Science-4



The Green Plants

Exercise

A. Tick (3) the correct answer :

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

- B. Fill in the blanks :
 - 1. leaf, 2. midrib, 3. carrot, 4. stomata, 5. interdependence
- C. Name the following :
 - 1. chlorophyll, 2. forests, 3. plants and animakls, 4. midrib

D. Think the answer: Name (A) and (B) here: During photosynthesis, plants take in (A) carbondioxide and give out (B) oxygen.



E. Answer the following questions :

- 1. Do yourself.
- 2. Carbon dioxide from atmosphere, water from soil and sunlight from sun.
- 3. Keep a healthy potted plant in dark for three days so that food (starch) stored in it is used up. Clip the black paper on one of the leaves as shown in the picture.

Keep the set up in the sunlight for 6-8 hours. Boil the covered leaf in water and then in alcohol. Wash in cold water. Check for the presence of starch by dropping iodine solution on the leaf.







The part of the leaf exposed to sunlight changes its colour to bluish black. Covered part does not change the colour as no starch was produced.

- 4. Plants give out oxygen, which is needed by animals to breathe. Animals in return give out carbon dioxide, which is needed by the plants for photosynthesis. This interdependence of plants and animals in a food chain helps to maintain a balance between the number of plants and animals. Thus, if there is a sudden increase or decrease in the number of either plants or animals, the balance in nature will be disturbed.
- 5. A chain that shows a series of organisms where each member depends on the lower member in the series for food is called a food chain. Example Caterpillar→Frog→Snake→Owl→Flower

Do and Learn

Do yourself.





How Plants Survive

Exercise

- A. Tick (3) the correct answer : 1.(b), 2.(a), 3.(b)
- Fill in the blanks : **B**.
 - needle, 2. Teak, coconut 3. stem, 4, hydrilla, tape grass 1.
- C. Write 'True' or 'False' for the following statements :
 - 1. False, 2. False, 3. False, 4. False

D. Answer the following questions :

- Plants are very useful to us. Everyday we use things made from plants in 1. some form or the other.
 - We all depend on plants for food. Fruits, vegetables, oil, sugar, cereals, pulses, nuts and spices are all plant products. Tea, coffee and cocoa beans are also obtained from plants.
 - Soaps and shampoos have vegetable oils, which are obtained from • plants.
 - Paints also contain substances obtained from plants. •
 - Plant fibres like cotton and jute are used to make clothes, carpet, sack, • and rope. Flax is another type of fibre that we get from plants.
 - Coconut plant gives us coconut oil, coconut water as well as a fruit to eat.
 - Trees are used to make paper, furniture, etc. The hollow stem or cane of a bamboo plant is used to make basket, hut, mat and walking stick.
 - Juice from the rubber tree is used to make rubber for tyres and pipe.
 - The juice of Acacia tree (kikar) is used to make gum. .



Some of the things plants give us

Clothes

- Trunks of trees like sheesham, teak and sal give us wood for making furniture, door and window.
- Many plants like eucalyptus, tulsi, cinchona and neem give us important medicines.
- Dyes from plants are extremely popular. Henna (mehendi) leaves are used for decorating hands.
- 2. Floating plants have light spony bodies filled with air, such as, hyacinth and duckweed.

Fixed plants have flat leaves which help the plant to float on the surface of



water, such as, lotus and water lily.

Underwater plants like hydrilla has thin, small leaves while tape grass has narrow leaves. They also have flexible stems. The thin leaves and flexible stems help these plants to let the water flow easily over them. They breathe through small air spaces.

- 3. Because their leaves are modified to trap insects. Pitcher plant, sundew.
- 4. Some plants have less leaves or no leaves. The process of photosynthesis is carried out in the stems and not in the leaves. These plants store the water in the stem. Some plants also have thorns which help them to conserve water.
- 5. Do yourself.

Do and Learn

Do yourself.



