Social Science - 3

1 Living and Non-living Things Exercise

• Fill in the blanks:

Ans:

- Living beings need air to breathe.
- Living things reproduce by giving birth to babies.
- Living things move from place to place in search of food and water.
- Fish breathe through their gills.
- Living things grow from baby to adult.

Match the following:

Ans:

- Seeds (e) Plant
- Insects (c) Spiracles
 - Puppy (d) Dog
- BirdsFood(b) EggsEnergy
- Complete the sentences:

Ans:

- Human beings breathe through their *lungs*. Fish breathe through *gills*. Insects have *spiracles* through which they breathe. Plants have *pores* that help in the exchange of gases.
- Encircle (O) the living things and cross out (x) the non-living things:

Ans:

- Puppy (O)
- Tree (O)
- Mobile (x)
- Baby (O)
- Bag (**x**)
- Book (x)
- Ball (\mathbf{x})
- Bug (O)
- Aeroplane (x)

• Answer the following questions:

• What are living things?

Ans:

- Living things are those which need air to breathe. Humans and some animals have lungs to help them breathe. Others like fish have gills and insects have spiracles. Plants also have pores underside their leaves through which they breathe.
- Living things need food to give them energy. Plants make their own food. They are called producers.
- Living things grow. A baby grows into a man or a woman. A sapling grows into a big plant or a tree.
- Living things react to changes in their surroundings. The change that brings about a reaction is called Stimuli. We feel cold, heat, etc. Touch-me-not plant droops to one side on being touched.
- Human beings and some other animals give birth to babies. They are called mammals. Animals like birds, lizards, turtles and snakes reproduce by laying eggs which hatch and young ones come out. Plants reproduce when their seeds are sown in the soil.
- Living things like humans and animals move from one place to another in search of food, water, shelter and mates. Plants do not move, but they show movement like Sunflower.
- What are non-living things?

Ans: The characteristics of non-living things are as follows:

- They do not breathe in air.
- They do not eat food.
- They do not grow in size.
- They do not feel.
- They do not reproduce.
- They show no movement at all.
- They move only when they are pushed or pulled by some external force.
- How do living things reproduce?

Ans: Living things reproduce as follows:

- Human beings and some other animals give birth to babies. They are called mammals.
- Animals like birds, lizards, turtles and snakes reproduce by laying eggs which hatch and young ones come out.
- Plants reproduce when their seeds are sown in the soil.
- What is the difference between living and non-living things?

Ans: The difference between living and non-living things is as follows:

Living things:

- They breathe in air.
- They eat food.
- They move on their own.
- They grow in size. They grow from babies to adults or from a seed to a whole new plant.
- They feel.
- They reproduce and give birth to babies.

Non-living things:

- They do not breathe in air.
- They do not eat food.
- They do not grow in size.
- They do not feel.
- They do not reproduce or give birth to babies.
- They do not move at all.
- They move when they are pushed/pulled by external force.

Work it out:

• Which of the following are speaking the truth? Tick ()the correct one: Ans:

• Lion - I am a living thing. ()

• Chair - I am a living thing.

• Book - I am a living thing.

• Sunflower - I move from place to place.

• Bag - I am a non-living thing. ()

Parrot - I am a living thing. ()

Thinkig Cap

• An aeroplane flies in the air. Is it a living or a non-living thing?

Ans: An aeroplane is a non-living thing.

Create Something New

• Ans: Do it yourself.

• Ans: Do it yourself.

Value Tip

• Bunny and his friends were throwing stones at a bird's nest on a tree. They said it would not hurt the bird. What would you do if you were Bunny's friends?

Ans:

- Throw stones at the bird's nest.
- Stop him from throwing stones at the bird's nest. ()

Find out

• Ans: Do it yourself.

2 The Human Body

Exercise

• Answer the following questions:

Ans:

• What is an organ system?

Ans: Every part of our body is made of cells. Cells are building blocks. Similar cells group together to form tissues. A group of tissues form organs. Different organs perform a specific task to carry out life process. When different organs work together to perform a process, it forms Organ System. Every organ system has different organs that help organ system to carry out its function.

What forms an organism?

Ans: Cells are building blocks. Many cells join together to form a tissue. May tissues form an organ. Different organs together form Organ System. All organ systems together form an organism.

• What are external organs? Give examples.

Ans: External organs are hands, legs, ears, nose, etc. are on outer surface of our body. They are easily visible.

• What are internal organs? Give examples.

Ans: Internal organs are brain, heart, stomach, large intestine, small intestine, liver, lungs and esophagus. They are inside our body. They are not visible.

• Where is the brain located?

Ans: Brain is located inside the head and is protected by the skull from any external injury.

• What is digestion?

Ans: Process of digestion of food is as follows:

- When we eat food, teeth start breaking it into smaller pieces which is called mechanical digestion. Saliva in mouth mixes with food to make it soft and easy to swallow.
- Food then enters food pipe which pushes it down to stomach.
- In stomach, acid and other gastric juices are released which digest food. Liver and Pancreas also secrete juices and help in digestion. Food is then called Bolus.
- Bolus is passed onto small intestine and further digestion takes place. Useful nutrients are absorbed by body.
- Undigested food is passed onto large intestine.
 Water is absorbed from food. Food then passes out of body by Anus.

• Tick () the correct option:

Ans:

- How many sense organs do we have?
 - (d) Five ()
- What are the basic building blocks of our body?
 - (c) Cells ()
- What pumps blood to every part of the body.
 - (b) Heart ()
- How many kidneys are there in our body?
 - (a) Two ()

Fill in the blanks:

Ans:

- The human body is a wonderful machine.
- The human body is made up of millions of cells.
- Many cells join together to make a tissue.
- Brain is the master organ of our body.
- Liver is the largest organ in our body.

• Write true or false:

Ans:

Many tissues form an organ.
The nose is an internal organ.
The stomach is a muscular organ.
Urine is a waste product of our body.
Kidneys are pear-shaped.

• Write the function of the following organs:

Ans:

Stomach Stomach is an important organ digestive system. It lies on left side in It is a large, broad and body cavity. slightly curved bag with thick muscular wall. Food we eat reaches stomach through food-pipe. Inner surface stomach crushes food into tiny particles. Here, food is mixed up with enzymes secreted by different glands. Glands are small muscular bags that secrete enzymes and help food to be digested.

• Liver : Liver is largest organ in our body. It is reddish-brown and is located on the right sight of stomach. It filters and detoxifies blood that comes from the digestive tract.

• Kidneys : Kidneys are important part of excretory systems. They are responsible for removing waste products like excess salts, water and urea in the form of urine.

• Brain : Brain is master organ of our body. It helps

to think and receive messages from all over body with the help of nerves. It also commands organs of body to react in a suitable way. Brain is also centre of memory.

• Heart is an important organ of human

body. It is located on left side of chest cavity. It has four chambers. The heart works all the time. It pumps blood to every part of body. Heart beats 72 times

in a minute.

