

# SCIENCE (CLASS-3)

## CHAPTER-1 – FOOD AND FEEDING HABITS OF ANIMALS

### Let us Answer

A. Tick (✓) the correct answer.

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

B. Fill in the blanks :

1. herbivores    2. carnivores    3. plant, animal    4. mouth    5. swallow    6. Gnaw

C. Identify the animals given in the pictures and answer the questions.

(a) (i) Cow

(ii) It eats grass or green plants.

(iii) Herbivore or herbivorous animal

(b) (i) Lion

(ii) It eats flesh of other animals.

(iii) It is found in a forest.

(c) (i) Rat

(ii) gnaw grains.

(iii) It is a rodent and lives in a hole.

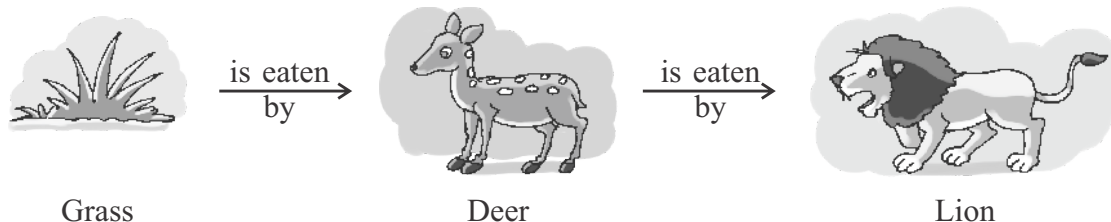
(d) (i) Snake

(ii) No, it does not have teeth to chew.

(iii) It swallow its prey.

D. Answer the following questions :

1. The food is the basic necessity of all the animals living on the earth because they cannot stay alive without food.
2. Animals that eat plants and plant products are called Herbivores. Cow, buffalo, deer and horse are herbivorous animals.
3. Animals that eat both plants and flesh of other animals are called Omnivor. Bear, cat and dog are omnivorous animals.
4. Animals depend either directly or indirectly on the plants for their food. This is like a chain and is called a food chain.



5. Some animals like cows, goats, horses, buffaloes first swallow the food without chewing it. After sometime, they bring it back into their mouths and chew it with their grinding teeth. This is called chewing the cud.



- (ii) Do not run in corridors or while climbing stairs.
  - (iii) Do not push others.
  - (iv) Do not throw objects at anyone as you might hurt someone.
2. Four safety measures to be taken at home are as follows :
- (i) Do not touch anything on the gas stove.
  - (ii) Do not touch electric wires and sockets.
  - (iii) Do not play with sharp objects like knives, blades, etc.
  - (iv) Always keep your toys and bags in their respective place.
3. Four safety measures to be taken on the road are as follows :
- (i) Always use zebra-crossing while crossing the road.
  - (ii) Always walk on the footpath.
  - (iii) Never play or run on the road.
  - (iv) Never take your hand or head out of a moving bus.
4. First-aid is the immediate help given to an injured person before the arrival of an adult or a doctor.
5. A good house has the following features :
- (i) The rooms of the house should be airy and well lit.
  - (ii) Besides doors and windows, a good house should also have open areas like balconies and verandahs.
  - (iii) It should have a proper drainage system.
  - (iv) It should have a lawn.
  - (v) It should have all the rooms which we need in our routine life.
6. Five ways to take care of a house are as follows :
- (i) Always keep the house neat and clean.
  - (ii) Keep the drains from the kitchen and bathroom covered.  
Uncovered drains become a breeding place for the mosquitoes.
  - (iii) Keep the toilets and bathrooms clean.
  - (iv) All household wastes should be thrown into covered dustbins.

### HOT QUESTIONS

- E. 1. After an injury, the wound should be cleaned with an antiseptic lotion and should not be left uncovered because an unclean and uncovered wound can get infected easily.
2. Dustbin containing household wastes should be covered because an uncovered dustbin is the source of bad smell and flies which may cause communicable diseases.

### Let us Try

- F. Do it yourself.
- G. Do it yourself.

