Science-3



Living and Non-Living Things

## Exercise

A. Tick (3) the correct answer :

1. (a), 2.(c), 3.(c), 4.(c)

**B.** Write True or False for the following statements : 1. False 2. True, 3. False, 4. True, 5. False

## C. Give two examples each of :

- 1. Plants Animals
- 2. Rock Soil
- 3. Nose Airholes
- 4. Grow Breathe

## D. Answer the following questions :

- 1. Living things need food to live and grow. Food gives living things energy to work. Food also helps them to become strong and healthy.
- 2. Do yourself.
- 3. All animals and plants are living things. Human beings are also living things. Living things move, grow, breathe, need food, feel changes and reproduce.
- 4. Plants make their own food.

## Do and Learn

## Make a list of living things, non-living things, things which were once

• **living :** Do yourself.



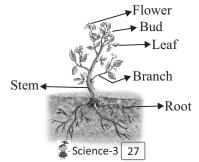
Parts of a Plant

## Exercise

1. Tick (3) the correct answer :

1. (b) 2. (c) 3. (a) 4. (c)

- 2. Fill in the blanks : 1. fibrous, 2. underground, 3. lamina, 4. chlorophyll, 5. many
- C. Label the different parts of the plant.



#### D. Write True or False for the following statements :

- 1. True, 2. False, 3. False, 4. False, 5. False
- E. Answer the following questions :
  - 1. Roots originate from the lower portion of a plant and they are in the soil. They fix the plant to the soil.
    - Roots are of two types-tap root and fibrous root.
  - 2. Carbon dioxide, water and sunlight.
  - 3. Leaves are called the kitchen or food factory of a plant because they prepare food for the plant using water, air and sunlight.
  - 4. 1. The stem gives support to the plant.
    - 2. The stem carries water and nutrients from the roots to the leaves.
  - 5. When a main root grows from the end of the stem and various other small roots grow from its sides, it is a tap root. Plants like balsam, bean and mustard have tap roots.

**Fibrous Root :** When a number of roots grow from the end of the stem, it is a fibrous root. Plants like rice, wheat, onion, grass, etc have fibrous roots.

## Do and Learn

• Pull out a grass plant and buy a carrot with leaves from the market. Observe their roots carefully. Draw the types of roots you see and name them.

Do yourself.



Living Habits of Animals

#### Exercise

- **A.** Tick (3) the correct answer : 1. (a), 2. (c), 3. (b), 4. (c)
- B. Unscramble the words to complete the sentences :

2. water

6. people

1. water

5. trees

3. desert

7. mountain

4. house

- **C.** Fill in the blanks : 1. terrestrial, 2. water, 3. deserts, 4. arboreal
- **D.** Write True or False : 1. False, 2. True, 3. True, 4. False
- E. Think and answer:
  - 1. Whales breathe by coming on the surface of the water.
- F. Answer these questions :
  - 1. Some animals spend most of their time on trees are called arboreal animals. Monkeys and squirrels.
  - 2. Terrestrial animals are animals who live only on land. Aquatic animals are those who live in water.



## 3. Changes caused by man are :

- i. Cutting trees to use the wood in industry and to build more houses.
- ii. Dumping waste from factories in water and on land.
- iii. Oil trailers accidents.
- 4. We can protect our habitat by plant more and more trees. We should try to keep the surrounding and water bodies clean.

## Do and Learn

Do it yourself

**2** 4

## Feeding habits of Animals

## Exercise

- A. Tick (3) the correct answer : 1. (d), 2. (c), 3. (c), 4. (a), 5. (d)
- **B.** Write the names of five animals which pick up food with their mouth to eat it. Write the names of two animals which :

1. Frogs, Lizards,

Cows, Buffaloes,
 Tigers, wolves

3. Mosquitoes, Butterflies,

## C. Fill in the blanks :

1. Frogs, 2. Monkey, 3. Hens, 4. Butterflies

## D. Write True or False :

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

## E. Match the following:

Ruminate — bring swallowed food back into the mouth to chew and eat it.

Swallow whole — eat without chewing.

Suck up — suck through a tube -like part.

## F. Define:

- 1. Herbivores are animal that eat only plants or plant products.
- 2. Carnivores are that Animals that feed on the flesh of other animals.