Work it out!

• Identify the organs and write their names:

Ans:

1st Picture : Heart
2nd Picture : Brain
3rd Picture : Liver
4th Picture : Kidneys

Thinking Cap

• Why is brain called 'the master organ' of body?

Ans: Brain is master organ of our body. It helps to think and receive messages from all over body with the help of nerves. It also commands organs of body to react in a suitable way. Brain is also centre of memory.

Create Something New:

• Ans: Do it yourself.

Value Tip

• What should you do to keep your body fit and healthy?

Ans: We should adopt healthy food habits. We should always take a balanced diet. We should take healthy food. We should also exercise regularly in order to keep our body fit and healthy.

Find out

• Are bones internal or external body-parts? What are their functions?

Ans: Bones are internal body-parts. Their functions are:

- They give shape to our body.
- They give support to our body to have an upright posture.

- They give protection to inner organs like Heart, Lungs, Brain and Stomach.
- Muscles attached to bones help in various movements of our body.
- Red and white blood cells are produced by Bone Marrow present in our bones.

Worksheet

Ans:

- Brain
- Lungs
- Heart
- Liver
- Stomach
- Large intestine
- Small intestine

3 The Respiratory System

Exercise

Answer the following questions:

What is the main function of the respiratory system?

Ans: The main function of respiratory system is to breathe. It is Respiration takes place as follows:

Nose We breathe in and breathe out through

Nose. Breathing in is called inhalation

and breathing is called exhalation.

Windpipe It is a passage through which air

passes from nose and enters lungs.

Lungs Lungs are a pair of spongy organs and

> are located inside chest cavity on each side. Lungs are protected by Ribcage. Lungs absorb oxygen from inhaled air and remove carbon dioxide as exhaled

air.

Diaphragm Diaphragm is a dome-shaped muscular

> organ located below lungs. It helps in inhalation exhalation while and breathing. When Diaphragm contracts, it moves downwards and air is inhaled. When it relaxes, it moves upwards and

air is exhaled.

• Where are the lungs located in our body?

Ans: Lungs are located inside chest cavity on each side.

What happens when the diaphragm contracts?

Ans: When Diaphragm contracts, it moves downwards and air is inhaled.

What happens when the diaphragm relaxes?

Ans: When Diaphragm relaxes, it moves upwards and air is exhaled.

What are the causes of air pollution?

Ans: There are both natural and man-made causes of air pollution. Volcanic eruptions, forest fires, etc. are natural causes of air pollution. They affect air quality and make it hazardous to breathe. Smoke released by industries and factories, burning coal, wood, petroleum, etc. are man-made causes of air pollution.

• Write any three effects of air pollution.

Ans: Three effects of air pollution are as follows:

- Air pollution causes diseases in lungs.
- Air pollution causes breathing problems, coughing, sneezing, headaches, etc.
- It destroys the ozone layer in atmosphere.

• Tick () the correct option:

Ans:

- Which gas do we breathe in?
 - (a) Oxygen ()
- Inhalation and Exhalation of air are called
 - (c) Respiration ()
- Which of these is a natural cause of air pollution?
 - (b) Volcanic eruption ()
- Where is the diaphragm located?
 - (a) below lungs ()

• Fill in the blanks:

Ans:

- Through the nose, we breathe in and breathe out.
- The process of breathing in is called inhalation.
- The process of breathing out is called **exhalation**.
- The lungs are protected by the Ribcage.
- Air pollution makes the air dirty and unfit to breathe.

• Write true or false:

Ans:

• We breathe faster when we run.

True

• The left lung is smaller than the right lung.

True

• The diaphragm is a cone-shaped organ.

False

• Lungs are a pair of spongy organs.

True

• Oxygen burns the food that we eat and gives us energy.

True

• Define the following:

Ans:

• Windpipe : It is a passage through which air passes

from nose and enters lungs.

• Inhalation : Breathing in air is called inhalation.

• Exhalation : Breathing out air is called exhalation.

• Air Pollution : Volcanic eruptions, forest fires, etc. are

natural causes of air pollution. Smoke released by industries and factories, burning coal, wood, petroleum, etc. are man-made causes of air pollution. Air pollution affects air quality and makes it hazardous to breathe. It causes diseases in lungs, breathing problems, coughing, sneezing, headaches, etc. It destroys ozone layer in atmosphere.

Work it out!

• Label the following picture and colour it:

Ans: Colour it yourself.

- Nose
- Windpipe
- Lungs

Thinking Cap

• Why is breathing essential for life?

Ans: Breathing is essential for life because in the absence of it, we cannot survive.

Create Something New:

• Ans: Do it yourself.

Value Tip

• Ans: Noted.

Find out

• Ans: Do it yourself.
Ans: Do it yourself.

Worksheet

Find out the names of the respiratory system in the word given below. Also, their names below:

Ans:

- DIAPHRAGM
- WINDPIPE
- NOSE
- LUNG

4 Birds

Exercise

- Answer the following questions:
 - How do birds fly?

Ans: The body of a bird and its feathers make flying possible. Birds have wings which are organs of flight. Shape of its body is streamlined which helps it to cut

through air easily while fling. They also have hollow bones which make their bodies lighter. A bird's tail helps it to change direction while flying.

What are talons?

Ans: Birds like Eagle and Kite have strong and sharp claws. Their claws are called Talons which help them to catch and hold their prey tightly.

Describe the feet of a wading bird?

Ans: Cranes and Herons have long, thin and slender feet with spread out toes which help them to wade in the water or walk easily on soft and loose sand or mud.

• Describe the beak of an eagle?

Ans: The beak of an eagle is strong, sharp and hooked.

• Describe the feet of a bird of prey?

Ans: Birds like Eagle and Kite have strong and sharp claws. Their claws are called Talons which help them to catch and hold their prey tightly.

• Fill in the blanks:

Ans:

- Birds have beaks instead of mouths.
- The feet of a bird are called claws.
- A woodpecker has chisel-shaped beak.
- Swallows have broad and short beaks.
- A parrot has a curved beak.

Write true or false:

Ans:

A vulture is a bird of prey.
 Tr
 ue

• A crane is a climbing bird. Fal

• Strong and sharp claws of eagles are called talons.

Tr

ue

• Swimming birds have webbed feet.

ue

• Birds have only flight feathers.

se

Match the following:

Ans:

Wading bird
Swimming bird
Climbing bird
Perching bird
(d) hereon
duck
(e) woodpecker
parrot

• Preying bird (a) eagle

• Complete the table by describing the bird's feet, claws and beaks in brief:

Ans:

Bird	Feet/Claws	Beak
Duck	Long, thin and slender with spread out toes	Hooked beak
Eagle	Strong and sharp claws	Strong, sharp and hooked beak
Woodpecker	Two toes pointing upward and two pointing downward - claws	Chisel-shaped beak
Parrot	Three front toes and one at the back	Curved beak
Swallow	?	Broad and short beak

Work it out!