Animals their Young Ones

Exercise

- A. Tick (3) the correct answer: 1. (d), 2. (b), 3. (a), 4. (c), 5. (d), 6. (c), 7. (b), 8. (c)
- B. Name the following:
 1. Yolk, 2. Mammal Mother, 3. Caterpillar, 4. Amphibians, 5. Grasshopper
- C. Write the term : 1. Moulting, 2. Reproduction, 3. Mammals, 4. Fish, 5. Birds
- D. Complete the following names using the hints given :1. SNAKE,2. HEN,3. BUTTERFLY,4. GOAT.
- **E.** Complete the series : 1. Nymph, 2. Caterpillar, 3. Yolk, 4. Insect
- F. Write True or False :
 - 1. False, 2. True, 3. False, 4. False, 5. True.

G. Define these terms :

- 1. After hatching from the egg the young looks like the adult but is wingless and called nymph. It becomes an adult after shedding its old skin. This process is called moulting.
- 2. All living things reproduce more of their own kind to replace one that died is called reproduction.
- 3. Animals that give birth to young ones and feed them with their own milk are called mammals.

H. Think and answer:

1. Fish lay thousands of eggs but only a few develop because eggs and small fish are eaten by big fish.

I. Answer these questions :

- 1. For life to go on, each living being has to produce one of its own kind.
- 2. Animals reproduce by laying eggs or by giving birth to young ones.
- 3. An egg has a thing when, hard protective outer covering called egg shell. Inside the egg shell, there is the albumen it is rich in protein. In the middle of the egg is yolk, which is rich growing chick is called the embryo. The

了 Science-4 41

embryo develops into a chick only when the eggs is kept warm.

- 4. Birds sit on their eggs to keep it warm. The embryo develops into a chick only when the egg is kept warm.
- 5. A frog lays eggs in large cluster called spawns. A spawn develops into a tadpole. A tadpole grows and slowly changes into a young frog, whose eggs grow longer and tail grows shorter. The young frog grows and develops into an adult frog, which has no tail. The process of growth of an adult frog from the tadpole is called metamorphosis.

Do and Learn

Do it yourself

24

Adaptation in Animals

Exercise

A. Tick (3) the correct answer :

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

B. After the names of the following animals write t (for terrestrial); a (for aquatic); am (for amphibious); ae (for aerial); ar (for arboreal) and p (for parasitic) :

Dog	t	Snake	t	Cow	t	Monkey	ar	Crab	am
Tiger	t	Squirrel	ar	Fish	а	Sea-turtle	am	Bat	ar
Crow	ae	Camel	t	Worm	t	Hawk	ae	Mouse	t
Newt	am	Leech	р	Eagle	ae	Rabbit	t	Whale	а

C. Write the scientific terms for the following :

1. aerial,2. Omnivores,3. lungs,4. arboreal,5. parasites,6. herbivores,7. adaptation

D. Write True or False :

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

E. Match the following :

Mosquito — sucks blood	Tapeworm—is a parasite
Zebra — merges with its surroundings	Goat—is a herbivores animal
Squirrel—lives trees	Monkey — is an arboreal animal
Salamander — is an amphibian	

F. Define the following terms :

- 1. The ability of an organism to adjust with the surroundings is called adaptation.
- 2. The long winter sleep of some cold-blooded animals is called hibernation.
- 3. The ability to merge with surroundings is called camouflage.

G. Give reasons, why?

1. Lizards and frogs hibernate because they are cold blooded animals. Their body temperature change with the outside temperature. When it is very cold and there is no food around during the winter months, these animals go to sleep.



- 2. A chameleon changes it colour to match its surroundings to protect themselves from their enemies.
- 3. Polar bear can survive in cold weather because they have thick furry coats to keep themselves warm.