### A Life Skill

- H. Tick (✓) which you feel is correct :

1. ✗      2. ✓      3. ✗      4. ✓      5. ✓

## CHAPTER-3 – PRECIOUS SOIL

### Let us Answer

- A. Tick (✓) the correct answer.  
1. (c)      2. (a)      3. (c)      4. (b)      5. (c)
- B. Unscramble the words to write the correct answer to the given clue :  
1. ROCKS      2. MINERALS      3. CROPS      4. MANURE
- C. Answer the following questions :

1. The soil is formed through breaking of rocks into tiny pieces in a long period of time, we can say that thousands of years. Sun, rain and wind are the main factors that play a vital role in breaking rocks and making soil.

2. On the basis of the following activity, we can say that soil contains stones, sand, clay and humus :

Take a handful of garden soil, put in a glass jar, which is empty. Now, fill the jar with water and cover it with a lid and shake well. Let the mixture stand for 15-20 minutes and then look at the jar carefully.

We observe that the stones settle down at the bottom. Above the stones, grains of sand can be seen. The clay settles down above the sand. The water above the top layer is not very clear.

At the top, parts of dead plants and insects float. This is called humus. This proves that the soil contains stones, sand, clay and humus.



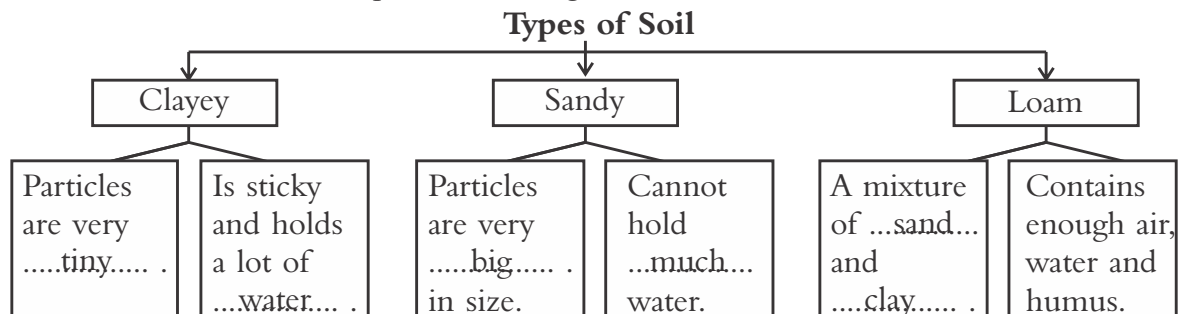
Soil contains humus, clay, sand and stones.

### HOT QUESTIONS

1. Jar C, because loam is the best soil to grow plants.  
2. He would use the clayey soil because it is used to make pots.

### Let us Try

- E. Do it yourself.  
F. Do it yourself.  
G. What kind of soil does each picture indicate ?  
Sand                      Loam                      Clay  
H. Fill in the boxes with the help of the words given.



**A Life Skill – Do it yourself.**

**ACTIVITY TIME–I**

- A. Read the clues and unscramble the letters to get the names of these animals.
1. BUTTERFLY
  2. MOSQUITO
  3. DONKEY
  4. BUFFALO
  5. RABBIT
- B. (a) The Two ways in which he should take care of the animals are as follows :
- (i) He should provide them a neat and clean shelter.
  - (ii) He should provide them clean water to drink and healthy food to eat.
- (b) He should take his cows to a veterinary doctor to cure their illness.
- C. Residents of which house have less chances of suffering from diseases due to mosquitoes and flies ? Why ?
- Residents of House-II have less chances of suffering from disease due to mosquitoes and flies because this house has doors and windows with wire-net.
- D. The soil is home to many small animals. Do this activity to find out tiny creatures.  
Do it yourself.