• Find and circle the names of six birds in the grid given below:

Ans:

- HOOPOE
- WOODPECKER
- EAGLE
- PARROT
- DUCK

• HEN

Thinking Cap

• What do you mean by the sight of an eagle?

Ans: By the sight of an eagle, we mean we have a very good eye-sight.

Create Something New:

• Ans: Do it yourself.

• Unscramble the letters to form the names of the birds:

Ans:

Parrot	Owl
Eagle	Crow
Duck	Hen
Pigeon	Flamingo

• Look at the pictures of birds' claws shown below and identify the birds they belong to:

Ans: Do it yourself.

Value Tip

• Summer days are very hot. There are birds outside in your verandah. What would you do?

Ans:

- Shoo them all away.
- Place a bowl of water in the balcony for them to drink.
- Build there a nest.

Find out

• What would happen if birds had mouths like ours instead of beaks?

Ans: Birds have beaks instead of mouths. The beaks of birds vary according to the food they eat. If they have mouths like us, they would not be able to eat the desired food needed by their particular natural bodily requirements.

Worksheet

Ans: Do it yourself.

5 Insects

Exercise

- Answer the following questions:
 - Do insects have wings?

Ans: Yes, many insects have wings.

What are social insects?

Ans: Some insects live together in groups or colonies. They are known as social insects. Ants, honeybees, wasps and termites are social insects. They work together to find food.

• Name the stages in the life cycle of a butterfly.

Ans: A butterfly has 4 stages in its life. Butterfly lays small and round eggs. After 5 days, tiny worm-like creatures hatch from eggs. Worm-like creature is Larva or Caterpillar. It is hungry once it has hatched and feeds on leaves. Caterpillar grows fast and starts shedding its skin. It then grows new skin and is called Molting. Second stage is Chrysalis called Pupa. Caterpillar makes a Chrysalis. It is resting stage. Caterpillar starts to change inside. It now turns into a Butterfly. In the last stage, Pupa opens and an adult butterfly emerges from it. Female butterfly lays eggs and cycle continues.

Life cycle of a Butterfly

Adult butterfly \rightarrow Egg \rightarrow Caterpillar \rightarrow Chrysalis \rightarrow Adult emerges

• How is a silk moth useful?

Ans: A silk moth is reared on mulberry leaves. It makes silk with the help of its saliva. So, silk moth is useful as we get silk from it.

 Name the mosquitoes that cause malaria, dengue and chikungunya.

Ans: Female Anopheles mosquitoes cause malaria.

Male Aedes mosquitoes cause dengue and chikungunya.

• Tick () the correct option:

Ans:

- Which of these is an insect?
 - (b) Cockroach ()
- Where do insects live?
 - (c) Both ()
- What make a beehive?
 - (b) Honeybees ()
- Where do lice live?
 - (a) On our head()

• Fill in the blanks:

Ans:

- Antennae help insect to smell and feel.
- The life cycle of a butterfly has four stages.
- Honeybees give us honey and wax.
- Bees and wasps sting us to defend themselves.
- Do not allow dirty water to collect in small containers.

• Write true or false:

Ans:

•	Some insect are very useful.	True
•	Insects have six legs.	True
•	Mosquitoes cause diseases.	True
•	Keep your surroundings dirty.	False
•	Apply insect-repellent cream.	True

• Match the following:

Ans:

•	Ants, honeybees	(e)	Social insects
•	Silk moth	(d)	Mulberry leaves
•	Lice	(a)	Scalp
•	Bee sting	(b)	Baking soda
•	Wasp sting	(c)	Vinegar

Work it out!

• Label the life cycle of a butterfly given below:

Ans: Clock-wise life cycle of a butterfly is as follows:

- A butterfly lays eggs.
- The egg hatches into a caterpillar.

- Caterpillar sheds its skin and becomes a pupa.
- Pupa develops into a butterfly.
- Adult butterfly.

Thinking Cap

• A dragonfly is a useful insect. How is it useful?

Ans: A dragonfly plays an important role in both terrestrial and aquatic habitat. It is a predator as both nymphs and adults, feeding on a variety of prey including nuisance species such as mosquitoes and biting flies. They are beneficial bugs because they eat pest-flying insects particularly midges and mosquitoes. They also eat butterflies, moths and smaller dragonflies. There is one Asian dragonfly that eats spiders from their webs.

Create Something New:

• Ans: Do it yourself.

Value Tip

• Ans: Noted.

Find out

• Honeybees give us honey. What is the importance of honey in our life? Ans: Honey is used with food items and it is also used as a medicine. So, honey is very useful and is important in our life.

Worksheet

Label the body parts of the insect given below:

Ans:

- Antenna
- Thorax
- Wings
- Abdomen
- Legs
- Head

Identify the insects and write one feature of the following insects:

Ans: Do it yourself.

6 Plants in Our Surroundings

Exercise

• Answer the following questions:

• What are the two important parts of a plant?

Ans: The two important parts of a plant are:

• Root : Roots grows below the soil.

• Shoot : Shoot emerges from the soil. It has

stem, flowers, fruits and leaves.

• What does the shoot system consist of?

Ans: The shoot system consists of:

• Stem : Stem is thick and strong. Stems are called trunks. Stems of smaller plants like Rose and Hibisous are woody thin and strong Stems

Hibiscus are woody, thin and strong. Stems of Climbers and Creepers are weak and cannot grow straight. They need support to

grow straight.

• Stem helps to carry food and water from leaves to different parts of a plant. It helps to keep plant upright. Some plants like Sugarcane store food. Plants like potato, ginger and onion are actually modified stems that grow underground to store food. We eat

them as vegetables.

Leaf is green, flat part of plant. They are many in number. Flat, broad part is called Leaf Blade or Lamina. A thick line that runs across the middle of leaf is called Mid-Rib. Small stalk that attaches leaf to a branch is called Petiole. Many other lines emerge from mid-Rib called Veins. Edge of leaf is called Margin and tip is called Apex.

- Main function of leaf is to prepare food for plant. Leaf is called the 'Kitchen of Plant'.
- Leaf has tiny pores on its underside which exchange of gases takes place. So, leaf helps in respiration. Leaf helps to release extra water. Leaves of plants like cabbage, lettuce and spinach are eaten as vegetables.
- Flower : It is most beautiful part of plant. It comes in different colours. Flowers change into fruits.

- Fruits and Seeds : Fruits are juicy, fleshy part of plant. They bear seeds inside them. Seeds when sown in soil under grow into new plants. A mango has one seed. An apple has a few seeds. A papaya has many seeds.
- What are the functions of the root?

Ans: The functions of the root are:

- Root fixes the plant in soil and prevents it from being carried away by strong wins or water.
- Root absorbs minerals and other nutrients from soil. It also absorbs water for the plant from soil.
- Some roots store food like carrots, radishes and beetroots. We eat them as vegetables.
- Name one fruit containing (a) one seed (b) a few seeds and (c) many seeds.