H. Answer these questions :

- 1. Animals that live on land are called terrestrial animals. They breathe with the help of lungs. They have legs or limbs to move, hairy or thick skin to bear heat and cold and well developed nervous system and sense organs.
- 2. Camel can store water in their body for later use. They can live without food and water for many days. A camel has thick skin to protect it from the heat of the Sun. A camel has padded feet to move on sand and a hump on its back which has stored fat.
- 3. Aerial animals have well developed wings and flight muscles to fly. Their bones are light and hollow. The shape of their bodies helps them to cut through the air easily.
- 4. Animals can protect themselves from their enemies by their ability to camouflage, by moving fast, by their big size or by the spines and scales on their bodies.
- 5. Frog can live both on land and in water are called amphibians. They have limbs that are suited to swim in water. Most of the amphibians have both lungs and gills to breathe.
- 6. Polar bear live in cold climatic conditions. They have thick furry coats to keep themselves warm. They also have a thick layer of fat under their skin. It is called blubber that also protects them from cold.

Do and Learn

Do it yourself



Food and Nutrition

Exercise

- **A.** Tick (3) the correct answer : 1. (b), 2. (c), 3. (a), 4. (a)
- **B.** Unscramble the following words with the help of clues given below : 1. PEAS, 2. MAIZE, 3. APPLE, 4. JAM
- C. Fill in the blanks :
 - 1. bones and muscles, 2. Growing children, 3. Vitamins and minerals,
 - 4. Three-fourths, 5. Sugar and starch
- D. Write True or False :
 - 1. False, 2. True, 3. False, 4. True, 5. True

E. Answer the following questions :

- 1. We need food because it gives us energy to work, to study and to play.
- 2. Nutrients of the balanced diet are
 - fats, milk, meat, vegetables, fruits, bread and cereals.
- 3. Proteins help in the repair of worn out cells and carbohydrates help people who do physical work.



- 4. Roughage is the part of food we cannot digest. It should be included in the diet because it helps in the proper functioning of the digestive system by removing wastes out of the body.
- 5. A diet that contains all the nutrients in correct proportion is called balanced diet.
- 6. We can preserve food by-
 - ! Freezing it; as ice-cream or custard.
 - ! Canning it; as in tinned food.
 - ! Salting it; as in pickles.
 - sweetening it; as in jam, jelly and chatney.
 - Oiling it; as in pickles.
 - Dehydrating it; i, e. remove water by drying the food.

Do and Learn

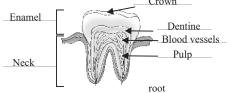
Do it yourself



Teeth and Microbes

Exercise

- **A.** Tick (3) the correct answer : 1. (b), 2. (a), 3. (b), 4. (c), 5. (c)
- B. The picture shows you the parts of a tooth. Label the part shown by the arrows:



- C. Give a single word for each of the following : 1. Crown, 2. Teeth, 3. Plaque, 4. Incisor, 5. Root
- **D.** Fill in the blanks :

1. crown, dentine, root, 2. pulp, 3. milk, 4. Tooth Decay, 5. vitamins, minerals

E. Write True or False :

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

F. Match the following :

Dentist — doctor who looks after teeth

Cavity-hole in tooth

Bacteria — grow well in sugary food

Enamel—outer covering of teeth

Gums — hold teeth in place

Milk teeth — temporary teeth

Acid — eats away enamel

Baby-no teeth

Pulp — found inside tooth



Permanent teeth — thirty-two Young child —

G. Answer the questions :

- 1. Teeth give shape to our face and help us in biting, chewing and eating the food.
- 2. At the age of two and half years, baby has a set of twenty teeth, these are called the milk teeth. When the child is about six years the milk teeth start to drop out and he gets a new set of teeth called permanent teeth.
- 3. Incisors, Canines, Premolar and Molars are four types of teeth. Incisors help us to cut and bite food. Canines are used for tearing or shredding the food. Premolars are used for cracking hard food such as nuts. Molars helps in crushing and grinding the food.
- 4. Microbes are tiny living things that can only be seen under a microscope. Some bacteria change milk to curd, some bacteria help to produce vitamins in humans. Yeast helps in making cakes and bread fluffy. We get a medicine, penicillin, from a fungus called Penicillium.