**CHAPTER-4 – LIVING AND NON-LIVING**

**Let us Answer**

- A. Tick (✓) the correct answer.
1. (c)
  2. (b)
  3. (a)
  4. (b)
  4. (c)
- B. Fill in the blanks :
1. life, life
  2. move
  3. touch-me-not
  4. breathe
  5. live, grow
  6. tree
- C. Unscramble the words given in the bubbles and write them in the correct places :
- Man-made things–car, bus, chair, road
- D. Answer the following questions :
1. The things which are made by human beings are called man-made things. Some man-made things are roads, bridge, chair, table, bus, car, etc.
  2. Living things need food to live and grow.
  3. All living things feel the change around them. For example during the summers we feel hot while winters we feel cold. If accidentally, we happen to touch something hot, we immediately remove our hand. In this way, we can say that living things can feel.
  4. Reproduction means a process by which living things produce more of their own kind. Human beings and animals like cows and cats give birth to babies. Birds lay eggs and baby birds come out of the eggs. Most plants reproduce with the help of seeds.

5. The five differences between living and non-living things are as follows :

|    | Living Things   | Non-living Things              |
|----|---|--------------------------------|
| 1. | They can move on their own from one place to another. | They cannot move on their own. |
| 2. | All living things need air to breathe.                | They do not breathe.           |
| 3. | They need food to live and grow.                      | They do not need food to eat.  |
| 4. | All the living things grow.                           | Non-living things do not grow. |
| 5. | They feel the change around them.                     | They cannot feel.              |

## HOT QUESTIONS

- E. The three major differences between the table and the tree are as follows.

|    | Table                                | Tree                         |
|----|--------------------------------------|------------------------------|
| 1. | It does not need food to stay alive. | It needs food to stay alive. |
| 2. | The table is a non-living thing.     | The tree is a living thing.  |
| 3. | The table cannot grow.               | The tree can grow.           |

**Let us Try – Do it yourself.**

## CHAPTER-5 – ANIMALS AND PLANTS

### Let us Answer

- A. Tick (✓) the correct answer.

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

- B. Do it yourself.

- C. Fill in the blanks.

1. sense organs      2. cannot      3. mushrooms      4. stomata

- D. Answer the following questions :

- Animals move from one place to another in search of food and shelter.
- Plants prepare their own food through a process called photosynthesis.
- The following are three different ways by which the living things breathe :
  - Some living things like cats, dog, horses, elephants have lungs to breathe.
  - Fishes have gills to breathe. They breathe through their gills.
  - Insects like cockroaches, flies, butterflies have air holes on their bodies which help them to breathe.
- The two ways by which the animals reproduce are giving birth to young ones and laying eggs from which babies come out few days later.
- There is a balance in nature if there are just enough plants, just enough plants eating animals and just enough, flesh-eating animals in the world. To maintain the balance in nature is our responsibility.

## HOT QUESTIONS

- E. Deforestation will one day lead to the extinction of animals left on the earth. This statement is absolutely true because forests are natural habitats of wild animals. They provide food and shelter to increase the members of their particular species. If these are cut down, they lose all these facilities and disappear from the earth forever.

### Let us Try

- F. Certain plants eat animals. Can you guess which plants is given in the picture ? Try to name it and write two lines on it :

The name of this plant is-Pitcher plants.

1. It is an insectivorous plants                      2. It can eat and digest insects.
- G. Do it yourself.

**A Life Skill – Do it yourself.**

## CHAPTER-6 – PARTS OF A PLANT

### Let us Answer

- A. Tick (✓) the correct answer.

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

- B. Match the statement with the correct picture.

Do it yourself.

- C. Answer the following questions :

1. The two main type of roots are-tap root and fibrous root.
2. The two functions of root are as follows :
  - (i) It fix the plants to the soil.
  - (ii) It takes water and minerals from the soil for the growth of plant.