Ans:

• One fruit with one seed : Mango

One fruit with a few seeds : AppleOne fruit with many seeds : Papaya

• Fill up the blanks:

Ans:

- The two types of roots are Taproot and Fibrous Root.
- The Taproot has a main root.
- The **Shoot** grows above the soil.
- Root holds the plant firmly into the soil.
- The stem keeps the plant upright.

• Write true or false:

Ans:

• Leaves make food for the plant.

Tr

• The stem carries food and water to the different

parts of a plant.

ue

• We eat the stems of plants like carrots and radish.

ue

• The process by which green plants make their own

food is called photosynthesis.

Tr

ue

• The flower changes into a fruit.

ue

• Match the following:

Ans:

• Flower (e) changes into a fruit

• Seed (c) grows into a new plant

• Fruit (d) bears seeds in them

Root (b) below the ground

• Shoot (a) above the ground

Work it out!

• How many seeds do these fruits have? Write 'one', 'a few' or 'many' against each fruit:

Ans:

• Pear - A few

• Bananas - One

• Mango - One

• Leechi - One

• Papaya - Many

• Watermelon - Many

• Apple - A few

• Strawberry - Many

Thinking Cap

• What if plants have no seeds? How do you think they reproduce?

Ans: If plants have no seeds, some plants would not reproduce. However, there are some other plants which grow by planting their stems like Rose.

Create Something New:

 Stop him from plucking all the leaves. () Pluck all the leaves with him.
 Find Out: Pluck all the leaves from a plant and observe what happens to the plant after three days. Write a report and read it out in the class. Ans: Do it yourself.
Worksheet Label the different parts of the plant given below: Ans:
• Flowers
• Buds
• Branch
• Root
• Stem
• Fruits
• Leaves
Test Paper - I
Exercise
• Tick () the correct option: Ans:
 The only organism that is both living and non-living.
(c) Virus ()
• Which of these is not a sense organ?
(a) hand ()
Which of them have chisel-shaped beaks?
(c) Woodpecker ()
• Insects havelegs. (c) six ()
 Which of these have fibrous root? 21

Do it yourself.

• Mohit plucked all the leaves of a plant. What would you do?

• Ans:

Value Tip:

(c) Both a and b ()

• Fill in the blanks:

Ans:

- Plants make their own food.
- The brain is the master organ of our body.
- The lungs absorb oxygen from the inhaled air.
- Swimming birds have webbed feet.
- Honeybees give us honey and wax.
- The roots fix the plant in the soil.

• Write 'true' or 'false':

Ans:

Non-living things can move.
 Tr

ue

• The stomach connects the food pipe to the Tr

small intestine.

• Air pollution causes the disease of lungs.

ue

A woodpecker makes a hole in the tree.
 Tr

ue

Mosquitoes live in our head and suck blood.
 Fal se

• Leaves prepare food for the plant.

ue

• Define the following:

Ans:

Living things : Living things breathe in air. They eat food. They move on their own.
 They grow in size. They grow from babies to adults or from a seed to a

whole new plant. They feel. They

reproduce and give birth to babies.

Organ system : Every part of our body is made of cells. Cells are building blocks.

cells. Cells are building blocks. Similar cells group together to form tissues. A group of tissues form organs. Different organs perform a specific task to carry out life process. When different organs work together to perform a process, it forms Organ System. Every organ system has different organs that help organ system to carry out its

function.

• Inhalation : Breathing in air is called inhalation.

• Perching : Perching birds like sparrow and

crow sit on the branches of trees. They are called perching birds. These birds have three toes in the front and one at the back. They use their claws to climb and hold on to

the branches.

• Social insects : Some insects live together in

groups or colonies. They are known as social insects. Ants, honeybees, wasps and termites are social insects. They work together to find

food.

• Photosynthesis : Plants use sunlight to prepare their

own food by the process of photosynthesis. It occurs in green leaves in the presence of carbon

dioxide, water and sunlight.

• Match the following:

Ans:

• Seed (e) Plant

Heart (b) Birds

Ozone layer (a) Atmosphere

Feathers (f) Chest

Caterpillar

(c) Butterfly

Stomata

(d) Leaf

• Answer the following:

Ans:

• Differentiate between living and non-living things.

Ans: The difference between living and non-living things is as follows:

Living things:

- They breathe in air.
- They eat food.
- They move on their own.
- They grow in size. They grow from babies to adults or from a seed to a whole new plant.
- They feel.
- They reproduce and give birth to babies.

Non-living things:

- They do not breathe in air.
- They do not eat food.
- They do not grow in size.
- They do not feel.
- They do not reproduce or give birth to babies.
- They do not move at all.
- They move when they are pushed/pulled by external force.
- Name the internal organs of our body.

Ans: Internal organs of our body are as follows:

- Brain
- Heart
- Stomach
- Large intestine
- Small intestine
- Liver
- Lungs
- Esophagus

They are inside our body. They are not visible.

• What are the various causes of air pollution?

Ans: There are both natural and man-made causes of air pollution. Volcanic eruptions, forest fires, etc. are natural causes of air pollution. They affect air quality and make it hazardous to breathe. Smoke released by industries and factories, burning coal, wood, petroleum, etc. are man-made causes of air pollution.

Why do birds build nests?

Ans: Birds build nests to live in. They use materials like leaves, twigs, straw, pieces of clothes, paper and pebbles to build their nests. Birds lay eggs in their nests. When eggs hatch, they raise their young ones until they are old enough to fly away.

• Write some ways to keep insects away.

Ans: Some ways to keep insects away are:

- Keep the surroundings clean.
- Do not allow stagnant water to collect in small containers.
- Keep your body covered with clothes to protect yourself from mosquitoes and other insect bites.
- Use a mosquito net to prevent mosquito bites.
- Apply insect-repellent cream.
- What is the importance of plants?

Ans: Plants are very important for the survival of all living beings. Green plants are producers as produce their own food. Plants from forests are called green lungs because they give out oxygen essential for living beings. Plants absorb CO₂ gas from air as they use it to carry out the process of photosynthesis. Plants are shelters of many birds and animals. Plants hold the soil together preventing soil erosion and landslides. Plants give us fruits, vegetables, food, wood, medicine, oxygen and so many other valuable things.

• Label the picture given below:

Ans: Clock-wise items are as follows:

- Apex
- Margin

- Lamina
- Petiole
- Veins
- Mid-rib

7 Food Obtained From Plants Exercise

- Answer the following questions:
 - Name the different types of plants.

Ans: Different types of plants are as follows:

• Trees : Trees are tall, strong and big plants with

woody trunks. Trunk is the main stem of the plant from which branches grow out. Trees have a long lifespan. Examples:

Pine, Apple, Neem, Banyan, etc.

• Shrubs : Shrubs are small bushy plants with

brown, hard, woody stem. Branches are closer to ground. They live for some years. Examples: Coffee, rose,

sunflower, lemon, hibiscus.