Do and Learn

Do it yourself Do it yourself



Clothing : Our Basic Need

Exercise

A. Tick (3) the correct answer :

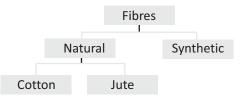
1.(c), 2.(b), 3.(c)

- **B.** Fill in the blanks :
 - 1. man-made, 2. two, 3. raincoat, 4. military uniform, 5. torn or have broken buttons before wearing them.
- C. Write True or False :
 - 1. True, 2. True, 3. False, 4. False, 5. True
- D. Answer the following questions :
 - 1. Clothes are our basic need. Clothes protect us from the heat of the sun, dust, cold, rain and insect bites.
 - 2. The fibres that we get from plants and animals are called natural fibres. Jute, Cotton, Flex are example of natural fibres.
 - 3. People wear different clothes according to their jobs or professions.
 - 4. Synthetic fibres are man-made fibres. These are not found in nature but synthesized by man. Nylon, Polyester are example of synthetics fibres.
 - 5. Woollen and silk clothes should either be dry-cleaned or washed with a mild detergent. Cotton clothes should be ironed before wearing. We should put mothballs or dried neem leaves to keep safe woollen and silk clothes from insects like silverfish and moths away.



Do and Learn

Complete the chart :





States of Matter

Exercise

- Tick (3) the correct answer : Α.
 - 1.(a), 2.(a), 3.(c),4.(b), 5.(b)
- Classify the following things into solids, liquids and gases : B.

Solids	Liquids	Gases
Car	Rain	Nitrogen
Pen	Ink	Football
Radio	Petrol	Oxygen
Glass	Lemonade	Air
Stove		Tyre

C. Write the states of the following substances : 1. Solid, 2. Liquid, 3. Gas, 4. Gas, 5. Solid, 6. Liquid, 7. Solid, 8. Gas, 9. Liquid D. Write (C) for chemical change and (P) for physical change : 1. (C), 2. (C), 3. (P), 4. (P), 5. (C) Choose the correct word and fill in the blanks : E. 1. molecules, 2. solids, 3. Liquids, 4. condensation, 5. liquid F. Match the following: Solid melts into — liquid Liquid freezes into — solid The smallest particles that can exist independently — molecule On heating liquid changes into — gas Sugar and water make a — solution G. Distinguish between the following : Physical change : This is a temporary change in which the molecules of 1. the substance do not change. Chemical change : This is a permanent change in which new molecules are formed. 2. **Solute :** The dissolved solid is called the solute. Solvent: The liquids in which the solid gets dissolved is called the solvent. 3. Solids : The substance in which molecules are packed very close to each other is called solid. Solid cannot change its shape easily. **Gases**: The substance in which the molecules are very loosely packed is called gasses. It has no fixed space.

Science-4 46

4. Liquids : The substance in which the molecules are not very closely packed is called liquid. It can flow and it takes the shape of the container it is poured it.

Gases : The substance in which the molecules are very loosely packed is called gases. It occupies all the available shape of the container. Air is a gas.

H. Define:

- 1. Anything that has weight and occupies space is called matter.
- 2. Matter is made up of small particles called molecules.
- 3. The space between the molecules is called intermolecular space.
- 4. Some solids like sugar, salt etc. get dissolved in liquids. The dissolved solid in liquid from the solution.

I. Give reasons, why?

- 1. The smell of a burning incense stick spread in the room because air is all around us. Air spreads the incense stick in the room.
- 2. A book is a form of solid and water is a form of liquid. Liquid does not have any fixed shape.
- 3. Melting of ice-cream is a temporary change in which the molecules of the substance do not change.

J. Answer these questions :

- 1. Sugar in water get dissolved easily but pebbles in water does not dissolved. Sugar is the solvent. Pebbles is hard and has a fixed shape and volume.
- 2. The molecules of liquid are not very closely packed. The molecules of gas are very loosely packed.
- 3. The soluble material can be separated from water by evaporation.
- 4. Physical changes is a temporary changes in which the molecules of the substance do not change. For example, water into ice or melting of wax candle. Chemical change is a permanent change in which new molecules are formed. For example, burning a paper.
- 5. The three states of water be interchanged in solid, liquid and gas.
- 6. **Solubility** is the property of a solid, liquid, or gaseous chemical substance called solute to dissolve in a solid, liquid, or gaseous solvent to form a homogeneous solution of the solute in the solvent. The solubility of a substance fundamentally depends on the physical and chemical properties of the solute and solvent as well as on temperature, pressure and the pH of the solution. The extent of the solubility of a substance in a specific solvent is measured as the saturation concentration, where adding more solute does not increase the concentration of the solution and begin to precipitate the excess amount of solute.

