

# SCIENCE – 4

## Chapter - 1

### A. Fill in the blanks.

1. Plants are producers because they make their own food.
2. A squirrel is a consumer because they do not make their own food.
3. Plants make food with the help of sunlight, water and carbon dioxide.
4. Plants give us oxygen.
5. Food chain maintains balance in nature.

### B. Match the following.

- |                |                                       |
|----------------|---------------------------------------|
| 1. herbivores  | a) takes water and minerals from soil |
| 2. carnivores  | b) eat other animals                  |
| 3. chlorophyll | c) green colour                       |
| 4. roots       | d) eat plants                         |
| 5. food chain  | e) maintain balance in nature.        |

### C. Choose the correct option.

1. At which of the following time may a plant be preparing food?  
a. 4 a.m                      b. 10 a.m                      c. 10 p.m                      d. midnight
2. In addition to sunlight what else is required for photosynthesis?  
a. Suger and water  
b. b. water and oxygen  
c. carbon dioxide and water  
d. d. oxygen and carbon dioxide
3. Green plants make their food. They are called producers.
4. A plant placed in a pot needs water, sunlight and air to grow.
5. If a plant is placed in a dark room it will grow weak and die.

### D. State True or False.

1. Photosynthesis can take place at night.                      F
2. Food flows from one organism to the other in nature.                      F
3. Plants give out carbon dioxide.                      F
4. Grass is a producer.                      F
5. Sunlight is not necessary for photosynthesis.                      F

### E. Answer the following questions.

1. What is food chain?

Ans: Chain of organism that shows that each organism depends on the lower organism for its food.

2. Name the process by which plants produce food. What are the necessary conditions for the process?

Ans: Name of process is photosynthesis. Necessary condition are the green presence of sunlight, water and carbon dioxide.

3. How do plants and animals depend on each other?

Ans: Plants and animals depend on each other for food.

4. Give a point of difference between a herbivores and a carnivores.

Ans: Herbivores eat only plants and carnivores eat only other animals.

5. What happens to the food prepared by the plants?

Ans: The food prepared is taken through the veins by the stem to all parts of the plant for growth and repair.

**F. The diagram below shows four types of organisms in a paddy field.**

**grasshopper**                      **rice plant**                      **eagle**                      **chicken**

a. Construct a food chain involving these organism.

rice plant            →    grasshopper            →            chicken            →            eagle

b. Name the producer rice plant.

c. What is the process carried out by the producer in producing food?

Ans: Photosynthesis.

d. Which of the animals in the food chain is a carnivores?

Ans: Eagle.

e. What happens to the rice plant if all the grasshopper die due to a disease?

Ans:            i) The rice plants will become less.

                  ii) The rice plants will become too much.

                  iii) Nothing will happen.

## Chapter – 2

**A. Fill in the blanks.**

1. Jack fruit is an evergreen plant.

2. Coconut tree grows along the coast.

3. Deciduous tree shed their leaves.

4. Fixed water plants have stomata on the \_\_\_\_\_.

5. Cactus stores food in their stem and leaves.

**B. Give two examples of the following.**

1. Floating plants

Hyacinth

Duckweed

2. Underwater plants

Hydrilla

Pondweed

- |                                  |               |                |
|----------------------------------|---------------|----------------|
| 3. Plants in deserts             | <u>Cactus</u> | <u>Saguaro</u> |
| 4. Plants in mountains           | <u>Pine</u>   | <u>Fir</u>     |
| 5. Plants in heavy rainfall area | <u>Lychee</u> | <u>Cashew</u>  |

C. Choose the correct option.

- Light and spongy water plants like duckweed can float on the surface of the water.
- Coconut trees grow well in coastal areas.
- Lotus is an underwater plants
- This tree usually have wax coating to prevent evaporation and less of water
  - Fir
  - hydrilla
  - coconut
  - mangrove
- Plants in marshy areas are called mangroves .

D. Match the following.

- |                          |                  |
|--------------------------|------------------|
| 1. Non green plant       | a. peepal        |
| 2. Plants in the plains  | b. venus flytrap |
| 3. Insectivorous plant   | c. Teak tree     |
| 4. Deciduous trees       | d. coconut       |
| 5. Plant in coastal area | e. mushroom      |

E. State True or False.

- Some terrestrial plants grow in water. F
- The cactus plant stores water in its stem. T
- Evergreen plants do not shed their leaves at once. T
- Spines protects from animals. T
- The trees in heavy rainfall areas are called conifers.

F. Answer the following.

- a. What is a habitat?

Ans: The place where an organism usually lives and grows in nature is called its habitat.

- b. How do insectivorous plants get their food?

