (d) all of these
- B. 1. India has the world's largest native population of **85** million tribal people, called Adivasis.
2. Adivasis live in hills and forest.
3. Roti made of jowar and vegetables in their daily delicious food. Rice dal-sabji is occasional meal.
4. The main occupation of Adivasis is cultivation and fishing.
5. Adivasis are born artisans and craftsmen and produce exquisitely beautiful handicrafts. Cane and bamboo industry of Adivasis is of very high standard.



Food and Health

- A. 1. (a) A 2. (b) blood clotting
3. (b) Roughage 4. (a) bones and teeth
- B. 1. carbohydrates, proteins, fats, vitamins, minerals and fibre in proper amount
2. Carbohydrates 3. Minerals
4. Proteins 5. Fats
- C. 1. Vitamin A 2. Minerals 3. Proteins
- D. 1. The food we eat is the sole source of our energy and nutrition.

2. The six essential nutrients includes carbohydrates, proteins, fats, vitamin, minerals and water.
3. Carbohydrates are the main source of energy for our body. Carbohydrates can be used by the body immediately or stored and converted for later use. Carbohydrates are basically sugar and starch. Wheat, potatoes, grains, candy, bread are all sources of carbohydrates.
4. Vitamins are needed in a small amount to help the normal functioning of the body. They are important because they serve a wide variety of functions. There are many types of vitamin—
Vitamin A, Vitamin D, Vitamin K, Vitamin C, Vitamin B
5. Water is the most important component of six basic nutrients. Water makes up 50 to 75% of the human body. We need at least 8 glasses of water a day to keep the body healthy.



Houses We Live In

- A.** 1. (b) sloping 2. (a) wood
3. (c) Nomads 4. (a) flood prone
- B.** 1. True 2. False 3. False 4. True
- C.** 1. People in different areas or regions live in different kinds of houses. The location and climate of a place, the construction materials available locally and the economic condition of the people determine the type of house they live in. Houses are made up of different materials. They are of various kinds and types. Some houses are a big while others are small.
2. Igloo and slopped roof houses are built in cold regions.
 3. Nomads live in temporary houses known as tents.
 4. Bungalows, multi-storied, and skyscrapers houses are found in cities.
 5. In flood prone areas, water might get into the houses if the houses are built on ground level. So in order to avoid

flooding of houses, houses are built on stilts as stilts are above the ground level, they prevent the houses from being flooded.



Different Clothes in Different Regions

- A. 1. (d) all of them 2. (a) Salwar
3. (b) Gujarati 4. (c) Lungi
- B. 1. Phirans 2. Kurta 3. Mekhela Chadar 4. Bengali style
- C. 1. Weather of the place, change in seasons and the changing fashions affect the type of clothes people wear.
2. In cities men wear trousers and shirts and women wear jeans, top, kurties, salwar-kameez etc.
3. The pheran is worn by Kashmiri women.
4. The men of Assam dress themselves in dhoti (a loin cloth) and women in mekhla-chadar, made from endi.
5. Do it yourself.



Water and Its Sources

- A. 1. (d) Both barav and vaav 2. (a) Pond
3. (c) Water wheel 4. (b) Clay
- B. 1. b 2. c 3. d 4. a
- C. 1. Dighis 2. Hand pump 3. Pot 4. Tube well
- D. 1. A dighi was a square or circular reservoir of about 0.38 m by 0.38 m with steps to enter. Each dighi had its own sliding gates. People generally hired a kahar or a mashki to draw water from the dighis.
2. Water from the wells is drawn out with a rope and bucket. using a pulley. A water wheel is also used to pull water from wells.
3. Water Tank irrigation is the most feasible and widely practiced method of irrigation all over the South India.

Most of the tanks are small in size and built by individuals or groups of farmers by raising bonds across seasonal streams.

Canal Irrigation—A canal is an artificial waterway constructed to allow the passage of boats or ships inland to convey water for irrigation. This is the most convenient methods of irrigation. It is easily to dig canals in these areas since the land is level and soil is soft.

4. A baoli is a reservoir in which water can be stored. It is also a source of ground water. Baolis, or step wells are known by various names in different cultures, Gandhak ki baoli, rajonki-baoli, etc.



