



GRADE- 4 SCIENCE

Chapter-6

LIVING AND SURVIVING

1. What do you understand by habitat?

Ans: The place, where a plant or animal lives is called a habitat.

2. What is adaptation?

Ans: A change that a living thing undergoes to become better suited to its environment is called adaptation.

3. Which plants are called terrestrial plants?

Ans: Plants that grow on land are called terrestrial plants.

4. Name the trees grow in the plains.

Ans: Neem, Banyan, Peepal, Ashok, Sheesham, Mango, Gulmahor and Sal.

5. Name the trees grow in coastal plains.

Ans: Coconut tree.

6. How the soil is in marshy areas?

Ans: The soil is sticky and clayey in marshy areas.

7. Which tree grows in these areas?

Ans: Mangrove.

8. Name the trees grows in cold hilly areas.

Ans: Pine, Fir, Deodar, Spruce.

9. Write the characteristics of trees in hilly areas.

Ans: Trees in hilly areas have thick barks. They are tall straight and cone shaped. This shape allows snow to easily slip off the branches. The waxy needle – like leaves do not allow losing their water.

10. Name the plants grow in desert.

Ans: Cactus, Keekar, Cate.

11. What is aquatic plant?

Ans: Plants that grow in water are called aquatic plants.

12. Write these kinds of aquatic plants.

Ans: Floating plants fixed plants underwater plants.

13. Name the floating plants.

Ans: Hyacinth and duckweed.

14. Name the fixed plants.

Ans: Lotus and water lily.

15. Name the plants do not have stomata.

Ans: Hydrilla, Tape grass.

16. Why do mangroves have breathing roots?

Ans: Mangroves grow in sticky and clayey marshy areas. So its roots do not get air. So to get air roots of mangroves grow out of the soil and water one called breathy roots.

17. Why do insectivores plants eat insects?

Ans: These plants are growing in soil and poor in minerals. So they eat insects.

18. How do plants in plains shed their leaves in winter?

Ans: In winter there is not much sunlight. So the leaves can't make food, they consume the food stored in their body. So, the trees shed their leaves.

19. How does the poison ivy protect itself from being eaten by animals?

Ans: If one touches them the poison in them will make the skin itch so animals can't eat it.

20. How does a cactus survive in deserts?

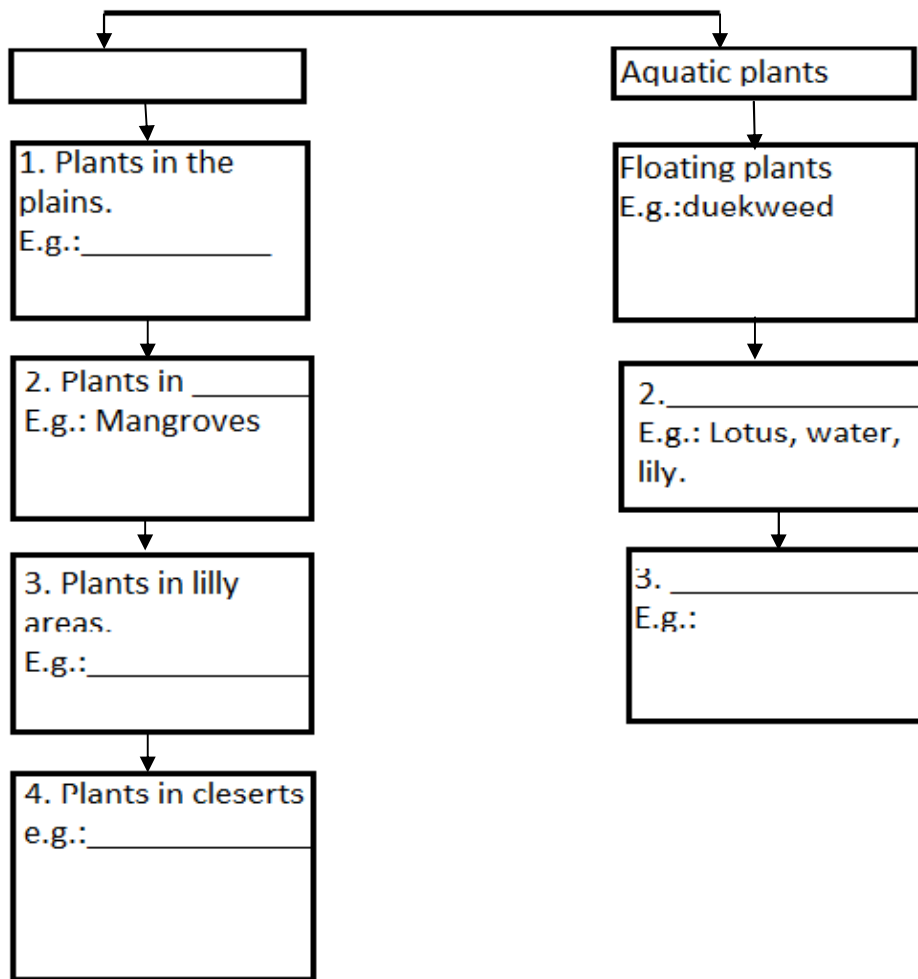
Ans: Cactus plants do not have leaves. As the leaves are modified into spines. This helping in reducing the loss of water.