• Herbs : Herbs are very small plants with soft,

thin stems. They are weak plants. They have a short lifespan. They generally survive for a season. Examples: Grass,

spinach, rice, tomato.

• Creepers : Creepers are plants that cannot stand

upright in soil. They have soft, weak and long stems. They creep on ground. Examples: Watermelon, Pumpkin,

Jasmine, Strawberry.

• Climbers : Climbers have long, thin and weak

stems. They need support to climb up

26

and grow. They cannot stand on their own. Examples: Cucumber, grapevine, beans, money-plant.

• What is a trunk?

Ans: Thick, hard, strong and woody stem is called trunk. The trunk divides into many branches

• What are green leafy vegetables?

Ans: Green leafy vegetables are spinach, lettuce and cabbage.

Name three stems that we eat?

Ans: Three stems that we eat are:

- Potato
- Ginger
- Sugarcane
- What are pulses? Give examples.

Ans: The seeds of bean, gram and chickpeas are called pulses.

• From which parts of plants do we get spices?

Ans: We get spices from the bark of cinnamon tree, fruits of cardamom plant, dried flower buds of clove plant, fruit of the pepper plant and stem of turmeric plant.

• Tick () the correct option:

Ans:

- Coriander, spinach and mint are
 - (b) Herbs (
- Which of these have weak stems?
 - (d) Both b and c ()
- We eat the roots of this plant.
 - (a) Radish (
- We get medicines from:
 - (d) Both b and c ()

• Fill in the blanks:

Ans:

- Trees live for many years.
- Shrubs appear like bushes.
- Fruits protect us from diseases.
- Cocoa is used for making chocolates.
- Sugar and jiggery are obtained from *Sugarcane*.

• Write true or false:

Ans:

Trees are big and strong plants.
True
Trees are smaller than shrubs.
False
Herbs are smaller than shrubs.
True

• We get oil from the fruits of coconuts. True

• We should grow more and more trees. True

• Give two examples of each of the following:

Ans:

Trees : Banyan and MangoHerbs : Rose and Hibiscus

• Shrubs : Coriander and Spinach

Climbers : Money plant and GrapevineCreepers : Watermelon and Strawberry

Thinking Cap

• What are beverages? Give examples.

Ans: Tea, coffee and cocoa are beverages that we obtain from plants.

Work it out!

• Complete the table given below:

Ans:

Plants	Parts used	Medicinal uses
Tulsi	Leaves	Curing cough and
		cold.
Neem	Leaves and stems	Brushing teeth and
Heena	Leaves	Hair dying and
		tattooing, dying finger-
		nails as well as fabrics
		like silk, wool and
		leather.

Amla	Fruits	
Sandalwood	Stems	Making fragrant oil and used in religious worshipping.

Create Something New:

• Ans: Do it yourself.

Value Tip

• Ans: Noted.

Find out

• Ans: Do it yourself.

Worksheet

Match the following:

Ans:

 Cauliflower 	(e)	Flower
 Carrot 	(d)	Root
 Spice seeds 	(a)	Spice
 Turnip 	(f)	Seed
 Sugarcane 	(c)	Stem
 Cabbage 	(b)	Leaf

8 Solids, Liquids and Gases

Exercise

• Answer the following questions:

• What are the three states of mater?

Ans: The three states of mater are:

- Solid Particles are packed very close to one another.
 - Solids have definite shape and a definite volume.
 - They do not flow.
 - They cannot be compressed.
 - Examples: Ice cubes, building, bed, book.
- Liquid Particles are not packed very close to one another.
 - Liquids do not have definite shape, but have a definite volume.

- They flow.
- They cannot be compressed easily.
- Examples: Milk, juice, soup, water.
- Gas
- Particles are packed very far away from one another.
- Gas do not have neither definite shape nor volume.
- They flow.
- They can be compressed easily.
- Examples: Oxygen, Carbon Dioxide.
- Write the properties of solids with two examples.

Ans: The properties of solid are as follows:

- Particles are packed very close to one another.
- Solids have definite shape and a definite volume.
- They do not flow.
- They cannot be compressed.

Examples: Ice cubes, Book.

• Write the properties of liquids with two examples.

Ans: The properties of liquid are as follows:

- Particles are not packed very close to one another.
- Liquids do not have definite shape, but have a definite volume.
- They flow.
- They cannot be compressed easily.

Examples: Milk, Water.

• Write the properties of gas with two examples.

Ans: The properties of gas

- Particles are packed very far away from one another.
- Gases do not have a definite shape or a definite volume.
- They flow.
- They can be compressed easily.

Examples: Oxygen, Carbon Dioxide.

• How will you make a solution of sugar and water?

Ans: We will make a solution of sugar and water as follows:

- Take a spoonful of sugar.
- Add a glass of water.
- Stir the mixture properly.
- Sugar crystals disappear after some time.
- Sugar is soluble in water.
- Sugar is solute.
- Water is solvent.
- Mixture is solution.

• Fill up the blanks:

Ans:

- Solids have definite volume and shape.
- Liquids have definite volume but no shape.
- Gases do not have definite volume or shape.
- Milk, juice and water are the examples of Liquid.
- A Solution is a mixture of solute and solvent.

• Write true or false:

Ans:

•	Solids can be compressed easily.	False
	Gases can be compressed easily.	True
•	Liquids flow.	True
•	Insoluble substances do not dissolve in water.	True
•	Water is called a universal solvent.	True

• Match the following:

Ans:

•	Salt + Water	(e)	Solution
•	Milk	(d)	Liquid
•	Oxygen	(c)	Gas
•	Wood	(b)	Solid
•	Sugar	(a)	Solute

• Group the following items as solid, liquid or gas:

Milk	pen	wood	oxygen	bag	water
Ans:	vapour	table	juice	mouse	
	SO	LID	LIOHD		GAS

Pen	Milk	
Wood		
		Oxygen
Bag		
	Water	
		Vapour
Table	Juice	
Mouse		

Work it out:

• What do the following pictures say? What properties do the objects have with these kinds of particle arrangement?

Ans:

1st Picture - Solid
 2nd Picture - Gas
 3rd Picture - Liquid

Make a table like the one shown below. Perform the activity with each
of the objects mentioned in the table and write your observation:
 Ans:

Name of the object	Sinks	Floats
Iron nail		
Feather		
Pebble		
Plastic bottle		
Spoon		
Cotton bail		
Steel saucer		

Make a table like the one shown below. Perform the activity with each
of the objects mentioned in the table and write your observation:
 Ans:

Name of the substance	Soluble	Insoluble	
Sand			
Chalk dust			
Milk powder			

Sugar	
Salt	
Rice	
Oil	
Milk	

• Complete the table given below:

Ans:

Plants	Parts used	Medicinal uses	
Tulsi	Leaves	Curing cough and	
		cold.	
Neem	Leaves and stems	Brushing teeth and	
Heena	Leaves	Hair dying and	
		tattooing, dying finger-	
		nails as well as fabrics	
		like silk, wool and	
		leather.	
Amla	Fruits		
Sandalwood	Stems	Making fragrant oil	
		and used in religious	
		worshipping.	