Safety Rules

-
- A. 1. (b) right 2. (a) height 3. (c) fully opened
- B. 1. zebra crossing 2. electricity 3. Hot
- C. 1. Safety is the state of being safe, the condition of being protected from any harm. Safety rules are activities and precautions taken to improve safety. We should follow the safety rules on road, boarding a bus, riding a bicycle, at home, in the bathroom, in the kitchen, fire safety rules and electricity.
2. Walk on the pavement and cross the road at the zebra crossing. Before crossing the road, look first at the right, then left and then at the right again.
3. • Knives and sharp objects must be used carefully.
- Electric appliance cords should be kept away from the sink and stove.
- Loose, flowing, clothing should never to worn during cooking.
- Cleaning supplies should be stored separately from food items and kept beyond children's reach.
4. Do yourself.



First Aid (Helping Hand)

- A. 1. (b) antiseptic cream 2. (a) 45-75%
3. (d) all of them 4. (b) mild soap
- B. 1. True 2. False 3. True 4. False
- C. 1. • We should not let a crowd gather around a sick person.
• Make the injured person sit or lie down.
• Call an adult for help or call a doctor immediately.
2. First Aid is the immediate treatment given to the victim of an accident or sudden illness, before medical treatment. It is important to have a first aid kit available.
3. Stop Bleeding
- Apply direct pressure on the cut or wound with a clean cloth, tissue or piece of gauze until bleeding stops.
 - If the wound is on the arm or leg, raise limb above the heart, if possible, to help slow bleeding.
 - Wash your hands again after giving first aid and before cleaning and dressing the wound.
4. • If someone is stung by an insect, such of bee, remove the stinger immediately by scraping it, away from the skin with your finger half or an iron key.
- Wash the area with soap and water, cover it to keep it clean.
 - Apply ice to reduce pain and swelling.



Diseases and Their Prevention

- A. 1. (b) Bacteria 2. (c) Viruses
- B. 1. Sneezes, cough Cleanliness, wear a surgical mask
2. Shivering, dry cough Use a tissue to cover your mouth, wear a surgical mask

3. Body ache, nausea covering the mouth and nose while coughing and sneezing, maintain high level of hygiene
 4. Headache, red rashes Vitamin A vaccine
- C.**
1. A disease is an illness that affects the health of a person. Disease is an improper functional conditional of the body.
 2. Certain diseases which can be passed from one person to another. These diseases are infectious and are called communicable diseases. They are caused by small living organisms that is spread from one person to another through a variety of ways that include: contact with blood and bodily fluids, breathing in an airborne virus or by being bitten by an insect.
 3. Our bodies are pretty amazing. Day after day, they work hard—digesting food, pumping blood and oxygen, sending signals from our brains and much more. But there is a group of tiny invaders that can make our bodies sick—they're called germs. Bacteria, viruses and protozoa.
 4. Hygiene is an essential component of healthy living and preventing diseases.



Medical Science and Health

- A.**
1. (a) Medical thermometer
 2. (a) French surgeon Ambroise Pare
 3. (b) Surgery
- B.**
1. e 2. c 3. d 4. b 5. a
- C.**
1. Thermometers use thermometric liquid to measure temperature in body cavities-orally, or at other auxiliary point, such as the underarm.
 2. A stethoscope is a diagnostic instrument. It is used by medical professional to listen to a patient's chest cavity, heart and various pulse points.



Transportation

- A.** 1. (b) Feet 2. (a) Central Government
 3. (a) 120 kmph 4. (a) Sea ports
- B.** 1. False 2. False 3. False 4. False 5. False
- C.** 1. Transport is needed for travelling and carrying goods from one place to another.
 2. There are three means of transport.
 (i) Land transport (ii) Water transport (iii) Air transport
 3. Europe and North America have more extensive railway network than other countries in world, like Asia, Africa and Australia. France, Germany, Japan and China have also some of the fastest trains in the world. These are Bullet train of Japan, the Maglev of China and the TGV of France.
 4. India has 13 major and 205 other (minor and intermediate) sea ports.
 5. Rivers are a natural highway which does not require any cost of construction and maintenance. So, It is cheapest mode than the other means of transport.



Prides of India

- A.** 1. (a) National Flag 2. (b) 2002
 3. (c) Sanskrit 4. (a) Mango
- B.** 1. Peacock 2. Banyan Tree
 3. Mango 4. Lotus
- C.** 1. Our national symbols such as national flag, national song, national anthem and national emblem represent our unity and identity. This unity in diversity is unique to India.
 2. Hindus, Muslims, Christians, Sikhs, Jains, Buddhists, Zoroastrians are different religions to followed in India.
 3. The saffron colour represents the strength and courage of

the people in India. The white colour is symbolic of the peace that the Indian people want. The green colour shows the growth of the land. In the centre of the white stripe there is a navy blue wheel which represents the chakra. The chakra (wheel) intends to show that there is life in movement and death in stagnation.