• **Fill in the blanks:**

1. Plants that grow on land are called **terrestrial plant.**
2. Mangroves have **breathing** roots.
3. Pine trees grow in **hilly** areas.
4. The water hyacinth is a **floating** plant.
5. Tape grass is an example of an **underwater.**

• **Complete the blow chart.**

Types of plants



Chapter-7

ANIMALS: LIVING & SURVIVING

1. What do you mean by terrestrial animals?

Ans: Animals that live on land are called terrestrial animals.

2. What is blubber?

Ans: Animals such as seals and penguins live in very cold places. They have thick layers of fat is called blubber.

3. What is winter sleep of frog and snakes?

Ans: Animals such as frogs and snakes can't bear extreme cold so they spend the winter by hiding their self in safe warm place animals living in these places save their energy by becoming inactive during the winter season, they use the fat stored in

their body as food. This long period of rest is called winter sleep.

4. What do you mean by summer sleep of animals?

Ans: Many animals can't bear heat of summer and go long period of summer sleep.

5. What is an aquatic animal?

Ans: Animals live in water are called aquatic animals.

6. Which organs are present in aquatic animals to breathe dissolved oxygen?

Ans: Gills.

7. Name the animals live both on land water.

Ans: Frogs and Toads.

8. What do you mean by arboreal animals?

Ans: Land animals such as monkeys that live mostly on trees are called arboreal animals.

9. What do you meant by aerial animal?

Ans: Animals that can fly in the air are called aerial animal.

10. What is meant by migration?

Ans: In the cold winter months, many birds fly thousands of kilometers towards warmer places for food and warmth. They go back when winter ends. This seasonal movement of birds is called migration.

11. What do you mean by herbivores animals?

Ans: The animals which eat plants are called herbivores. Such as cow goats, zebra, etc.

12. Describe features of herbivores animals.

Ans: Herbivores animals have sharp front teeth for biting and cutting and very strong back teeth for grinding leaves and grass. Some herbivores have special features that help them to gather the food. Elephants have long trunks to pull out grass and leaves. Giraffe has long neck to reach tall trees like mouth to suck nectar from flowers.

13. What are carnivores?

Ans: Animal such as lions, tigers, wolves and crocodiles eat flesh of other animals, they are called carnivores.

14. Describe the features of carnivores animals.

Ans: They have pointed sharp teeth for catching their prey and tearing its flesh. Carnivores bird such as eagles. And kites have sharp claws and strong hooked breaks to tear at the flesh of their prey.

15. What are omnivores animals?

Ans: Animal such as human beings, bears, squirrels can eat both plants and flesh of other animals. They are called omnivores animals.

16. Describe features of omnivores animals.

Ans: They have sharp and strong teeth birds have sharp breaks.

17. What is an endangered animal?

Ans: Some animals are disappearing fast from the earth. It is because people are destroying their habitats or hunting them for selling their body parts, such animals are called endangered animals.

18. Name the endangered animals.

Ans: Elephants, rhinoceros, tigers, crocodiles, polar bears, she turtles, etc.

19. For which animal dandily wild life centaury is famous?

Ans: Crocodiles.

20. For which animal Gir's national park is famous?

Ans: Lions.