7.

6	0	0000	

Molecules in solids, liquids and gases

Do and Learn

Do yourself.

Science-4 47



Force, Work and Energy

Exercise

- **A.** Tick (3) the correct answer : 1. (b), 2. (b), 3. (b), 4. (c), 5. (a)
- **B.** Fill in the blanks : 1. position, 2. magnet, 3. mechanical, 4. electrical, 5. Sun
- C. Write True of False :
 - 1. False, 2. True, 3. True, 4. True

D. Define:

- 1. **Force :** Force is a push or a pull.
- 2. **Energy :** Energy is the ability to do work.
- 3. **Work :** Work is done when a force is applied on a body and the body moves through a certain distance.
- 4. Simple Machine : The devices invented to make our work faster with less effort are called simple machines.

E. Answer these questions :

- 1. Force can bring change in the position of the objects.
- 2. Wind, electrical energy, heat, light, solar, sound, water, magnetic, chemical nuclear and atomic energy.
- 3. Energy can be changed from one form to another.
 - i. A bulb converts electrical into light energy.
 - ii. A radio converts electrical energy into a sound energy.
- 4. Work is done when a force is applied on a body and the body moves through a certain distance.
- 5. Sources of energy are following :
 - i. **Solar energy :** Solar energy circulates in all living beings. This energy can also be used to generate electricity.
 - ii. Atomic energy : Atomic energy can be used to generate electricity.
 - iii. Geothermal energy: This energy comes out in the form of hot water springs or geysers. This energy is used to generate electricity.
 - iv. **Kinetic energy :** The kinetic energy of wind is used to turn windmills that helps to produce electricity. Boats sail with the help of wind energy.

Do and Learn



Soil Erosion and Conservation

Exercise

A. Tick (3) the correct answer : 1. (c), 2. (b), 3. (c), 4. (a)



Blo iFjillunsthe blanks :

1.rocks, 2. wind and water, 3. barren and unproductive, 4. Trees, 5. hilly

C. Write True or False : 1.True, 2. False, 3. True, 4. True, 5. True

D. Match the columns :

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

E. Answer these questions :

- 1. When the fast flowing rain and river water entered the cracks and broke the rocks into small pieces. These pieces were further became fine due to action of air and thus soil is formed.
- 2. Soil erosion is the carrying away of the top fertile soil by agents like wind and water. It is a slow and steady process.

Its causes when

We cut down trees

it rains heavily

strong winds blow

faulty methods of crop growing are practiced.

3. Effects of soil erosion are

A. Tick (3) the correct answer :

It washes away the fertile top soil, making land barren and unproductive It deposits unwanted sand and other types of soil on top of the productive soil.

- 4. The protection of the soil from erosion is called soil conservation.
- 5. Four measures to conserve soil are : Afforestation

Construction of dams



The Way We Live

Exercise

1	fick (0) the correct a				
	1.(a), 2.(a), 3.(b), 4	4. (c)			
В.	Write the correct wor	rd :			
	1.Ozone, 4. Recycling,	2. Ultraviolet rays, 5. Non-biodegradable.	3. Jaundice,		
C.	Give two examples of each of the following :				
	1. Water, Air, Jaundice	2. Skin diseases, Cancer	3. Typhoid,		
D.	Write True or False :				
	1. False, 2. True, 3. False, 4. True, 5. True				
Е.	Answer these questio	ns :			
	1. A substance that causes pollution are called a pollutants.				