Thinking Cap

• Do solids directly change into gas without changing to liquid on heating? If yes, give an example.

Ans: No, solids do not directly change into gas without changing to liquid on heating. Metals like Iron, Gold, etc. change into liquid on heating first.

Create Something New:

Ans: Do it yourself.

Value Tip

To get water from ice, put it in the sun instead of heating it on fire. We should use sun's energy whenever and wherever possible. This saves fuel and creates no pollution. What value is acquired from the above activity?

Ans: Do it yourself.

Wise use of ice.

Wise use of water.

Wise use of sun's energy.()

Find out

• We use ice for many purposes. Find out and write any two purposes of ice.

Ans:

- Use as dessert
- For cooling water
- Sportspersons use for relief

Worksheet

Look at the pictures given below. Write S for solid, L for liquid and G for gas:

Ans:

•	1 st Picture	:	Water	-	L
•	2 nd Picture	:	Eraser	-	S
•	3 rd Picture	:	Tea	-	L
•	4 th Picture	:	Air inside a balloon	-	G
•	5 th Picture	:	Pen	-	S
•	6 th Picture	:	Juice	-	L

9 Properties of Water

Exercise

- Answer the following questions:
 - What is melting?

Ans: Melting is a process by which a solid changes into liquid on heating. For example, solid wax of a burning candle changes to molten form.

Define evaporation.

Ans: Evaporation is a process by which a liquid converts to gaseous form on heating. For example, water disappears from a china dish when placed for a longer time in sun.

What do you mean by condensation?

Ans: Condensation is a process by which gases change into liquids on cooling. For example: Changing of water vapours into water when a lid is placed on the vessel while it is being heated.

• What is freezing?

Ans: Freezing is a process by which liquids change into solids on cooling. For example, water when placed in the freezer turns to ice after sometime.

How can you say that water occupies space?

Ans: Water takes the shape of the container in which it is kept. Thus, water occupies space.

• Why is water called a universal solvent?

Ans: Water is called a universal solvent because many materials can be dissolved in water.

• Fill in the blanks:

Ans:

- We cannot live without water.
- Water exists in three different forms.
- Ice changes into liquid on heating.
- Water changes into ice on freezing.
- Water vapour changes into water on cooling.

• Write true or false:

Ans:

- Water is very important to all living beings.
- Water is a universal solvent.
- Water changes into water vapour on cooling.
- The object whose density is higher than water, sink in it.
- The object whose density is lower than water, float on it.

• Complete the table given below. Tick () if it is the property of water and cross (x) if it is not:

Ans:

Transparent	Colourless	Colourful	Tasteless	Occupies
				space

W			
A		X	
Т			
E			
R			

• Name the following:

Ans:

Solid form of water : IceLiquid form of water : Milk

• Gaseous form of water : Water vapour

Work it out!

• Look at the picture carefully and answer the following questions:

Ans:

• The process by which X changes into Y. : Melting

The process by which Y changes into Z. : Evaporation
The process by which Z changes into Y. : Condensation

Thinking Cap

• Is sea water a solution? If yes, name the solute and the solvent.

Ans: Yes, sea water is a solution. Solute is salt. Solvent is water.

Create Something New:

• Ans: Do it yourself.

Value Tip

• Some water is left in your water bottle. What would you do?

Ans:

- Throw it on the road.
- Pour it on to a small plant. ()

Find out

• Take water in a pan and an ice cube in another pan. Heat both of them.

Which will change into water vapour and disappear first? Find out the reason.

Ans: Water in a pan will change into water vapour and disappear first. It is because the water in pan is already a liquid and on heating it will directly change into water vapour.

On the other hand, ice cube has to melt and become a liquid first and only then it will change into water vapour. So, in this case, there is one more step involved.

Worksheet

Different sources of natural water are shown below. Identify them and write their names:

Ans:

- RIVER
- LAKE
- STREAM
- SEA
- RAIN
- OCEAN

10 Water As A Resource

Exercise

• Answer the following questions:

• Explain the process of water cycle?

Ans: When water in rivers, lakes and ponds is heated due to sunlight, it changes into vapour and rises up into sky. High above where it is colder, vapour changes to water droplets. These water droplets join together to form clouds. When clouds become too heavy with droplets, they fall down as rain. Rainwater again fills up rivers, lakes and ponds and cycle continues. This is called a water cycle.

• What are impurities?

Ans: The substances that make water impure are called impurities. There are two types of impurities as under:

• Soluble : Soluble Impurities are those that

dissolve in water. Example -

salt, mud, etc.

• Insoluble : Insoluble Impurities are those

that do not dissolve in water.

Example – sand, oil, pieces of rocks, etc.

• What are soluble impurities?

Ans: Soluble Impurities are those that dissolve in water. Example – salt, mud, etc.

• What are insoluble impurities?

Ans: Insoluble Impurities are those that do not dissolve in water. Example – sand, oil, pieces of rocks, etc.

• What do you mean by water purification?

Ans: Water purification is the process of removing harmful substances and germs to make the water fit for drinking.

• What is rain harvesting?

Ans: Rain Harvesting is a method of collection rainwater. Rainwater is collected in tanks or natural water reserves for future use. The collected water can be used for farming, gardening, drinking water for animals and domestic use. Rainwater can also be collected from rooftops and stored in water tanks. This is called Rooftop Rainwater Harvesting.

• Fill in the blanks:

Ans:

- Even our body is made up of water.
- 70% of the earth is covered with water.
- Impure water is not fit to be consumed.
- Water that is fit for drinking is called clean water.
- Boiling kills the germs present in water.

• Write true or false:

Ans:

• There are many sources of water in nature.

ue

We can drink impure water.
 Fal

se

drink We must pure water. Tr

Drinking impure water may cause many

water-borne diseases.

Tr

ue

Chlorine kills the germs present in water.

Tr

ue

What happens during the following processes? Also, give an example for each process:

Ans:

• Evaporation Liquid changes into a gas on

> heating. When water (liquid) is heated, it changes into water

vapour (gas).

Condensation A gas changes into a liquid on

> cooling. When water vapour (gas) is cooled down, it changes into

water (liquid).

A liquid changes into a solid. Freezing

> When water (liquid) is kept in a freezer, it changes into ice (solid).

Melting A solid changes into a liquid on

> heating. When ice (solid) is kept out of refrigerator, it melts into

water (liquid).

Explain the following methods of purification:

Ans:

• Filtration Filtration removes small particles of

stones, plants or dirt from water. White cotton cloth, a filter paper and charcoal pieces are used for filtering water. We can

make water safe to drink by filtration.

Chlorination Chlorine tables are mixed in drinking

> water to purify it. Chlorine kills the germs present in water and makes it pure and

39

safe for drinking. This process of purifying drinking water using chlorine tablets is called Chlorination.