Two functions of stem :

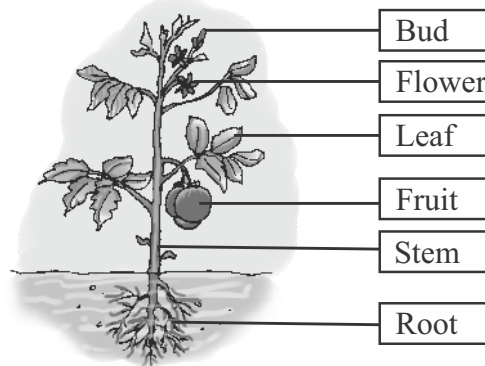
- (i) It holds the plant upright and bear branches, leaves, flowers and fruits.
  - (ii) It carries the water and minerals taken in by the roots to the other parts of the plant.
3. The flat and broad part of a leaf is called the lamina or leaf blade. Green leaves make food for the plant in presence of air, water and sunlight. Some plants store extra food in their leaves.
  4. The process by which a baby plant grows from a seed is called germination.
  5. The leaves are called the food factory of a plant because they synthesise food for the plants through a process called photosynthesis.

## HOT QUESTIONS

- D. The leaves of the green plants appear green in colour because of a green pigment called chlorophyll present in them.
- E. The green plants release oxygen and we take it in to breathe.

## Let us Try

F. Label the various parts of plants :



**ACTIVITY TIME–II** – Do it yourself.

## CHAPTER-7 – BIRDS : FOOD AND MORE

### Let us Answer

A. Tick (✓) the correct answer.

1. (b)      2. (c)      3. (b)      4. (c)      5. (b)

B. Fill in the blanks :

1. beaks, claws      2. webbed      3. muddy water      4. talons      5. down

C. Match the following :

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

D. Answer the following questions.

1. A short, hard and horny beak is useful to a sparrow because it can crush grains and seeds.
2. A woodpecker has strong and chisel-shaped beak. It uses its beak to dig out holes in the tree trunks and pull out insects from the holes.
3. A back toe is useful for a perching bird because it curls around the branch due to which this bird does not fall off even while sleeping.
4. Wading means to walk or move in muddy water. The names of two wading birds are crane and heron.
5. The wings of the birds show two types of movement-the upstroke and the downstroke. During the downstroke, the wings move downward and forward. During the upstroke, the wings move upward and backward.

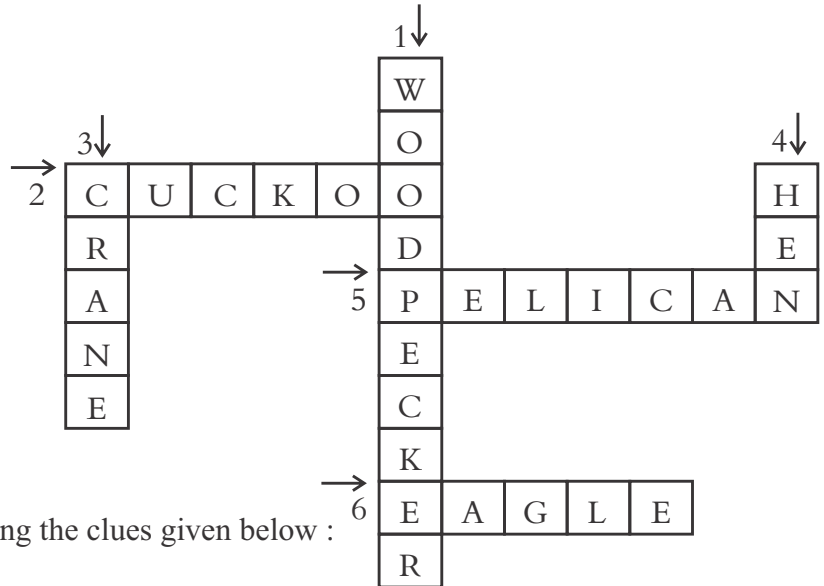
### HOT QUESTIONS

- E. 1. If there were no side holes on the beak of a duck, it would be unable to flow out the muddy water from its beak. This water goes into its stomach with insects.
2. If there are no claws on the bird's feet, they would not be able to catch prey and also protect themselves from their enemies.
3. If ducks have no webbed feet it would not swim swiftly in the water.



4. If a bird lacks a tail, it would not be able to change its direction during flight. As we know that the tail of a bird helps it to change its direction during flight.