## G. Answer these questions :

- 1. Chameleons and frogs catch their food with their tongues and swallow it whole.
- 2. Animals like butterflies, mosquitoes, flies suck up liquid substances with a tube-like part called a proboscis.
- 3. As fish eat the algae and insects growing in water, they help in keeping the water in rivers and ponds clean.
- 4. Camouflage helps an animals to hide from its enemies. It also helps it in hunting for its prey.
- 5. Many animals and birds move from one place to another in different



seasons. This movement of an animals is known as migration. Some birds migrate to escape from cold weather, searching of food and to lay their eggs.

## Do and Learn

- Collect pictures of different animals and paste them in your scrapbook. • Also paste picture of food they eat.
  - Do yourself.



## Exercise

- A. Tick (3) the correct answer : 1. (d), 2. (a), 3. (c)
- B. Whoiam?1. Humming birds,4. Crane,
- 2. Kingfishers,
  5. Jacana
- Cardinals,
  Weaver bird

Birds

- C. Fill in the blanks:
  - 1. fluffy, 2. flightless, 3. teeth, 4. webbed
- D. Given below are the names of some birds and the pictures of their feet and claws. Match the bird with its feet and claws :
  - Hen







## E. Name the following :

1. Crow, Sparrow

4. Duck. Swam

2. Eagle, Cranes 3. Hen, Sparrow 5. Herons, Cranes

Duck

- F. Define:
  - 1. A web is a thin skin spread between the toes.
  - 2. The sharp claws of a flesh-eating bird are called talons.
  - 3. Birds use their beaks to smoothen their feathers. This is called preening.

## G. Give reasons, why?

- 1. Birds build nests to lay their eggs.
- 2. They have wing and hollow light bones.

## H. Answer the questions :

- 1. Birds are different from other animals because birds can fly but animals cannot fly. Birds have light weight but animals have heavy weight from the birds. Birds have only two legs but animals have four legs.
- 2. Bird has a boat-shaped body, this helps a bird to cut through the air and fly easily. The hollow bones make the body lightweight and so, easier to fly. The wings with strong muscles can flap its wings to fly. The tail of a bird helps it in taking off, balancing and changing direction during a flight.



- 3. The tail of a bird helps it in taking off, balancing and changing direction d uring a flight.
- 4. Birds use their toes and claws to hold things, balance, scratch, climb, walk, run and wade in water.
- 5. Different birds have different kinds of beaks because the beaks of different birds tell us about the eating habits of birds.
- 6. Most grain eating birds have cracker type of beaks.
- 7. They have webbed feet with small claws, these helps them to swim. Water birds have long legs and spreading toes to wade in water.

## Do and Learn

• Find the names of eight birds :



- Collect the feathers of the birds around you. Paste them in your scrapbook. Name the birds to which they belong. Do it yourself
- Collect the pictures of different types of nests the birds build and paste them in your scrapbook. Do it yourself



# Human Body

## Exercise

A. Tick (3) the correct answer :

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

- B. Name the organs of the following organ systems :
  - 1. mouth, stomach, intestine
- 2. heart, blood vessels
- 3. nose, trachea, lungs
- brain, spinal cord, nerves
- 5. Lungs, kidneys, large intestine
- C. Correct the following sentences by changing the words given in bold :
  - 1. The brain controls all the systems and organs.
  - 2. The skeletal system consists of skull, ribcage, backbone, other bones and joints.



- 3. The skull protects the brain.
- 4. The ribcage protects the heart and the lungs.
- **D.** Fill in the blanks with the suitable words given in the Help Box : 1. system, 2. sense, 3. nervous, 4. function, 5. brain
- E. Write True or False :
  - 1. False, 2. True, 3. True, 4. False, 5. False
- F. Define:
  - 1. The ribcage protects the heart and the lungs.
  - 2. The place where two or more bones meet is called a joint.
  - 3. The knee cap is a circular bone which protects the knee.
  - 4. Some muscles are under our control. They move when we make them move. They are called voluntary muscles.
  - 5. Some muscles are not under our control. They work on their own. They are called involuntary muscles.

## G. Answer these questions :

- 1. The skeletal system has three major jobs :
  - i. It protects our vital organs such as the brain, the heart and the lungs.
  - ii. It gives us the shape that we have.
  - iii. It allows us to move.
- 2. A long bone running from the neck all the way down to the hips. This is the spine it is very flexible. It helps us to bend our body forward, backward or sideways.
- 3. Muscles, together with joints, help us in performing various movements such as walking, throwing, jumping, running, lifting, pushing, etc.
- 4. We can keep our bones and muscles strong by exercising regularly.