• Boiling : Boiling of water kills the germs in it and makes it safe for drinking.

Work it out!

• Label the diagram of the water cycle given below:

Ans: Clockwise water cycle is as follows:

- Water of water bodies
- Evaporation
- Condensation
- Rain

Thinking Cap

• What do you mean by decantation?

Decantation method is used for removing insoluble impurities. Impure water is left without disturbance. After some time, impurities settle at bottom. Clear water is on top. Thereafter, clear liquid is poured into another container without disturbing settled impurities at bottom.

Create Something New:

• Ans: Do it yourself.

Value Tip

• How can you conserve water? Tick () or cross (x):

Ans:

- Turn off a running tap while brushing your teeth. ()
- For taking bath, use a mug and a bucket. ()
- Throw away the water left in your water bottle.

)

- Don't make the source of water dirty. ()
- Get the leaky taps repaired. ()

Find out

• Find out how water is made safe for drinking.

Ans: Water is made safe for drinking by following methods:

- Filtration
- Chlorination
- Boiling

- Decantation
- Sedimentation

Worksheet

Observe the pictures given below and write what is happening in each of the pictures:

Ans:

• 1st Picture : Water boiling process is shown in the

picture. Boiling of water kills the germs in

it and makes it safe for drinking.

• 2nd Picture : Rainwater harvesting method is shown in

the picture. Rainwater is collected from rooftop and is stored in water tanks. This is called Rooftop Rainwater Harvesting.

• 3rd Picture : Melting process is shown in the picture.

Ice cubes change into liquid on heating.

• 4th Picture : Water purifier like (Ken RO) is shown in

the picture.

11 The Sun – The Ultimate Source of Energy

Exercise

Answer the following questions:

• Why are plants called producers?

Ans: Plants prepare their own food. Therefore, plants are called producers.

• Write any five uses of solar energy.

Ans: Five uses of solar energy are:

- Solar Energy is needed by plants, animals and human beings.
- Sun's heat dries wet clothes.
- A solar cooker uses sun's heat to cook food.
- Solar Geyser uses solar energy to heat water.
- Solar energy is used for producing electricity
- How did the sun's heat and light cause seasons?

Ans: Sun's heat and light cause seasons. Earth moves around the sun During this movement, the different parts of earth are heated at different times of year. This causes change of seasons.

• Name the four main seasons of our country.

Ans: Four main seasons of our country are:

• Summer Season - Hottest time of the

year.

• Monsoon Season - It rains a lot in

monsoon season.

• Autumn Season - It is very pleasant

season. It is neither

too hot nor cold

• Winter Season - It is the coldest time of

year.

• Mention any five ways to conserve energy.

Ans: Five ways to conserve energy are:

- Switch of fan and lights when being used.
- Turn off Radio and Television when not in use.
- Use LED bulbs instead of electric bulbs.
- Do not keep water geyser switched all the time.
- Do not leave refrigerator door open for a long time.

• Fill in the blanks:

Ans:

- The sun gives us heat and light.
- The energy we get from the sun is called solar energy.
- A Solar Panel has many solar cells.
- Summer season is the hottest time of the year.
- Use LED lambs instead of electric bulbs.

• Match the following:

Ans:

- Monsoon (e) rain
- Winter (b) coldest time of the year
- Sun (a) huge ball of hot gases
- Water (c) hydro energy
- Solar panels
 (d) solar energy

• Write true or false:

Ans:

• The sun is a star.

True

Plants do not need sunlight.
Soil is a renewable source of energy.
Coal is a non-renewable source of energy.
Autumn is neither too hot nor too cold.

• Define the following:

Ans:

• Photosynthesis : Plants use sunlight to prepare

their own food by the process of photosynthesis. It occurs in green leaves in the presence of carbon dioxide,

water and sunlight.

• Renewable sources of energy : Renewable sources of energy

are those sources of energy that last for a long period of time. Examples: Sunlight, wind, water, soil and forest.

• Non-renewable sources of energy: Non-renewable sources of

energy are those sources of energy that do not last for a long period of time. Examples: Coal, Fossil

Fuels, Petroleum, etc.

• Solar power : Solar power is the energy

that we get from sun as heat

and light.

Work it out!

• Identify the pictures given below and write their names:

Ans:

• 1st Picture : Sun - It gives us heat and

light.

• 2nd Picture : Solar Cooker - We use it to cook

food.

• 3rd Picture : Windmill - We use it to get wind

energy.

• 4th Picture : Solar Panel - We use it to get

electricity.

• 5th Picture : LED lamp - We use it for light.

Thinking Cap

• How is an LED bulb related to conservation of energy?

Ans: LED bulb costs less in the long run so it is a good source of conservation of energy.

Create Something New:

• Ans: Do it yourself.

Value Tip

• What would you do in winter?

Ans:

- Use a sweater to stay warm. ()
- Turn on the heater.
- What will you do to your clothes which you do not use them anymore?
 Ans: We will give away our clothes to someone in need of them.

Find out

• Energy obtained from water is called hydro energy. Find out how hydro energy is used.

Ans: Hydro energy is generated by power of flowing water. It is used to convert into electricity.

Worksheet

Observe the pictures given below. Write 'R' for renewable sources of energy and 'NR' for non-renewable sources of energy.

Ans:

1st Picture Petrol NR 2nd Picture NR Coal 3rd Picture Solar Energy -R • 4th Picture Wind Energy -R 5th Picture Kerosene Oil -NR • 6th Picture Water R

Health and Cleanliness

Exercise

• Answer the following questions:

• What do you understand by cleanliness?

Ans: Cleanliness is being clean, free from germs and dust. Keeping clean is one way of being fit and healthy. We should keep our body clean. We should also keep the area us clean. It is very important to follow clean and healthy habits. Cleanliness is next to godliness.

• What do you mean by good health?

Ans: Good health is a state when our body is fit, free from germs and diseases. For a good health, we should always follow some healthy and clean eating habits. We should also regularly exercise.

Mention three ways by which we can stay healthy.

Ans: Three ways by which we can stay healthy are:

- We should always wash our hands before eating our meals.
- We should eat fresh and vegetables.
- We should avoid eating junk food.
- Mention three table manners that we should always follow.

Ans: Three table manners that we should always follow are:

- We should not talk while eating.
- We should take only that quantity of food that we can eat. We should not waste food.
- We should place the things back in their respective places after use.
- Mention any three clean habits that we should always follow.

Ans: Three clean habits that we should always follow are:

- We should brush our teeth twice daily.
- We should bathe with clean water and good quality soap
- We should trim our nails and hair regularly.

• Fill in the blanks:

- Cleanliness means being clean, free of germs and dust.
- We should also keep the area around us clean.
- We should always throw waste in the dustbin.

- We should brush our teeth twice daily.
- We should clean our ears with ear-buds.

• Match the following:

Ans:

Nail-cutterToothbrush(e) nails(c) teeth

• Comb (d) hair

• Ear-buds (b) ears

• Towel (a) face

Work it out!