2. The ozone layer of the atmosphere protects us from the harmful ultraviolet rays

Science-4 49

of the Sun. Ultraviolet rays can cause skin diseases and cancer.

- 3. Anything that is of no use to us is called waste. Waste is mainly of two types–Biodegradable and non–biodegradable.
- 4. **Biodegradable waste :** Vegetable peels, tea leaves, left-over food are buried in a pit in the ground, they turn into manure which can be used in gardens. Substance like these rot or decompose are called biodegradable waste.

Non-biodegradable waste : Substances like aluminium or steel cans, glass, plastic and some kinds of thick cardboard are non biodegradable. Substance which is not decompose are called non-biodegrable waste.

Soil

Do and Learn



Exercise

- **A.** Tick (3) the correct answer: 1. (d), 2. (a), 3. (b), 4. (d), 5. (a)
- B. Unscramble the following with the help of clues given below :

 1. HUMUS
 2. GRAVEL
 3. MOLE
 4. CHEMICAL
- **C.** Choose correct word and fill in the blanks : 1. Topsoil, 2. Gravel, 3. Clay, 4. ponds
- **D.** Write True or False : 1. False, 2. False, 3. False, 4. True, 5. False
- E. Match the following :
 - Topsoil dark in colour
 - Rockbed consists of stones and rocks
 - Sand—used for making building
 - $Clay-can \, hold \, a \, lot \, of \, water$
 - Loam best for the growth of plants
- F. Write the differences :

Clayey Soil :

- 1. It is soft and smooth to touch.
- 2. It is found near river beds.
- 3. Plants do not grow well in this soil.
- 4. The particles of such soil are very small and can hold a lot of water in it.

Sandy Soil :

- 1. It is mostly made of rough sand particles.
- 2. It is found near sea shores and in deserts.
- 3. No plants can grow in such soil.
- 4. They are large in size and water easily passes through them.



Loamy Soil :

- 1. It is mixture of sand and clayey soil.
- 2. It also has the fertile humus layer.
- 3. It is best for the growth of plants.
- 4. It holds some amount of water and excess seeps underground.

G. Give reasons, why?

- 1. Plants grow in topsoil, because topsoil provides food for the plants. Topsoil is rich in nutrients.
- 2. We should grow the same crops again and again, because the fertility of the soil decreases, and gradually it become infertile.

H. Answer these questions :

- 1. Soil is formed over a long period of time by the weathering of rocks. Weathering is the process in which large piece of rocks are broken down into smaller and smaller pieces due to the heat of the Sun, rain, wind and other changes in weather.
- 2. Weathering is the process in which large pieces of rocks are broken down into smaller and smaller pieces due to the heat of the Sun, rain, wind and other changes in weather.
- 3. The soil can be divided into three main layers-topsoil, subsoil and bedrock. Topsoil contains the most humus, which is the dark part of the soil that is rich in nutrients. Under the topsoil these layers tend to be sandier and have less humus. Under the subsoil is bedrock, which is solid rock.
- 4. We need to supply water and fertilizers regularly to the fields because, in order to preserve the fertility of the soil, we need to use fertilizers and water in the fields.
- 5. Chemical fertilizers are artificially manufac-tured in factories. They are used to increase the fertility of soil.
- 6. Excessive use of chemical fertilizers can cause crop production to decrease. If nitrogen fertilizers are used too much on fruits-yielding plants, the plants will grow but will not bear any fruits. Excessive use of this fertilizer can cause plants to die.

Do and Learn

Do it yourself



Air, Water and Weather

Exercise

- **A.** Tick (3) the correct answer : 1. (a), 2. (c), 3. (b), 4. (d), 5. (c), 6. (a).
- **B.** Fill in the blanks : 1. sea, 2. frost, 3. filter, 4. ill



C. Write True or False :

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

D. Match the following:

- 1. Ice — solid form of water
- 2. Evaporate — change from liquid to gas
- 3. Boil—change from water to steam
- 4 Rivers — flowing water,
- 5. Condensation — change from gas to liquid

F. **Distinguish between :**

1. Evaporation : On heating, water changes into water vapour and the process is called evaporation.

Condensation : The changes of water vapour into water on cooling is called condensation.