Chapter-8

REPRODUCTION IN ANIMALS

1. What is a mammal?

Ans: Animals that give birth to babies and feed them on milk are called mammals.

2. Name the mammals.

Ans: Monkey, Cows, Human beings, goat, etc.

3. Name the animals that lay eggs.

Ans: Birds, Lizards, Fish, Snakes, Crocodiles, etc.

4. What is embryo?

Ans: This is an outer shell that protects the egg. At the centre of the egg lies the yolk. It is yellow in color. It contains the growing baby is called embryo.

5. What is albumen?

Ans: White glue like liquid around the yolk is called albumen.

6. Write the parts of an egg.

Ans: Egg shell, Yolk, albumen

7. What is a tadpole?

Ans: When the eggs hatch tiny frogs are called tadpoles.

8. How tadpoles look like?

Ans: A tadpole has a tail and looks like a fish.

9. What is a nymph?

Ans: The baby insects look like the parent insects but they do not have wings are called nymph.

10. What is moulting?

Ans: The shedding of skin grows is called moulting.

11. What do mean by larva?

Ans: The baby insect looks different from the parent insect are called larva.

12. What is the name of larva of butterfly?

Ans: The larva of butterfly is called caterpillar.

13. Name stage in which caterpillar grows inside the cocoon?

Ans: Pupa.

14. Name the fish which carry their developing babies in their mouth.

Ans: Jewfishes.

15. Name the animals lay eggs on the ground.

Ans: Lizards, Snakes and Turtles.

1. Name the external organs.

Ans: Eyes, Ears, Nose, Tongue and Skin.

2. Name the internal organs.

Ans: The heart, Lungs, Stomach, Brain, Etc.

3. What is organ system?

Ans: A group of different organs that work together to do one or more tasks is called an organ system.

4. Name the organs involve in digestive system?

Ans: Mouth, Stomach, Small, Intestine, liver, pancreas.

5. How does skeletal system helps the body?

Ans: Skeletal system gives shape and support to our body.

6. What is the task of muscular system?

Ans: It helps in movement of the body.

7. What is the work or function of digestive system?

Ans: It helps in digesting food.

8. What is the function of respiratory system?

Ans: It helps in the process of respiration.

9. What is the function of circulatory system?

Ans: It supplies the blood to all parts of the body.

10. What is the function of excretory system?

Ans: It removes waste products from the body.

11. What is the function of nervous system?

Ans: It controls all the activities of the body.

12. What is digestion?

Ans: The process of breaking down of food into a simpler form so that body can absorb it easily is called digestion.

13. What is Saliva?

Ans: The liquid produced in the mouth is called saliva.

14. What is churn?

Ans: The strong muscles of the stomach move the food with great force is called churn.

15. Name kinds of teeth.

Ans: Incisors, canines, premolar and molars.

16. What is an incisors?

Ans: The four front teeth in each jaw are called incisors.

17. What is enamel?

Ans: The outer layers white layer of teeth is called enamel.

18. What is pulp?

Ans: The innermost layers of tooth are called pulp.

19. What is present in pulp?

Ans: Pulp has blood vessels and nerves.

20. How do nutrients reach to the tooth?

Ans: The nutrients reach the tooth through the blood vessels.

21. Write any two ways to take care of teeth.

Ans: Eat healthy diet containing milk, fruits, and green vegetables.

→ Wash the mouth after eating.

22. What is plaque?

Ans: If we do not brush our teeth properly sticky layer called plaque develops on the teeth.

23. What is in plaque?

Ans: Germs are in plaque which live in mouth.

24. How do germs feed in pulp?

Ans: Germs feeds on the bits of food stuck to the teeth and give out acids.

25. What is respiration?

Ans: The process by which the body uses oxygen to get energy from food is called respiration.

26. Name the organs of respiratory system.

Ans: Nose, Windpipe, Lungs.

27. What is mucus?

Ans: The nose has hair & sticky substance is called mucus.

28. Which organs covered the lungs?

Ans: The lungs are covered with blood vessels and tiny air sacs.

Chapter-10 SAFETY AND FIRST AID

1. What do you mean by safety?

Ans: To be safe means is to be after to avoid dangers and keep away from damage.