Ans: The leaves of insectivorous plants are disguise into different structure to trap insects.

- c. What are breathing roots?

Ans: The roots of the plants that grow and of the soil to breath from the air are called breathing roots.

- d. Why do mountain of plants have waxy coating on the leaves?

Ans: The mountain plants have waxy coating on the leaves to prevent evaporation and loss of water.

- e. Why do fixed aquatic plants have flexible and light stems?

Ans: Fixed aquatic plants have flexible and light stems to help the leaves to float.

## Chapter – 3

### A. Fill in the blanks.

1. A porcupine has spine on its body.
2. Mosquito and leach are blood sucking animal.
3. Siberian crane is a migratory bird.
4. When amphibians are in the water, they absorb oxygen through their moist skin.
5. Chameleons blend to protect themselves from predators.

### B. Give two examples of the following.

- |                               |                |                     |
|-------------------------------|----------------|---------------------|
| 1. Animals in aquatic habitat | <u>Dolphin</u> | <u>Fish</u> .       |
| 2. Animals in polar region    | <u>Penguin</u> | <u>polar bear</u> . |
| 3. Arboreal animals           | <u>Koala</u>   | <u>Monkey</u> .     |
| 4. Aerial animals             | <u>Bat</u>     | <u>Owl</u> .        |
| 5. Omnivores                  | <u>Beans</u>   | <u>Dog</u> .        |

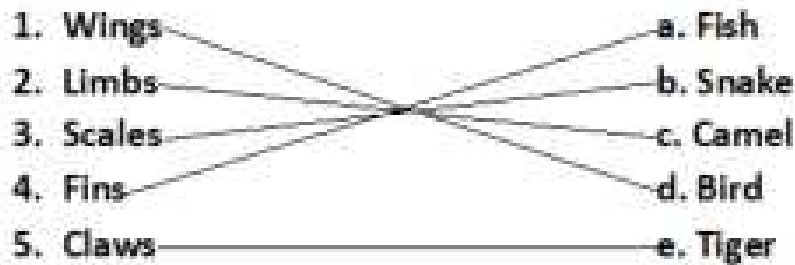
### C. Choose the correct option.

1. Which of the following is habitat of a cow?
  - a) desert
  - b) river
  - c) tree
  - d) open land
2. Which of the following is an adaptive feature of a penguin?
  - a) strong legs
  - b) thick skin
  - c) gills
  - d) fur on body
3. cat is a terrestrial animal.
4. Carnivores have teeth for tearing flesh.
5. Which of the following is not a feature for protection?
  - a. Shell
  - b. Horn
  - c. Webbed feet
  - d. Scales

### D. State True or False.

1. Adaption helps animal to live uncomfortably. F
2. Zebras can changes its colour. F
3. The animals that live in cold places have thick fur on their body. T
4. Leech is a parasite. T
5. Ostrich is a bird but cannot fly. T

### E. Match following.



### F. Answer the following questions.

1. What is adaptation?

Ans: Adaptations are the special features that help an animal to survive in its habitat.

2. State any two adaptive features of animals found in desert.

Ans: The skin of desert animals is thick and not very hairy. They have padded feet.

3. Give a point of difference between a terrestrial animal and an arboreal animal

Ans: A key point of difference between a terrestrial animal and an arboreal animal is their primary habitat and adaptation.

4. Define camouflage.

Ans: Camouflage is the ability to blend into the surrounding environment to avoid a predator.

5. What are parasites? Give an example.

Ans: Parasites are small animals that depend on other living animals for their food. For example a parasite.

## Chapter – 4

### A. Fill in the blanks.

1. A life cycle shows the stage of a living thing from birth to death.
2. In the life cycle of butterfly the larva stage is also called a caterpillar.
3. The chrysalis is also known as a pupa stage.
4. The second stage in the life cycle of a frog is the tadpole stage.
5. Eventually the froglet develops lungs and is able to breath out of water.

### B. Choose the correct option.

1. How many stage does a butterfly go though in its life cycle?  
a. 2                      b. 3                      c. 4                      d. 5
2. At the stage do animals lay eggs?  
a. Adult                      b. larva                      c. pupa                      d. none of these
3. The transformation or change in an animal goes through to become on adult is called metamorphosis.
4. At which stage do most frogs breathe though gills only?  
a. adult                      b. froglet                      c. tadpole                      d. all of these

5. The tail of the froglet shrinks away as it becomes an adult frog.

C. Match the following.

A.