### Let us Try



F. Do yourself.

G. Fill in the crossword by using the clues given below :

H. Do it yourself.

## CHAPTER-8 – MAN : THE LIVING MACHINE

### Let us Answer

A. Tick (✓) the correct answer.

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

B. Fill in the blanks :

1. skeleton      2. brain, spinal cord, nerves      3. hair      4. kidneys      5. skin

C. Do it yourself.

D. Answer the following questions.

- Our body is made up of different kinds of cells.
- Our skin helps us to feel pain, touch, pressure and temperature. On the basis of these features we can say that our skin is a sense organ.
- The importance of the skeleton system :
  - It gives shape and support to our body.
  - It helps us to stand, walk and move.
  - It protects delicate inner organs of our body.
- Digestion is the process of changing of food into a simple form so that it can be used by the body. The main organs of digestive system are mouth, food pipe, stomach, small intestine, large intestine and anus.
- The three main parts of the circulatory system are the heart, blood and blood vessels.

### HOT QUESTIONS

E. 1. No, it is not right to keep the windows of our rooms closed all the time because it

blocks the way of the fresh air to enter the room. A room needs fresh air to remain germs free.

2. Aman is not doing right because green vegetables, fruits and milk are parts of our body-building and protective food. We need them to be stay healthy and fit.
3. He can tell the difference between the two fruits by using the touch of his skin and by tasting them with his tongue. These two sense organs can help him to know the difference between them.

### Let us Try

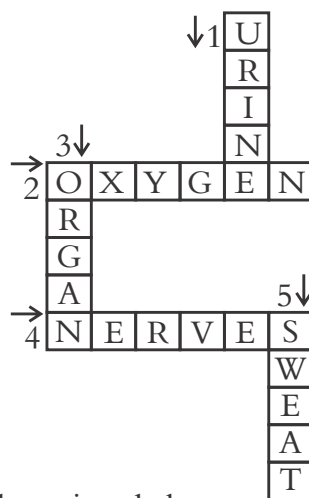
F. Skeleton system

Mascular system

Circulatory system

Nervous system

Respiratory system



G. Do it yourself.

H. Fill in the crossword by reading the clues given below :

## CHAPTER-9 – MEASUREMENT

### Let us Answer

A. Tick (✓) the correct answer.

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

B. Fill in the blanks :

1. hands, feet
2. metres
3. electronic balance
4. hour
5. Temperature

C. Complete the following :

1. 100 cm
2. 10 mm
3.  $\frac{1}{1000}$  kg
4. 60

D. Do it yourself.

E. Answer the following questions.

1. People used their hands and feet to measure length earlier. Some non-standard units for measuring length are the handspan, the cubit and the footspan.
2. A vegetable vendor weights the vegetables by an electronic balance.
3. Capacity is the quantity of a liquid which a vessel can hold.

4. Measuring cylinders and measuring jars are commonly used for measuring capacity.
5. Centigrade and Fahrenheit are the two scales for measuring temperature.

### HOT QUESTIONS

- F. 1. Do it yourself.
2. Length-30 cm and width-110 cm.
  3. 135 cm.
  4. 60cm.
  5. I will pay ₹ 45. ₹ 55 should be return me.

**Let us Try** – Do it yourself.

### CHAPTER-10 – LIGHT, SOUND AND FORCE

#### Let us Answer

- A. Tick (✓) the correct answer.
1. (b)      2. (a)      3. (c)      4. (c)      5. (a)      6. (c)
- B. Fill in the blanks :
1. sun      2. shadow      3. solar eclipse      4. noise      5. force
- C. Do it yourself.
- D. Answer the following questions :
1. The objects that give light are called luminous objects. A bulb is a luminous object.
  2. When something comes in the way of light, a shadow is formed.
  3. When the moon blocks the light of the sun, a solar eclipse occurs. Due to this, shadow of the moon falls on the earth and the sun cannot be seen or is partially hidden.
  4. When the earth blocks the light of the sun, a lunar eclipse occurs. The shadow of the earth falls on the moon and the moon cannot be seen.
  5. Sound which is loud or unpleasant is known as noise. To reduce the noise we should do the following things :
    - (i) We should speak softly.
    - (ii) We should play music and TV a low volume.
    - (iii) We should not use loudspeakers.