2. Who is a bully?

Ans: A bully is a person who teases, frightened or hits other.

3. How do you deal with strangers?

Ans: A stranger is unknown person, do not talk to strangers. Do not take a ride or accept gift from a stranger. If a stranger tries to talk to you, walk away immediately and tell an adult.

4. Write safety rules while riding vehicles.

Ans: Always wear helmet and tie its straps when you ride a bicycle.

→ Keep your bicycle in a good condition make sure that the brakes are working well, the bicycle chain is well oiled.

→ Always stay, alert while riding your bicycle.

→ Do not ride on a wet or uneven road.

5. Write safety rules while driving a car.

Ans: Wear your seat belt while travelling in a car.

→ Always children should sit on the back seat of a car.

→ Do not stick your head or hands out of the vehicle.

Chapter-11

FORCE WORK & ENERGY

1. What is force?

Ans: The act of pulling or pushing is called force.

2. What is gravitational force?

Ans: The force by which the earth pulls on object towards itself is called gravitational and force.

3. Why a ball travels a shorter distance on a grass surface than a smooth floor?

Ans: A rough surface causes more friction than a smooth surface so, ball travels a shorter distance on a grass surface than a smooth floor.

4. What is a common example of friction?

Ans: A common example is the oiling of bicycle chains.

5. What is magnetic force?

Ans: You can feel as if some force is pulling it towards the magnet. This is called magnetic force.

6. What is atomic energy?

Ans: When an atom breaks down it gives out energy called atom energy.

7. What is solar energy?

Ans: The energy that we get from the sun is called solar energy.

8. Which energy is used to produce electricity?

Ans: Solar energy is used to produce electricity.

9. How do plants make food?

Ans: Plants make food by using solar energy.

10. How we can get heat & light?

Ans: We can get heat & light from the solar energy.

11. Why do we use petrol & diesel?

Ans: We use petrol & diesel to run our vehicles.

12. What do we burn for cooking & heating?

Ans: We burn wood & coal for cooking or heating.

13. What do we burn to get energy?

Ans: We burn fuels such as wood coal & petrol to get energy.

14. What is geothermal energy?

Ans: The heat we get from this part of the earth is known as geothermal energy.

Chapter-12 THE EARTH AND ITS NEIGHBORS

1. Why do stars look like tiny of light?

Ans: Stars look like tiny points because they are very far from us.

2. Why the sun appears to be much big than the stars?

Ans: The sun is also a star. The sun appears to be much bigger the other earth because, it closer to the earth than all other stars.

3. What is essential for life?

Ans: The heat & light given out the sun are essential for life on the earth.

4. What does the solar system?

Ans: The solar system consists of the sun and all the objects that move around it.

5. What are planets?

Ans: The eight large round objects that move around the sun are called planets.

6. What is orbit?

Ans: The fixed path of a planet is known as its orbit.

7. What does the planet does not give its own?

Ans: A planet does not give out heat or light on its own.

8. Why a planet does shines?

Ans: It shines because it reflects the light of the sun.

9. Which are the inner planets?

Ans: The first four planets (Mercury, Venus, Earth & Mars) are called the inner planets.

10. Which are the outer planets?

Ans: The last four planets are called the outer planets.

11. Which are the heavenly objects that move around the planets?

Ans: Our earth has only one moon.

12. How many moons our Earth has?

Ans: Our Earth has only one moon.

13. What is the size of the Earth?

Ans: The size of the Earth is more than one quarter the size of the Earth.

14. What is atmosphere?

Ans: The Earth is the only planet known to have life on it. It is surrounded atmosphere.

15. What does the atmosphere contains?

Ans: Atmosphere contains the oxygen.

16. Which gases does the atmosphere contains?

Ans: The atmosphere also contains other gases such as nitrogen, Carbon – dioxide and water vapour.

17. How many part of the earth is covered with land?

Ans: About one – fourth of the earth is covered with land.

18. What is crust?

Ans: Water & land are present on the outer most layer of the earth this part is called the crust.

19. What is mantle?

Ans: Below the crust there is a layer of molten rocks called the mantle.

20. What is core?

Ans: The innermost layer is called the core.

21. How is core made?

Ans: It is made up of hot melt metals.

22. Which are the two types of rotation?

Ans: The earth shows two types of movement rotation and revolution.