Activity-based questions:

Write how each of these things can help you stay clean:

Ans:

• 1st Picture : Nail-cutter - We should trim

our nails at regular interval.

• 2nd Picture : Towel - We should use

a clean towel to keep us dry.

• 3rd Picture : Brush - We should

brush twice

daily.

• 4th Picture : Comb - We should

properly comb

our hair

• 5th Picture : Shoe-polish - We should

polish our shoes

daily.

Write any two clean and healthy habits that you follow every day.

Ans: Two clean and healthy habits that I follow everyday are:

- I brush my teeth twice daily.
- I use mustard oil on my hair and comb them properly.

Solve the clues and find the hidden message:

EAT HEALTHY TO STAY HEALTHY

Write the message here: Eat Healthy To Stay Healthy.

Thinking Cap

• Why is a clean body a healthy body?

Ans: By clean body, we mean a body free from dirt, dust, germs and diseases. By clean body, we also mean that we have to be clean from inside as well as outside. Therefore, it is well said that a clean body is a healthy body.

Create Something New:

• Ans: Do it yourself.

Value Tip

• Ans: Noted.

Find out

• Ans: Do it yourself.

Worksheet

Match the following:

Ans:

1st Picture Handkerchief Sneezing (c) 2nd Picture Toothpaste **Brushing** (d) teeth 3rd Picture Hair oil (b) Oiling hair • 4th Picture Soap **Bathing** (a) • 5th Picture Comb (e) Combing hair

Test Paper - II

Exercise

Tick () the correct option:

- Cotton plant is a
 - (a) Shrub ()
- Which of these is solid?

- (b) Ice ()
- Which of these is soluble in water?
 - (b) Sugar ()
- Energy is obtained from water.
 - (a) Hydro Energy ()
- We should brush our teeth
 - (a) twice a day ()

• Fill in the blanks:

Ans:

- Plants with weak stems are called creepers and climbers.
- The particles in gas are loosely packed.
- Water changes into vapour on heating.
- Rainwater harvesting is a method of collecting rainwater.
- We get heat and light from the sun.
- Dirty hands contain germs.

• Write 'true' or 'false':

Ans:

•	We eat the leaves of cabbage plant.	True
•	Solids cannot be compressed.	True
•	Water is colourful.	False
•	Boiling kills the germs in it.	True
•	Winter is the coldest time of the year.	True
•	We should not talk while eating.	True

• Define the blanks:

Ans:

• Creepers : Creepers are plants that cannot stand upright in soil. They have soft, weak and long stems. They creep on ground. Examples: Watermelon, Pumpkin, Jasmine, Strawberry.

• Solvent : Any liquid that dissolves the solute is called the solvent. A mixture of solute

and solvent is called the solution. Water is a universal solvent as it dissolves almost everything.

Evaporation

Evaporation is a process by which a liquid converts to gaseous form on heating. For example, water disappears from a china dish when placed for a longer time in sun.

• Water cycle

When water in rivers, lakes and ponds is heated due to sunlight, it changes into vapour and rises up into sky. High above where it is colder, vapour changes to water droplets. These water droplets join together to form clouds. When clouds become too heavy with droplets, they fall down as rain. Rainwater again fills up rivers, lakes and ponds and cycle continues. This is called a water cycle.

Solar Energy

The energy that we get from sun is called solar energy. It is needed by plants, animals and human beings. Sun's heat dries wet clothes. A solar cooker uses sun's heat to cook food. Solar Geyser uses solar energy to heat water. Solar energy is used for producing electricity

Cleanliness

Cleanliness is being clean, free from germs and dust. Keeping clean is one way of being fit and healthy. We should keep our body clean. We should also keep the area us clean. It is very important to follow clean and healthy habits. Cleanliness is next to godliness.

• Match the following:

- Neem leaves
- Water
- Steam
- Filter
- Solar Panel

- (e) Medicine
- (d) Solvent
- (f) Gas
- (a) Water
- (b) Sun

Junk Food (c) Pizza

• Answer the following:

Ans:

• From where do we get spices?

Ans: We get spices from the bark of cinnamon tree, fruits of cardamom plant, dried flower buds of clove plant, fruit of the pepper plant and stem of turmeric plant.

• Show with an example that matter can change its form.

Ans:

• Explain the process of condensation.

Ans: Condensation is a process by which gases change into liquids on cooling. For example: Changing of water vapours into water when a lid is placed on the vessel while it is being heated.

What do you mean by chlorination?

Ans: Chlorine tables are mixed in drinking water to purify it. Chlorine kills the germs present in water and makes it pure and safe for drinking. This process of purifying drinking water using chlorine tablets is called Chlorination.

Write any three ways to conserve energy.

Ans: Three ways to conserve energy are:

- Switch of fan and lights when being used. Turn off Radio and Television when not in use.
- Use LED bulbs instead of electric bulbs.
- Do not keep water geyser switched all the time. Do not leave refrigerator door open for a long time.
- How do you keep yourself clean?

Ans: Cleanliness is being clean, free from germs and dust. Keeping clean is one way of being fit and healthy. I keep my body clean. Cleanliness is next to godliness.

I do the following three things:

• I brush my teeth twice daily.

- I bathe with clean water and a good quality soap
- I oil my hair daily and trim my nails and hair regularly.

• Label the diagram of the water cycle given below:

Ans: Clockwise water cycle is as follows:

- Water of water bodies
- Evaporation
- Condensation
- Rain

Assessing Each Other – 1

Get into a pair. One of you will look at the picture shown here and make three questions. The other partner will answer the questions. The first one will then assess the answers written by his / her peer.

Question 1 : What do you observe in the picture?

Answer : We see various food items: vegetables - cabbage,

tomato, carrots, spinach, peas, potatoes; fruits - apples, watermelon, banana, other items like milk,

curd, butter, like bread, etc.

Question 2 : What is being attempted to show?

Answer : Different meals for different times of the day are being

attempted to show.

Question 3: What is Food Pyramid?

Answer : A food pyramid shows the food items that are to be

eaten most are at the base. As the pyramid moves towards the apex, the food items given at the top are to

be eaten in lesser quantity.

Assessing Each Other – 2

Get into a pair. One of you will look at the picture shown here and make three questions. The other partner will answer the questions. The first one will then assess the answers written by his / her peer.

Question 1 : How many birds do you see in the picture?

Answer : In the picture, I see six birds: four smaller and two

bigger birds. Out of two ducks, one is splashing into the water and the other one has been alarmed on seeing the bigger birds.

Question 2 : What the birds are doing?

Answer : Little duck is enjoying her bath and bigger duck is

frightened to see the birds of prey. Parrot is also seems to be in fear. The birds of prey are about to pounce

upon the smaller birds.

Question 3: What else do you see?

Answer : There is beautiful river flower. There is a big tree.

Parrot is sitting on a branch. One bird of prey is sitting on a fatter branch of the tree. Another bird of prey is

flying and lowering down.