Food and Nutrition

## Exercise

- A. Tick (3) the correct answer :
  - 1.(c), 2.(c)
- **B.** Unscramble the jumbled letters and find the nutrients : 1. PROTEINS, 2. VITAMINS, 3. ROUGHAGE,
  - 4. MINERALS, 5. CARBOHYDRATES

## C. Give three example of each type of food :

- 1. Rice, Wheat, Maize 2. Toor, Moong, Masoor
- 3. Tomato, Potato, Brinjal 4. Butter, oil, Ghee
- 5. Milk, Eggs, Meat

## D. Fill in the blanks :

- 1. food, 2. plants, animals, 3. malnutrition,
- 4. Growing children, 5. temperature



## E. Ask your elders and fill in the table :

|            | What can they eat? | What can they not eat? |
|------------|--------------------|------------------------|
| 1.         | Vegetables, milk,  |                        |
|            | Fruits, Eggs       | Chips, Chocolates      |
| 2.         | Pulses, creals,    |                        |
|            | Fish, Eggs         | Junk food, oily food   |
| 3.         | Vegetables, Milk,  |                        |
|            | Fruits, Eggs       | Spicy food, Junk food  |
| <b>C</b> . |                    |                        |

## F. Give reasons, why?

1. We should eat diet that has all necessary nutrients because our body needs food to work, grow and remain healthy.

## G. Answer these questions :

- 1. Our body need food to work, grow and remain healthy.
- 2. Food gives us energy to work and play. It builds up our body. Food keeps away illness and make us healthy.
- 3. The food which contains carbohydrates, fats, proteins, vitamins, mineral, salts and roughage are nutrients.
- 4. A diet which has a proper amount of fats, carbohydrates, proteins vitamins and minerals salts is called a balanced diet.
- 5. A tiny living things in the dirt of fruits, vegetables, grains and meat are know as germs.
- 6. Water is necessary to wash the fruits, vegetables, grains before cooking. Water helps to wash away waste in the body.

## Do and Learn

Do it yourself



Safety and First Aid

## Exercise

A. Tick (3) the correct answer :

1.(a), 2.(c), 3.(b), 4.(c)

- **B.** Fill in the blanks : 1. footpath, 2. lift, 3. electric, 4. swings, 5. hedges or boiled
- C. Write True or False :

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

## D. Match the following :

a. (ii) wait for your turn, b. (iv) taking patients to hospital, c. (i) dangerous to play, d. (iii) zebra crossings

## E. Answer these questions :

- 1. To avoid accidents we should follows safety.
- Three safety rules that we should followed at home are : Do not light a match stick or a candle. Do not take any medicine without your parent's or doctor's advice.



Do not touch hot utensils or boiling water.

- 3. There safety rules that should be followed on road are : Always walk on footpath. Do not get in or off a moving bus. Do not run across the road or play on the road.
- 4. First Aid is the immediate help given to an injured person.
- 5. We should do when someone gets injured-
  - ! Make the injured person sit or lie in a comfortable position and calm him.
  - ! Do not let a crowd gather around the injured person.
  - ! Give him/her drinking water.

## Activity/Project :

Do it yourself



## Pushes and Pulls

## Exercise

- A. Tick (3) the correct answer : 1. (b), 2. (c), 3. (c).
- **B.** Give one example of each : 1. Fans, 2. Oxen, 3. Horses, 4. Oil, 5. Rubber.

## C. Fill in the blanks :

- 1. Force,
- 2. more, less,
- 3. Lubricants,
- 4. Friction,
- 5. Friction.

## D. Write True or False :

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

## E. Give reasons, why?

It is because powder help in reducing friction.

## F. Answer these questions :

1. Force : A Force is something which pulls or pushes an object.

Friction : Friction is a force that tries to stop objects when it moves.

- 2. A force can make things move, stop, turn, twist etc.
- 3. We cannot move on a slippery surface because on a slippery surface, there is very little opposing force or friction.
- 4. Substances like oil, powder, grease reduce friction. They are called lubricants.

## Do and Learn

Do it yourself







#### Exercise

- **A.** Tick (3) the correct answer : 1. (c), 2. (b), 3. (a), 4. (b)
- **B.** Fill in the blanks : 1. wind, 2. oxygen, 3. Three-fourth, 4. 100°C, 5. sailboats wind mills
- C. Write True or False : 1.False, 2. False, 3. True, 4. False, 5. True
- D. Match the Column A and Column B :

a. (ii) wind, b. (v) storm, c. (iv) oxygen, d. (iii) carbon dioxide, e. (i) blue planet

- E. Answer these questions :
  - 1. Air is composed of invisible gases like oxygen nitrogen and carbon dioxide. It also contains dust particles.
  - 2. We use air in many ways : Oxygen present in the air helps in burning. Air helps birds to fly in the sky. Air dries our clothes faster.
  - 3. Three forms of water aresolid, liquid and gas.
  - 4. we use water in many ways. We use it for drinking, cooking, bathing, washing and watering the plants.
  - 5. The water from rivers, lakes and seas gets converted into vapour due to the heat of the Sun. The water vapour moves upwards. This process is called evaporation. Many such drops come together to form clouds. These drops cool through the process of condensation. When these drops become heavy, they fall back in the earth's surface as rain. This process is called water cycle.