### HOT QUESTIONS

- E. 1. We find that the ball will move more speedily on a polished floor than on a rough floor or on grass.
2. Light travels faster than sound. That's why Jasleen saw lightning first and then heard thunder.
  3. Ambulances, fire engines and police vans use sirens to aware people on the road, so that they give them side to move smoothly and they can reach in time at the places they are needed.

### Let us Try

- F. Hidden in the word search are the names of four luminous and four non luminous objects. Find and write their names in the correct boxes :

#### Luminous objects

1. Stars
2. Lamp
3. Sun
4. Candle

#### Non-luminous objects

- Pen  
Pencil  
Table  
Bottle

G. Do it yourself.

H. Do it yourself.

I. Morning                      Noon

Evening

J. Do it yourself.

**A Life Skill – Do it yourself.**

### ACTIVITY TIME–III

A. Name the bird that :

1. Weaverbird
2. Eagle
3. Duck
4. Penguin
5. Woodpecker

B. In this word search are hidden the names of some body parts. How many can you find ?

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| I | L | N | Y | S | V | S | K | I | N |
| K | I | D | N | E | Y | S | O | P | Q |
| S | V | H | E | A | R | T | R | T | U |
| L | E | W | X | Y | N | O | S | E | Z |
| U | R | B | C | B | R | M | I | N | D |
| N | P | C | T | B | R | A | I | N | X |
| G | F | G | M | U | S | C | L | E | S |
| S | U | S | L | V | E | H | E | K | H |

C. Do it yourself.

D. What measure will you use to buy

- (a) l    (b) kg    (c) l    (d) kg    (e) kg    (f) kg    (g) dozen    (h) kg

### CHAPTER-11 – OUR EARTH AND ITS NEIGHBOURS

#### Let us Answer

A. Tick (✓) the correct answer.

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

B. Fill in the blanks :

1. eight
2. spherical
3. Rotation, Revolution
4. gases
5. moon
6. phases of the moon

C. Name the planets in the increasing order of their distance from the sun.

1. Mercury
2. Venus
3. Earth
4. Mars
5. Jupiter
6. Saturn
7. Uranus
8. Neptune

D. Write the times taken for one :

1. 24 hours      2.  $365\frac{1}{4}$  days      3.  $29\frac{1}{2}$  days

E. Answer the following questions :

1. A planet is a heavenly body that moves around a star like the sun, in a fixed path called the orbit. The names of eight planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
2. The earth appears flat to us because what we see is only tiny part of a very big arc.
3. The movement of the earth on its own axis is called rotation. Rotation causes day and night.
4. The earth goes around the sun in a fixed path called the orbit. This movement of the earth is called is revolution. The earth's revolution around the sun causes the change in seasons.
5. Due to the changes in the position of the earth, the moon appears to change its shape. The different shapes of the moon are called the phases of the moon.

We can see only these parts of the moon that get the sunlight. Hence, the moon appears to change its shape every night. When the moon is between the earth and the sun, we do not see it at all. This is called new moon. In two or three days, time the moon looks like a crescent. This is the crescent moon. Within a week, we see half of the moon called the first quarter. When we see more than half of the moon, it is called the gibbous moon. In two weeks time, we see the full moon.

6. The groups of stars that form patterns in the sky are called constellations. The names of two constellations are Ursa Major (The Great Bear) and Orion (Hunter)

### HOT QUESTIONS

- G. 1. We should never look straight in the sun because it may harm our eyes.  
2. We don't get heat and light from the other stars in the sky because they are very far from us and their light and heat cannot reach to us. The sun is the star that is closest to the earth, so it gives us heat and light.