Chapter-13

AIR WATER & WEATHER

1. What do you understand by the term weather?

Ans: The weather is the condition of air over that place.

2. What is thunderstorm?

Ans: A storm which occurs along with thunder and lightning.

3. Write any one factor that affects the rate of evaporation.

Ans: When temperature is high evaporation occurs faster.

4. How is frost different from dew?

Ans: The water vapour condenses into tiny water droplets in winter is called dew. While in very cold these water droplets freezes into tiny ice crystal which are known as frost.

5. How is fog formed?

Ans: In winter air above the land is cold and condenses on dust particles or smoke to form fog clouds. This is known as fog.

6. Explain the role of the sun in changing the weather?

Ans: The sun changes the temperature of air at a place. Different places get different amount of sunlight wherever the place is hot. And the places which get less sunlight are cold. Sun energy causes wind to blow and change water into water vapour. It helps to form clouds and bring rain.

7. What causes the wind to blow?

Ans: The heat of sun causes wind to blow.

8. Explain land breeze.

Ans: Land breeze:

→ During the night the air above the sea rises up & air above the land gets cooled faster in night. So cold air of land moves towards sea. This is called land breeze.

9. Explain sea breeze.

Ans: During the day, the land gets heated. So, the air over the land becomes hot & light in weight. This land air above is cold which moves towards the land. This movement of air is called sea breeze.

10. Different between evaporation and condensation.

Ans:

Evaporation

- a) In this water changes into water vapour.
- b) If temperature is high evaporation occurs faster.

Condensation

- a) In this water vapour changes into water.
- b) If temperature is high condensation occurs slowly.

11. What is water cycle?

Ans: Continuous rotation of water from earth to atmosphere & again atmosphere to earth is called water cycle.

12. Which is water cycle called so?

Ans: Rainwater goes into seas, rivers and condensation again repeats in nature. This repeated change of water forms in its soil is called water cycle.

Chapter-12

THE EARTH AND ITS NEIGHBORS

1. Write about the earth.

Ans: The earth is the third planet from the sun. It is called the blue planet as three-fourths of the earth's surface is covered with water. Here life is possible.

2. Which planet has a great red spot on its surface?

Ans: Jupiter.

3. Which is the closest planet to the sun?

Ans: Mercury.

4. Which is the farther planet from sun?

Ans: Neptune.

5. Which planet is coldest planet?

Ans: Uranus.

6. What do you mean by moon?

Ans: Moons are heavenly objects that move around the planets.

7. How many moons of the earth?

Ans: Only one.

8. Which planet has red soil and rocks?

Ans: Mars.

9. What do you mean by rotation?

Ans: The spinning movement of the earth about its axis is called rotation.

10. What is pole?

Ans: The two points where the axis seems to enter the earth are called poles.

11. What is North Pole?

Ans: The northern point of the earth is known as North Pole.

12. Which movement of the earth causes day and night?

Ans: Rotation.

Chapter-14 KEEPING THE EARTH CLEAN

• Short answer:

1. What do you understand by the term environment?

Ans: All the living and non-living a thing is in over surrounding make up our environment.

2. What is noise?

Ans: A sound which is unpleasant to our ears is known as noise.

3. Write any one effect of air pollution.

Ans: Smoke and harmful gasses can cause asthma and lung cancer.

4. Give an example of how water pollution is harmful to us.

Ans: If we drink polluted water, we may fall sick.

5. Suggest any one method to prevent water pollution.

Ans: We must treat dirty water from homes before releasing in into lakes, river and seas.

• **Long answer.**

1. How does air get polluted?

Ans: Cars, buses, trucks and other vehicles give out harmful gases into the air. This happens when the petrol and diesel they run on, burns.

2. How does water get polluted?

Ans: Dirty water from homes and factories goes into drains. This water contains soap, detergent and chemicals. The drains release this dirty water into various water bodies such as river, lakes or seas and pollute them.

3. Write two ways by which air pollution can be controlled.

Ans: We should use CNG and LPG Gas fuel for vehicles. This causes less air pollution checks. Vehicle should go through regular pollute checks.

4. What is three R's of the environment?

Ans: R = Reduce, R = Reuse and R = Recycle.