- |   |               |
|---|---------------|
| 1. A fully grown person or animal                                   | a. larva      |
| 2. The chrysalis stage where a caterpillar changes into a butterfly | b. tadpole    |
| 3. All the stages of an animal or plant life                        | c. life cycle |
| 4. The young of some insects  | d. pupa       |
| 5. A young frog   | e. adult      |

D. State True or False

- |  |   |
|--|---|
| 1. All animals reproduce by laying eggs.                             | F |
| 2. The tail of a tadpole shrinks as it grows.                        | T |
| 3. The yolk of an egg contains food for the embryo                   | T |
| 4. Incubation is the period from laying of eggs till of egg hatches. | T |
| 5. Tadpoles feed on mother milk.                                     | F |

E. Unscramble the words related to life cycle of a butterfly.

- |                |                    |
|----------------|--------------------|
| 1. CRYHASSIL   | <u>Chrysalis</u>   |
| 2. APUP        | <u>Pupa</u>        |
| 3. LVARA       | <u>Larva</u>       |
| 4. CREATALILPR | <u>Caterpillar</u> |
| 5. RETUBTYLF   | <u>Butterfly</u>   |

F. Answer the following questions.

1. Why do animals reproduce?

Ans: All animals reproduce to give birth to their young ones.

2. What is metamorphosis?

Ans: The change of development from young one to its adult is called metamorphosis.

3. Why do birds sit on their eggs?

Ans: The birds sit on their eggs to keep them warm till it hatches.

4. What happens to the tail of the tadpole of a frog?

Ans: The tail of the tadpole shrinks and develops into limbs of a frog.

5. Why do caterpillars feed enormously on the leaves?

Ans: The caterpillars feed enormously on the leaves to get energy and nutrients to grow.

## Chapter – 5

A. Fill in the blanks.

1. Carbohydrates and fats provide energy for the body.
2. Boiling controls the growth of germs in food.

3. Cooked foods are soft and chewy to digest.
4. A diet that has proper proportions of all nutrients necessary to keep good health is called Balanced diet.
5. Flies carry germs on their body and can cause diseases like diarrhea, typhoid etc.

**B. Answer in one word.**

1. Which method of cooking does not destroy nutrients present in food?

Ans: Steaming.

2. What is the indigestion portion of food derived from plants?

Ans: fibre.

3. Name one fruit rich in vitamin C.

Ans: Orange

**C. Choose the correct option.**

1. Calcium is a minerals.

2. All citrus fruits are rich in vitamin C.

3. Carbohydrates provides quick energy to the body.

4. Minerals that helps in formation of blood

a. Vitamin      b. Calcium      c. Iron      d. All of these.

5. The nutrient is also called body building nutrients.

a. Fat      b. Protein      c. Carbohydrate      d. Vitamins

**D. State True or False.**

1. Different food item contain same amount of nutrients. T
2. Vitamin C is found in milk. F
3. Calcium maintains healthy bones and teeth. T
4. We should eat fresh cut fruit and fresh cooked food only. T
5. Dehydration means drying by heating. F

**E. Answer the following questions.**

1. Name two energy giving food.

Ans: Carbohydrates and fats.

2. Why food is important for us?

Ans: Food is important for us to develop, replace and repair itself.

3. Why should we avoid eating from roadside vendors?

Ans: We should avoid eating from road side vendors because their food is uncovered and exposed to dust and flies.

4. What is the importance of roughage in our diet?

Ans: Roughage clears own stomach.

5. Write about any 2 methods of preserving food.

Ans: Boiling and Dehydration.

## Chapter – 6

### A. Fill in the blanks.

1. Fungi can cause disease like ringworm.
2. Disease causing microbes are called germs.
3. An adult has 32 teeth.
4. There are 6 grinding teeth in each jaw.
5. The four chisel shaped teeth at the front of each jaw are called incisors.

### B. Choose the correct answer.

1. How many permanent teeth are there in an adult?  
a. Thirty – two  
b. Sixteen  
c. Twenty  
d. Nineteen
2. Which of the following is not a type of teeth.?  
a. Pre – molar            b. Incisor            c. canine            d. pulp
3. How many molars are there in the upper jaw?  
a. Twelve            b. Sixteen            c. Six            d. Two
4. The hardest substance in our body?  
a. Crown            b. Root            c. Dentine            d. Hair
5. What causes diseases?  
a. Germs            b. Pure water            c. Healthy food            d. None of these

### C. State True or False.

1. Bacteria causes diseases like malaria and dysentery.            F
2. Microbes can be seen through a microscope only.            T
3. We should chew the food well.            T
4. We should brush out teeth twice daily            T
5. We should drink milk every day for healthy teeth.            T

### D. Name the following.

- a. Type of teeth used for biting.            Incisor
- b. Teeth which help in tearing the food.            Canines
- c. The process of breaking down of food into simpler substances.            Digestion
- d. Number of sets of teeth found in humans.            Four
- e. A machine through which we can see microbes.            Microscope

### E. Answer the following questions.

1. What are milk teeth?

Ans: The first set of teeth in a child is called temporary or milk teeth.