Sea breeze : Cool air from the sea moves in to take the place of the warm 2. air is called the sea breeze.

Land breeze: Warm air above the sea rises, cool air from the land takes its place is causes the breeze, called the land breeze.

F. Answer the following :

- The revolution of the Earth around the Sun causes seasons because, an 1. imaginary line called equator divides the Earth into northern and southern halves. The Earth rotates on its axis. This axis is tilded and the rays of the Sun fall directly on one half of the Earth for six months during its revolution. This half past of the Earth has summer season and the other half experiences the winter season.
- 2. The heat of the Sun affects the movement of the air. The Sun heats up the air making it lighter. The lot and lighter air rises up and the cool air takes its place. This movement of air causes winds to blow.
- 3. Factors affect the rate of evaporation are, wind, temperature, dry air and surface area.
- Soluble impurities : Impurities which are dissolved in water and are not 4. visible are called soluble impurities.

Insoluble impurities : Impurities like twigs, that do not dissolve in water and therefore can be seen are called insoluble impurities.

Purification of water can be done by sedimentation, decantation and filtration. 5.

Do and Learn

Do it yourself



Our Planet Earth

- A. Tick (3) the correct answer : 1.(b), 2.(a), 3.(c)
- **B.** Fill in the blanks : 1. rotation,



Exercise

- 2. 24 hours,
- 3. west to east.
- 4. Hydrosphere,
- 5. seasons

C. Write True or False:

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

D. Answer these questions :

The outer layer of the earth is called the crust. It is a thin layer of mostly 1. solid rocks. It includes the soil. The mantle lies below the crust and is made up of very hot rocks.

2. Rotation

- Revolution ! The earth spins on The spinning of night. its own anis. ! The spinning of the The movement if earth earth on its own anis around the sun is called is called rotation. revolution.
- 3. The rotation of the earth cause day and night.
- 4. Revolution of the earth causes seasons when the North Pole is towards the sun : It is summer in the northen hemisphere. At the North Pole there is sunlight throughout the day and during the night. During this time the south pole is turned away from the sun and has winter. There is no day light at the south pole at all.

When the North Pole is turned away from the Sun : It is winter in the northern hemisphere. The North Pole is in complete darkness. It is summer in the southern hemisphere.

The region near the equator gets. the same amount of sunlight all the year round. It has summer throughout the year.

Do and Learn

Do yourself.



What You Can See in the Sky

Exercise

A. Tick (3) the correct answer :

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

B. Correct the following statements by changing the underlined words :

- 1. A satellite are the heavenly bodies that revolve around planets.
- Venus is usually called the evening star and the morning star. 2.
- Jupiter is the biggest and fastest spinning planet. 3.

C. Write the term :

1. Constellation,

2. revolution, 5. Moon.

3. Craters,

4. Sun.

Science-4 53

D. Fill in the blanks :

1. Neptune, 2. rotation, revolution. 3. Sun, 4. Venus, 5. longer, shorter.

E. Write True or False :

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

F. Match the following :

- 1. Planet nearest to the Sun Mercury
- 2. Planet farthest from the Sun-Neptune
- 3. Planet with rings Saturn
- 4. The planet closes to the Earth Venus
- 5. The planet having life Earth

G. Give reasons, why :

- 1. Places near the equator always have summer because there, the rays of Sun fall directly.
- 2. Planets revolve around the Sun, but never collide with each other because planets around the Sun along a fixed oval path.

H. Answer these questions :

- 1. **Star**: i. Stars are big balls of burning gases.
 - ii. Stars have heat and light of their own.
 - Planet : i. Planets are heavenly bodies that move around the Sun or any other star.
 - ii. Planet have no heat and light of their own.
- 2. A group of stars with a definite pattern is called constellation. Ursa major or Great Bear, Orion or hunter are some of the constellations.
- 3. The satellites made by man are called artificial satellites.

Do and Learn

Do it yourself