4. National song is Vande Mataram and National Anthem is Jan Gan Man. National song is written by Bankim Chandra Chatterji and National Anthem is written by Rabindranath Tagore.
5. National bird is Peacock and National animal is Tiger.



Our Heritage

- A. 1. (b) Mumbai 2. (a) white marble
3. (c) Jantar Mantar 4. (a) Jagadguru Kripaluji Maharaj
- B. 1. c 2. Andhra Pradesh 3. e 4. d 5. a
- C. 1. Taj Mahal was built by Mughal emperor Shah Jahan in memory of his beloved wife, Mumtaz Mahal.
2. Prem Mandir is located on the outskirts of Vrindavan in 54 acres.
3. Meenakshi Temple, Charminar, Venkateswara Temple are the names of some monuments of Southern India.
4. **Lotus Temple** : The Baha’l House of Worship in the city of Delhi in a Massive temple that is devoted to the Baha’l faith. This temples is better known as the Lotus Temple because of its massive lotus-like shape.
Jantar Mantar : It is located in Parliament Street in Connaught Place. It was built by Sawai Jai Singh II. It is an astronomical observatory which consists of different structures in sandstone to calculate the movement of celestial bodies and the planetary positions.
5. The Ajanta caves in the west, depicts the story of Buddhism. Ajanta has 29 caves that were all built as secluded retreats

for Buddhist monks. The paintings on the walls of Ajanta Caves are made using the tempera technique. The colour used for the paintings has been made from natural products.



Celebration of Special Days

- A.**
- (a) Dr. Sarvepalli Radhakrishnan
 - (b) Children's Day
 - (a) Chacha Nehru
- B.**
- Teacher's Day celebrated to pay tribute to teachers, who have dedicated a considerable part of their life to impart moral academic knowledge to their students.
 - School children organize cultural programs to celebrate the day. They sing national songs and short stage dramas. There are many celebrations, including one at Teen Murti where Nehru lived as Prime Minister and one at Parliament House. Students are exhorted to be patriotic and follow the footsteps of Pandit Nehru.
 - World Environment Day is to think of the environment challenges we face and how to solve them. Protecting Earth is every person's and every country's responsibility.
 - Do it yourself.



Locate Places on Maps and Globes

- A.**
- (a) Paper
 - (b) Map scale
 - (a) Green colour
- B.**
- Atlas
 - Gerard Mercator
 - Cartographers
 - The scale of map
 - North direction.
- C.**
- A map is a visual representation of an entire area or a part of an area, typically represented on a flat surface. The work of a map is to illustrate specific and detailed features of a particular area, most frequently used to illustrate geography. There are many kinds of maps; static, two-dimensional, three-dimensional, dynamic and even interactive.

2. Maps show the directions with the help of an arrow, usually drawn on the right hand margin of the map.
3. On the map it is shown by a smaller unit as 1 centimeter. Then, the scale of the map is 1 centimeter = 100 km. On a map an actual distance of 200 km will be shown as 2 centimeters. Thus, the ratio between the distance on the ground and on the map is known as the scale of the map.
4. Blue and Brown are used in maps to represent oceans and mountains.
5. The use of signs symbols makes the map quicker and easier to read.



Natural Phenomena

- A. 1. (c) 2. (a) 3. (a) Southern Peninsula
- B. 1. Earthquakes 2. Cyclone 3. earthquake
4. floods 5. Central Government
- C. 1. Natural disasters are extreme, sudden events caused by environment factors that injure people and damage property Earthquake, windstorms, floods and diseases are examples of natural disasters.
2. When there is a tsunami, we should turn off stove and take cover. Avoid taking cover near windows, large mirrors hanging objects, heavy furniture, heavy appliances or fireplaces. If you are outside, move away from buildings, power lines and trees.
3. A cyclone is a storm accompanied by high speed whistling and howling winds. It brings torrential rains. A cyclonic storm develops over tropical oceans like the Indian Oceans and Bay of Bengal and the Arabian Sea. Its strong winds blow at great speed.
4. When the level of water rises above the banks or dams, the water starts overflowing, which causes floods. Floods can make people drown and die.

They can destroy a lot of people's homes

They bring too much water which causes damage to farmland.

5. The role of the Central Government is supportive at the time of disaster. It provides immediate relief, also a variety of medical aid.
 - NGOs also played a significant role in disaster mitigation, relief and rehabilitation.
 - The Indian Red Cross Society is a voluntary organization and provides relief in times of disasters/emergencies and promotes health and care of the vulnerable people and communities.