2. What is crown?

Ans: The crown is the part that is called outside the gum.

3. Name any four organs involved in digestion of food.

Ans: Mouth, Stomach, Small intestine, Liver.

4. Give the uses of molars and incisors.

Ans: Molars - used for chewing and grinding the food well.

Incisors - used for biting and cutting food into smaller pieces.

5. State three ways to protect out teeth.

Ans: a. Brush your teeth twice a day, in the morning and night.

b. Clean both the inner and outer surface of the teeth properly.

c. Brush the upper teeth downwards and lower teeth upwards.

**F. Solve the crossword puzzle with the help of the clues given below.**

**Down**

1. Part of the teeth embedded in your gums

3. Teeth used for biting food

5. Yellow sticky layer on teeth

2 B	1 R	U	S	H						
	O									
	O	3 I	5 P							
	T	N	L							
	4	C	A	V	I	T	Y			
		I	Q							
		S	U							
		O	E							
		R								
6 M	I	C	R	O	S	C	O	P	E	

**Across**

2. Tool for cleaning your teeth

4. Decayed teeth

6. Microbes can be seen using this

## Experiential Learning

**B. Discuss the following question with your friend. Write down the points discussed in the given space below.**

1. Why should we rinse our mouth after every meal?

Ans. We should rinse our mouth after every meal to remove food particles stuck between teeth.

2. Which teeth would you use to chew an almond and bite a guava?

Ans: To chew an almond we use molars to bite a guava we use incisors.

## Chapter – 7

**A. Fill in the blanks.**

1. Saliva helps to digest starch in the mouth.
2. Blood absorbs the food after it is digested.
3. Stomach is a muscular bag in the digestive system.
4. Food pipe is a narrow tube that allows food to pass from mouth to the stomach.
5. From the stomach, the food passes into the small intestine.

**B. Choose the correct option.**

1. Which gland secretes saliva?  
a. lungs            b. pancreas            c. salivary gland            d. none of these
2. The tongue helps to mix the food with the saliva.
3. Churning of food occurs in stomach.
4. Where is water absorbed from wastes?  
a. anus            b. rectum            c. small intestine            d. large intestine
5. Waste is sent out of the body through the anus.

**C. State True or False.**

1. Food pipe connects mouth and stomach. T
2. Blood carries the digested food to all parts of the body. T
3. We should stand and eat. F
4. After large intestine the food moves to the small intestine F
5. Digestion starts from the mouth. T

**D. Match the following.**

- |   |       |                      |
|---|-------|----------------------|
| 1. Saliva                                       | _____ | a. good eating habit |
| 2. Digestion                                    | _____ | b. tongue            |
| 3. Absorption of water                          | _____ | c. large intestine   |
| 4. Washing hand before eating                   | _____ | d. stomach           |
| 5. Helps in pushing the food into the food pipe | _____ | e. mouth             |

**E. Arrange the following sequence of event in the digestive process in order by writing 1 to 6. (1 being the first)**

- 2 the food moves into the stomach through food pipe
- 3 Food is churned.
- 1 The food is chewed and mixed with saliva.
- 4 The food is mixed with digestive juices.
- 5 Undigested food moves to large intestine and water is absorbed
- 6 Semi solid waste is released through the anus.

**F. Answer the following question.**

1. Why does food needs to be digested?  
Ans: The food we eat is not directly used to provide energy. So it is broken down into smaller, simpler forms to digest.
2. How is saliva useful in digestion?  
Ans: Saliva softens the food so that it can be swallowed easily.
3. What happens to undigested food?  
Ans: In the small intestine, the food is mixed with certain juices and the digested food is absorbed into the blood.
4. What is the function of large intestine?  
Ans: The large intestine absorbs the water from the undigested food and passes out the semi solid waste through anus.

**G. Draw a rough sketch of a stomach. Also write about its function.**

Ans: The food is churned and mixed with digestive juices in the stomach.