5. Full form of CNG.

Ans: Compressed Natural Gas.

Chapter-11

FORCE WORK & ENERGY

• **Long answer.**

1. What do you understand by gravitational force?

Ans: The force by which earth pulls object towards itself is called gravitational force or gravity. Gravity holds everything on earth.

2. What is work? Explain with an example.

Ans: When a force is able to move an object from one place to another is considered a cupboard and it does not move, we say

that no work done. But, when you pull a table or pick up the book from a cupboard work is done.

3. What is energy? Write the different forms of energy.

Ans: The different form of energy are:-

- Heat energy.
- Light energy.
- Electrical energy.
- Sound energy.
- Atomic energy.
- Geothermal energy.

4. Write a short note on solar energy.

Ans: The energy we get from sun is called solar energy. Plants use solar energy. Plants use solar to make their own food. We eat fruits, vegetables, creeds. Grains to get energy to work. This sun energy is also used to generate electricity.

5. Define geothermal energy and write what it is used for.

Ans: The innermost part of earth is very hot. We get heat energy from innermost part of earth which is known as geothermal energy. This energy is used to generate electricity.

Chapter-12

- Long answer.

1. What is the difference between a planet and a moon?

Ans:

Planet

- a) The eight large objects move around the sun are called planets.
- b) There are eight planets are there In the solar system.

Moon

- a) Heavenly objects the at moves around the planets are called Moon.
- b) Planets posses different Number of moon.

2. What is the solar system? Name the planets in the solar system starting with the one closest to the sun.

Ans: A solar is the group of sun & other right large planets that move around the sun. Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune this is the sequence of planets to move around the sun.

3. What are inner planets? Name them?

Ans: The first four planets closest to sun are collects inner most plants. They are Mercury, Venus, Earth and Mars.

4. Describe the structure of the Earth.

Ans: One fourth parts is water. Water and land are present on the outer most layer which is called crust, below the crust there is larger made up of molten rocks called mantle. The innermost layer is called core which is made up of molten metals.

5. How are seasons formed?

Ans: The seasons are caused due to revolution of the earth and the tilt of the earth's axis. When one hemisphere is farther from the sun. So one hemisphere gets sunlight and having summer. While other one get winter during the earth's revolution there is time when no hemisphere faces towards the sun. At this time hemisphere gets autumn and other one gets spring.

Chapter-10

SAFETY & FIRST AID

• **Long answer.**

1. Write two safety tips you should follow while travelling in a car.

Ans: Following tips should bellow while travelling in a car.

➔ Wear your seat belt.

➔ Do not stick your head and hands out of the vehicle.

2. Do not stick your head and hands out of the vehicle.

Ans: Following rules should follow while swimming.

- Use swimming tube to swim.
- Do not jump or drive into the water.

3. Write any two safety rules to be followed by visiting a crowded place.

Ans: Following two safety rules to be followed while a crowded place.

- Keep your address and phone number of your parents in your pocket.
- Wear bright colored clothes.

4. What will you do if someone around you gets injured?

Ans: If someone get injured call an adults or a doctor immediately comfort the injured person. Do not allow people to crowd around him or her. Let there be plenty of fresh air around the person. Do not move the person if the injury is serious.

5. How will you help a person who has suffered a minor burn?

Ans: If a person gets a minor burns put the burnt area under running tap water. The apply an antiseptic cream on the wound and tie a bandage over it. This will keep the dust and flies away.

Extra

• **Fill ups.**

1. EV _ P _ RATION
2. CO _ DES _ TION
3. V _ P _ UR
4. D _ W
5. F _ OST
6. R _ YC _ E
7. C _ NSTE _ ATION
8. N _ ISE
9. PO _ _ UTION
10. PO _ _ UT _ NT

• **T & F.**

1. We must treat dirty water.
2. Breathing polluted air can make us healthy.

3. Waste that can rot with the help of bacteria is called non-biodegradable waste.

4. A sound which is unpleased is called music.

• **Draw the diagrams or label the diagram.**

1. Parts of an egg.

2. Water cycle.

3. Solar system.

4. Two safety signs.

5. Structure of tooth.

6. Digestive system.

7. Respiratory system.

8. Life cycle of butterfly.

9. Life cycle of frog.

10. Life cycle of hen.