## Do and Learn

Do it yourself Do it yourself



Matter

## Exercise

- **A.** Tick (3) the correct answer : 1. (c), 2. (a), 3. (b), 4. (c)
- **B.** Classify the following as Solid (s), Liquid (L) and Gas (G) : 1. G, 2. G, 3. S, 4. L, 5. S, 6. G
- C. Fill in the blanks : 1. three, 2. air, 3. vapour, 4. solid, 5. vapour



## D. Write True or False :

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

## E. Answer these questions :

- 1. Matter is anyting that has mass and that occupies space.
- 2. Three states of matter issolid, liquid and gas.
- The properties of solid are : It can neither change its shape nor can flow. Book, pen, table, chair, etc are all solids because they have a fixed shape and size.
- 4. The properties of liquid are : They do not have a definite size and they take the shape of the container they are kept in. They can be poured and spilled while a solid cannot.

#### 5. Evaporation

The process of conversion of a liquid to water vapour is called evaporation.

## Do and Learn

Do it yourself



## Condensation

When a gas change into a liquid, this process is called condensation.



Exercise

- **A.** Tick (3) the correct answer: 1. (b), 2. (c), 3. (a)
- B. Fill in the blanks :
  - 1. metre,
  - 2. grams,
  - 3.1000,
  - 4.(24),
  - 5. clock, watch,
  - 6. kilometre,
  - 7. Thermometer

## C. Write True or False :

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

## **D.** Match the following :

Chalk piece — centimetre Milk — litre

Wheat flour — kilogram



Brinjal — gram

Cloth-metre

## E. Answer these questions :

- 1. Short length are measured with a ruler in a millimeter. A measuring tape measures length in metres and centimetres. Distance between two places are measured in kilometres.
- 2. The distance between two cities are measured in kilometers.
- 3. Volume is the space occupied by a thing : Liquid and gases are measured by volume. Volume is expressed in litres and millilitres.
- 4. The normal temperature of human body is  $37^{\circ}$ C.
- 5. In ancient times Sun dial and hour glass are used to find time.

## Do and Learn

Do it yourself



# Our Universe

## Exercise

A. Tick (3) the correct answer :

1.(b), 2.(b), 3.(a)

- **B.** Fill in the blanks :
  - 1. Sun,
  - 2. Moon,
  - 3. Earth,
  - 4. west, east,
  - 5. constellation

## C. Write True or False :

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

## D. Give reasons, why?

1. The moon has no light of its own, still we can see it in the sky because the moon shines at night due to light reflected from the Sun.

## E. Answer these questions :

- 1. Day and night is caused by the rotation of the EArth west to east and the slating axis. The Earth gets light form the sun. As the Earth moves slowly the lighted part moves away form the sun and has night. The dark part comes to face the sun and has day.
- 2. On a particular day the moon looks like a full circle. That the full moon . It is described as 'Poornima'. After that day, the moon starts to wane. It appears in size day after day. After about 14 days, it, reaches the new moon stage. It is described'Amavasya'. We cannot see the lighted part of the moon that day.
- 3. The moon shine at night due to light reflected from the Sun.



#### 4. Star:

- i. The stars are big heavenly bodies. All stars shine like the Sun.
- ii. There are large number of stars in the sky at night.

#### Planet :

- i. Planets are heavenly bodies that move around the Sun.
- ii. There are eight planets.
- 5. **Planets :** Planets are heavenly bodies that move around the Sun. There are eight planets. Earth is also a planet. It is our home.

**Satellite :** Satellite is a heavenly or artificial body that moves round the Earth or another planet.

**Constellation :** A group of stars is called a constellation.

**Rotation :** The movement of the Earth on its axis is called rotation of the Earth.

#### Do and Learn

## Complete the puzzle using the given clues :

**Down :** 1. Moon, 2. Star, 4. Earth, 7. Rotation **Across :** 3. Sun, 5. Air, 6. Water