## Chapter – 8

**A. Fill in the blanks.**

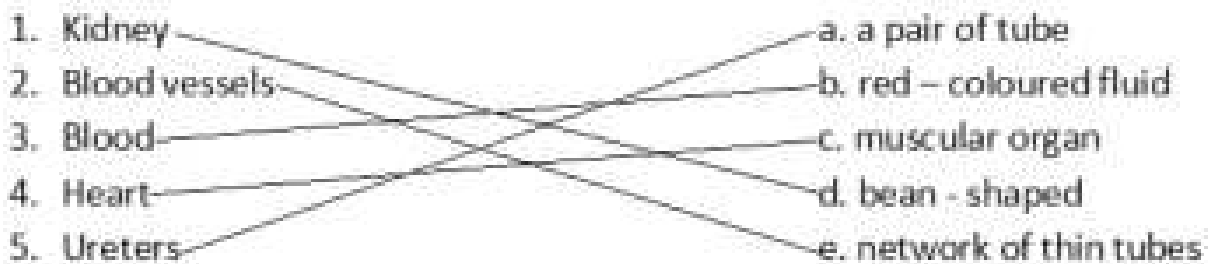
1. The circulatory system consists of the heart, blood vessels and blood.
2. The heart is a muscular organ that pumps blood to all the parts of the body and also receive back blood from different parts of the body.
3. Blood vessels are thin tube that carry blood from the heart to all parts of the body and then back to the heart.

4. Urine is formed in the kidney.
5. Blood is a red – coloured fluid that flows through the blood vessels.

**B. Choose the correct option.**

1. A type of blood vessels.
  - a. veins
  - b. capillaries
  - c. arteries
  - d. all of these
2. This blood vessels carries blood from different parts of the body to the heart.
  - a. artery
  - b. vein
  - c. capillaries
  - d. ureter
3. The function of the excretory is to remove waste.
4. Which of these is an organ of the excretory system?
  - a. Blood vessels
  - b. urinary bladder
  - c. heart
  - d. blood
5. Ureters carry wastes from the kidney to the bladder.

**C. Match following.**



**D. State True or False.**

1. Blood our body regulates the body temperature. F
2. Urinary bladders carry urine from kidneys to urethra. F
3. Blood keeps our body warm. T
4. Arteries carry blood away from the heart. T
5. Kidneys are bean shaped organ. T

**E. Answer the following questions.**

1. Where is the heart located?  
 Ans: The heart is located in the centre of the chest and is slightly tilted towards the left.
2. What is function of blood?  
 Ans: The function of blood is to carry oxygen, water and nutrients to all the parts of the body.
3. What does the kidney help in?  
 Ans: The kidney helps to filler liquid waste from the blood and get rid of it in the form of urine.
4. What is the function of urinary bladder?  
 Ans: The function of urine bladder is to store urine temporarily and when the bladder gets filled up urine is expected out.
5. Give a point of difference between circulatory system and excretory system.

Ans: The circulatory system helps in the transportation of substances like oxygen, water and nutrients in our body where as the excretory system gives out harm but waste products from our body.

## Chapter – 9

### A. Fill in the blanks.

1. Cotton clothes soak sweat easily.
2. Silk is obtained from silk worms.
3. Fabrics are made by knitting fibres together.
4. Nylon is an example of synthetic fibre.
5. Loose clothes help to maintain comfort during sleep.

### B. Choose the correct option for each of the following.

- i. The collective term for garments or items worn on the body is clothing.
- ii. Based on origin, fabrics can be classified into natural and synthetic fabrics.
- iii. The following are synthetic fabrics except silk.
- iv. The following are natural fabrics except rayon.
- v. Which of these is not a clothing?  
a. earring      b. shirt      c. jeans short      d. pants

### C. State True or False.

- a. We should wear colourful and heavy clothes in summer. F
- b. Clothes protect us from heat and cold. T
- c. Cotton clothes keep us warm. F
- d. We should wear loose fitting clothes when we sleep. T

### D. Answer the following questions.

1. What is a fabric?

Ans: Fabrics are threads or fibres which are inter wind by knitting or weaving to make clothes.

2. Give a point of difference between a natural fibre and synthetic fibre?

Ans: Natural fibre is obtained from natural sources like plants or animals whereas synthetic fibres are made from chemicals by humans.

3. What do clothes speak about us?

Ans: Clothes tells us about our personality, culture and tradition.

4. What type of clothes do we wear in summer?

Ans: We wear cotton clothes in summer.

5. Give two ways to take care of your clothes?

Ans: i) Clothes should be washed with good detergent and dried in shade.

ii) Clothes should not be wrinkled tight as it damages them.

**E. Write down the material and the descriptions for the clothes.**

1. The material for the cap is woolen. It is worn in winter.
2. The material for the belt is leather. It is worn around the waist to hold up pants.
3. The material for the dress is cotton. It is worn in summer

### Experiential Learning

**B. The table below shows average temperature and weather condition of 5 months. Study and answer the questions given below.**

Feb	March	April	May	June
20°C Partly cloudy	22°C Sunny and Windy	30°C Sunny	38°C Sunny and humid	28°C Showers

1. What dress will you in February? Woolen Clothes
2. What is the weather in April and May? Sunny Weather
3. What dress will you wear in May? Cotton Clothes
4. What should you carry in the month of June  
When you go out? Umbrella

## Chapter – 10

**A. Fill in the blanks.**

1. Matter has mass and occupies space.
2. Evaporation is the process of liquid changing into water vapour.
3. In sedimentation, the clear water is poured out. This process is called decantation.
4. When sugar is dissolved in water, the liquid so formed is called a solution.
5. In solids, the molecules are very closely packed.