### Let us Try

- G. Do it yourself.  
H. Do it yourself.  
I. Do it yourself.  
J. Do it yourself.  
K. Unscramble to words to get the names of the planets to the clue given.  
1. VENUS      2. NEPTUNE      3. SATURN      4. MERCURY

**Life Skill :** Do it yourself

## CHAPTER-12 – GOING INTO SPACE

### Let us Answer

- A. Tick (✓) the correct answer.  
1. (c)      2. (b)      3. (c)      4. (b)
- B. Fill in the blanks :  
1. gravity      2. Rockets      3. Neil Armstrong  
4. Craters      5. less      4. Kalpana Chawla

C. Join the dots and colour the given figure :

Do it yourself.

D. Answer the following questions :

1. As we go beyond the layer of air surrounding the earth, we reach into space.
2. The other two astronauts who went along with Neil Armstrong were Edwin Aldrin and Michael Collins.
3. There is no life on the moon due to absence of air and water.
4. The persons who go into space in a spacecraft are called astronauts. They do experiments in the spacecraft.
5. Kalpana Chawla went into the space, again in 2003. Her space-shuttle crashed on the return journey on 1st February, 2008. She was died in this accident.

### HOT QUESTIONS

- E. 1. Astronaut in the space shuttle seem to fly because of the absence of gravitational force in the space.
2. Rockets and engines in a space be according to Isaac Newton's third law of motion. Every action produces an equal or opposite reaction. This helps a rocket to operate in space.

### Let us Try

F. How much would they weigh on the moon ? Complete the given table.

| Name    | Weight on Earth | Weight of Moon    |
|---------|-----------------|-------------------|
| Suman   | 30 kg           | 5 kg              |
| Sumit   | 40 kg           | $6\frac{4}{6}$ kg |
| Reema   | 25 kg           | $4\frac{1}{6}$ kg |
| Simaran | 33 kg           | $6\frac{3}{5}$ kg |

G. Write two lines on each of the given pictures :

1. Rakesh Sharma was the first Indian man to go into the space. He was an Indian air force pilot.
2. Kalpana Chawla was the first Indian woman to go into the space. She was died on 1st February, 2003.
3. Sunita Williams was the second woman of Indian origin to go into space. She stayed in space in her space-shuttle for 195 days.

## CHAPTER-13 – WATER AND WEATHER

### Let us Answer

A. Tick (✓) the correct answer.

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

B. Fill in the blanks :

- |                             |             |            |
|-----------------------------|-------------|------------|
| 1. ice, water, water vapour | 2. droplets | 3. weather |
| 4. sun, wind, clouds, rain  | 5. overhead | 6. breeze  |

C. Do it yourself.

D. Answer the following questions :

1. Ice, water and water vapour are three forms of water.
2. Water keeps changing its form in nature too. This cycle of change is called the water cycle.
3. The day to day change in the condition of the air is called weather. The sun is low in the sky during morning and evening. Due to this the sun rays are slanting during this time of the day. At noon, the sun is overhead and the sun rays fall straight. That is why, noon is the hottest part of the day. During mornings and evenings the weather is not very hot.

| 4. |    | Breeze  | Storm   |
|----|----|---|---|
|    | 1. | The wind blowing gently is called a breeze.                                       | Storms are very strong winds.                                       |
|    | 2. | A breeze is cool and pleasing. They do not cause any damage to life and property. | A storm can uproot the trees and cause damage to life and property. |

5. The cloudy nights are warmer because the clouds act like a blanket and do not allow the heat of the earth to escape.

## HOT QUESTIONS

- D. 1. Sumit observed that noon is the hottest part of the day because at noon the sun is overhead and its rays fall straight on the land. This makes the noon the hottest part of the day.
2. When Garima poured some cold drink in a glass, the outer surface of the glass became cool. The water vapour present in the air came in contact of this cold surface and changed into tiny water droplets because of condensation, the process by which water vapour are changed into liquid water.

**Let us Try – Do it yourself.**

## ACTIVITY TIME–IV

A. Identify the given constellations :

1. Scorpius      2. Ursa Major      3. Orion      4. Leo

B. Do it yourself.

C. Do it yourself.

D. Do it yourself.