**B. Choose the correct answer.**

1. Solid butter changes to liquid butter on heating.
2. Matter exist in three form – gas, solid and liquid
3. Change of vapour into liquid an cooling is called.  
a. Melting      b. freezing      c. evaporation      d. condensation
4. A solid that dissolves in a solvent solute.
5. Soluble substances can be separated by evaporation.

**C. State True or False.**

1. Solids can change their shape F
2. Liquid take the shape of the container. T
3. In gases, the molecules are loosely packed. T
4. Gases do not have a fixed shape. T
5. Insoluble substances can be separated by sedemation and decantation. T

**D. Answer the following question.**

a. Which state of matter holds its own shape?

Ans: Solid hold its own shape.

b. What do you know about a solid's molecule? Give an example of solid.

Ans: The molecules of solids remain closely packed. They do not move freely around in all directions, rather they remain fixed. Ex – stones

c. Define freezing?

Ans: Freezing is the process by which a liquid turns into solid an cooling.

d. Give a point of difference between the molecules of solid, liquid and gas.

Ans: The molecules of solids are closely packed and they remain fixed. The molecules of liquids are loosely packed and move freely. The molecules of gas have a lot of space between them and can move freely.

e. How will you separate a mixture of water and sugar?

Ans: We could separate a mixture of water and sugar by the process of heating.

**G.Complete the sentences with the correct word.**

1. When you heat butter it melts.

2. When you heat water it evaporates.

3. When you cool gas it condenses.

## Chapter – 11

**A. Fill in the blanks.**

1. You should cross a road only at zebra crossing.

2. Do not wear synthetic clothes in the kitchen.

3. We should not play on the road.

4. First – aid is the immediate care given to an injured person before a doctor arrives.

5. In case of insect bites. We can apply calamine lotion over the infected area.

**B. Choose the correct option.**

1. In which of these situation will you help on your own.

a. a road accident                      b. a serious burn                      c. deep cut                      d. all o these

2. We should never touch an electrical appliance with wet hands.

3. We should walk on footpath.

4. Accident happen when we are careless.

5. In case of minor burn we may apply aloe vera.

**C. State True or False.**

1. We can avoid most of the accidents by following safety rules.                      T

2. We should wear cotton dress when working in the kitchen.                      T

3. Running on the stairs is safe.                      F

4. Giving first aid can help save someone life.                      T

5. We should not touch electric switches with wet hands.

T

**D. Unscramble the letters to get the correct words related to safety.**

- |             |                  |
|-------------|------------------|
| 1. atopfoth | <u>Footpath</u>  |
| 2. aegbdna  | <u>Bondage</u>   |
| 3. ruynji   | <u>Injury</u>    |
| 4. daiifrst | <u>First aid</u> |

**E. Answer the following question.**

1. State two safety rules to be followed on road.

Ans: i) Always walk on the footpath.

ii) Cross the road only at the zebra crossing.

2. How should you behave when walking up or down the stair case?

Ans: We should not push anyone when walking up or down the stair case.

3. What is first aid?

Ans: First aid is the immediate care given to a person when he / she is injured or suddenly falls sick.

4. What should you do if someone gets a minor burn?

Ans: If someone gets a minor burn we should pour cold water over it for about 10 minutes.

If there is no injury we may apply aloe vera gel or lotion.

5. What should you do if someone has a nose bleeding?

Ans: - Sit them up straight and lean forward.

- Pinch the soft part of the nose shut for 5-10 minutes.

- Apply a cold compress or ice pack.

- Keep their head elevated.

- Avoid blowing their nose or bending.

G. First aid is immediate help given to someone who is sick or hurt before taking him / her to the hospital. First Aid kit is a small box containing items used to give immediate medical treatment. Make a list of items that you must have in a first aid kit.

Ans: 1. Detol

2. Scissor

3. Antiseptic – cream

4. Cotton

5. Lotion

6. Thermometer

7. Bandage



8. Burn gel
9. Medical gloves
10. Band – aid

## Experiential Learning

### A. What is a first aid?

Ans: First aid is the immediate care given to a person when he / she is injured or suddenly falls sick.

### B. Do not group discussion. As a pedestrian, what safety rules do you follow to avoid accidents on the road?

#### Note down the points discussed

Ans: We should always walk on a footpath. We should cross the road only at the zebra crossing. We should obey the traffic lights. We should look both ways to check if vehicles are approaching before you cross the road.

## Chapter – 12

### A. Fill in the blanks.

1. Pulley is a simple machine consisting of a wheel and a rope around it.
2. The \_\_\_\_\_ is an inclined plane wrapped around a rod.
3. The energy that we get from sun is called solar energy.
4. Fossil fuel is a non – renewable sources of energy.
5. Nut cracker is an example of a lever.

### B. Choose the correct answer.

1. What is a pull or push acting on an object called?  
a. Force            b. friction            c. gravity            d. energy
2. We can move objects by applying force.
3. Force causes an object to change its position.
4. Which of the following does not change on applying force?  
a. Speed            b. direction            c. weight            d. all of these
5. The capacity to do work is called energy.

### C. State True or False.

1. Things can move without any force acting on them            F
2. Energy is required to do work.            T
3. If a moving object comes to a stop, it means some force is acting on it.            F
4. Energy in food indirectly comes from the Sun.            F
5. Energy of wind can be used to generate electricity.            F

### D. Answer the following question.

1. What is work? When is work said to be done?

Ans: When we use force on an object and the object moves through a distance we say that work is done.

2. What are simple machines? Describe any one simple machine and how it work.

Ans: A device used to make our work easier is called a simple machine. A pulley is one of the simple machine when we draw water from a well. A pulley can be used to both push down and pull up.

3. What is energy?

Ans: Energy is the capacity to do work.

4. Why do we sprinkle powder on carrom board?

Ans: We sprinkle powder on a carrom board to reduce friction, allowing the pieces to slide smoothly and consistently, making gameplay easier and more precise.

5. Give a point of difference between kinetic energy and potential energy.

Ans: Kinetic Energy: Energy of motion (an object is moving and has energy due to its motion).

Potential Energy: Stored energy (an object has energy due to its position or state, but is not currently moving).

## Chapter – 13

### A. Fill in the blanks.

1. Mars is also known as the Red Planet.
2. Earth has life.
3. The coldest planet is Neptune.
4. Saturn planet has rings.
5. Revolution causes seasons.

### B. Choose the correct answer.

1. Which among these doesn't have its own light?  
a. Stars                      b. Moon                      c. Sun                      d. None of the above
2. Which star is responsible for the light emitted by the moon?  
a. Sun                      b. Dhruv Star                      c. Evening Star                      d. Earth
3. Which planet is known as the Blue Planet?  
a. Mars                      b. Neptune                      c. Venus                      d. Earth
4. Which planet is the hottest?  
a. Earth                      b. Mercury                      c. Mars                      d. Venus
5. Rotation causes day and night.

### C. State True or False.

1. Moon is the natural satellite of the Earth. T
2. Saturn is the second largest planet. T

3. The Earth takes 362 days to complete one revolution around the sun. F
4. Saturn is called the red planet. F
5. In September the Northern hemisphere experiences autumn. T

**D. Match the planet to its description.**



**E. Answer the following questions.**

- What is the major composition of Sun?
  - Hydrogen (H): approximately 75% by mass
  - Helium (He): approximately 25% by mass
- Why is Venus called the veiled planet?
 

Ans: Venus is totally covered by clouds, that is why it is also known as veiled planet.
- What is an equator?
 

Ans: The imaginary line which divides the earth into two halves, the northern hemisphere and the southern hemisphere is called an equator.
- Why is Earth known as the water planet?
 

Ans: Earth is called the water planet because of the presence of water on it. It is the only planet in our solar system that has liquid water on its surface.
- Explain how seasons are formed.
 

Ans: The revolution of the Earth around the Sun in a fixed orbit causes seasons. When the Earth revolves around the Sun, it is tilted to one side. When the North Pole is tilted towards the Sun, the northern hemisphere gets more sunlight and has summer. Similarly the South Pole is tilted away from the Sun, gets less sunlight and has winter.

## Chapter – 14

**A. Fill in the blanks.**

- Wind blowing from land to sea is called land breeze.
- The continuous process of evaporation and condensation in nature results in water cycle.
- The tiny droplets of water present in the air are called water vapor.
- Hot air is lighter than cold air.
- During cold nights, dew drops freeze to form frost.

**B. Choose the correct answer.**

- Land breeze blows during the night.

2. Ramesh took a glass of cold water from the refrigerator and placed it on a table. After a few minutes he observed water drops on the outer surface of the glass. Why did water drops form?
  - a. Glass produced water droplets.
  - b. The water in the glass seeped out.
  - c. Water vapour present in the air got condensed.
  - d. Water came out from the gaps present in the glass.
3. The fine droplets observed on the leaves of plants and grass during winter morning are due to dew drops.
4. The process by which water vapour changes into water is called condensation.

**C. State True or False.**

1. Land cools down faster than water. T
2. Sea water is fit for drinking. F
3. When water vapour condenses to form clouds just above the ground, fog is formed. T
4. When clouds become heavy it falls down as rain. T
5. In land breeze, wind blows from land to sea. T

**D. Match the following.**

- |                 |       |  |
|-----------------|-------|--|
| 1. Condensation | _____ | a. rivers and lakes.                   |
| 2. Fresh water  | _____ | b. water droplets frozen on their way. |
| 3. Snow         | _____ | c. water vapour frozen in clouds       |
| 4. Hail         | _____ | d. opposite of evaporatoin             |
| 5. Boiling      | _____ | killing germs.                         |

**E. Answer the following questions.**

1. Define atmosphere.

Ans: The atmosphere is the layer of gases surrounding the Earth, or a surrounding environment that evokes a particular feeling or mood.

2. What is water cycle?

Ans: Water evaporates from the earth, condenses to form clouds and then comes down as rain. This process repeats itself. This is called water cycle.

3. Why is it cooler in the evening than in the afternoon?

Ans: During the day, the sun is directly over head and it gets very hot. But in the evening, the Sun's rays are slanting. This is why it is cooler in the evening than in the afternoon.

4. How do we get pure drinking water?

Ans: Water from the river is sent to water works and treated to make it fit for drinking.

**F. Complete the water cycle diagram and define the following terms.**

**Water cycle:** Water evaporates from the earth, condenses to form cloud and then comes down as rain. This process repeats itself. This is called water cycle.

**Precipitation:** Water falling from the sky to the ground, including rain, snow, sleet, hail, and more, formed when water vapor condenses and cools in the atmosphere.

## Chapter – 15

### A. Fill in the blanks.

1. Air pollution leads to breathing problems.
2. Loss of fertile soil is called soil erosion.
3. Cholera is caused by drinking polluted water.
4. Smoke given out by vehicles causes air pollution.
5. Harmful gasses mixed with water drops lead to acids.

### B. Choose the correct option.

1. Which of the following is a type of pollution.  
a. Water pollution    b. Air pollution    c. Soil pollution    d. All of these
2. Which type of pollution is shown in the given figure?  
a. Air pollution    b. Land pollution    c. Water pollution    d. Soil pollution
3. Which of these is non – biodegradable?  
a. Paper    b. Plastic bag    c. Flower    d. Leaves
4. Which statement among the following is not correct.  
a. Dumping plastics in the soil is not harmful.  
b. Excessive use of coal and petroleum causes pollution.  
c. Loudspeakers causes noise pollution.  
d. Factories do not pollute the air.
5. Recycling is a way to save the environment.

### C. State True or False.

1. Waste that does not rot is biodegradable waste. F
2. The addition of harmful substance to land, air or water is called pollution. T
3. Living and non living things together make up the environment. T
4. Pollution causes diseases. T
5. Wastes consisting of plastic can be decomposed. F

### D. Answer the following questions.

1. What is environment?

Ans: Everything that surrounds us is called our environment. This includes land, air, water and living things.

2. What are biodegradable wastes? Give 2 examples.

Ans: The wastes that rot and mix with the soil is called biodegradable wastes. Vegetable peels and paper are the example.

3. What is air pollution?

Ans: When the air is polluted by the smoke and poisonous gasses given out by cars and buses, it is called air pollution.

4. How can you help prevent land pollution?

Ans: We can help prevent land pollution by recycling things, saving fuel and planting trees.

5. Why is plastic and plastic product harmful for the environment?

1. Take hundreds of years to decompose.
2. Pollute oceans and waterways, harming marine life.
3. Release toxic chemicals during production and disposal.
4. Contribute to greenhouse gas emissions and climate change.
5. Waste resources and litter landscapes.

#### **E. Unscrambled the words that are related to the environment.**

- |                  |                 |
|------------------|-----------------|
| 1. ERIVONNMENT   | : Environment   |
| 2. RGAAGBE       | : Garbage       |
| 3. TIATHAB       | :               |
| 4. EREYLCC       | : Recycle       |
| 5. RIBODEGAADLBE | : Biodegradable |

#### **F. Segregate the following items as biodegradable and non biodegradable.**

##### **Biodegradable**

1. wooden chair
2. leaf
3. dead insects
4. vegetable
5. rotten apple
6. paper
7. onion peels

##### **Biodegradable**

1. plastic bottle
2. broken glass
3. glass



