

New Mehran

MAYARI SCIENCE

Class-3

(THECHAR GUIDE)

Unit 1

PLANTS

EXERCISE

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: Who prepare food for plants?

Ans: Plants prepare their food themselves.

Q2: Who uses additional food of plants?

Ans: Human beings and animals use additional food of plants.

Q3: How do plants use the carbon dioxide?

Ans: Plants use carbondioxide to prepare their food.

Q4: What is embryo?

Ans: Small plant emerges from a seed is called an embryo.

Q5: What is seed coat?

Ans: Outer hard layer of a seed is called seed coat.

(b) **THICK THE RIGHT ANSWER.**

1. Their own food is prepared:

(a) By plants✓

(b) human beings

(c) by animals

2. When plants prepare food they emit:

(a) carbon dioxide ✓ (b) Oxygen

(c) nitrogen

3. Outer hard layer of a seed is called:

(a) Seed cover (b) Seed slide

✓ (c) Seed coat

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Plants are main part of our LIFE.

2. Oxygen gas is very necessary for humans' and animals' LIFE.

3. There is processes of REPRODUCTION in plants.

4. SUNLIGHT is not necessary for all seeds to germinate.
5. A seed has A PROTECTING COVER in its outer side.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

- Plants are useless for us. (x)
- During reproduction process a seed came into existence. (x)
- Proper temperature is required for the growth of a seed. (✓)
- A seed does not receive energy from the air at all. (x)
- A seed has a protecting cover in its outer side. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Plants produce seed.	Water, temperature, air.
Conditions of plant growth	Root
Outer cover of a seed.	In reproductive process
Seed grow	Embryo
To absorb water from the earth	Seed Coat

(f) **FIND PICTURES OF SEEDS AND PASTE THEM IN GIVEN SPACE.**

Unit 2

INSECTS

Exercise

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: What are insects?

Ans: Insects are living things which fly or creep e.g: Mosquite, Cockroach and Bug-insects are invertebrate.

Q2: How many parts body are there in insect?

Ans: There are three parts of body in insects.

Q3: What kind of eyes do insects have?

Ans: Insects have two eyes along with antenna.

Q4: Which insects have sting?

Ans: Bee, wasp and scorpion have sting.

Q5: Which insect does destroy wood?

Ans: Termite destroys wood.

(b) **THICK THE RIGHT ANSWER.**

- Normally how many insects have the legs:
(a) Two (b) four ✓ (c) Six
- To taste something a fly uses:
(a) Tongue (b) Antennae ✓ (c) legs
- Parts of body in insects are:
✓ (a) Three (b) five (c) many

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

- Most of the insects have six LEGS.
- Legs and wings of the insects are attached to the THORAX.
- Insects have sting like antennae on their heads which help them to protect from surrounding environment and taste of food.

4. Glow worm is also counted in INSECTS.
 5. A spider is also an insect which as EIGHT legs.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Insects have two legs. (x)
 2. There are three bones in the body of insects. (x)
 3. There are some insects which can fly in the air. (x)
 4. Bees are very useful to us. (✓)
 5. Termite is a useful insects (x)

(e) **MATCH THE COLUMNS:**

Column (A)		Column (B)
Flying insects	↔	Scorpion, spider
Reptile insects	↔	Bees
Beautiful insects	↔	Glow worm
Glowing insects	↔	Fly, mosquito, meloid
Useful insects	↔	Butterfly

(f) **FIND PICTURES OF SEEDS AND PASTE THEM IN GIVEN SPACE.**

Unit 3

HABITATS OF LIVING THINGS

Exercise

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: What is meant by habitat?
 Ans: A place where an animal lives is called habitat.
 Q2: Which things affect the habitat?
 Ans: Light, temperature and water affect the habitat.
 Q3: In what areas are polar bears found?
 Ans: Polar bears are found in arctic area.
 Q4: In what areas are date palm trees and cactus plants found?
 Ans: Date palm trees and cactus plants are found in desert.
 Q5: In which habitat do fishes and seagull live?
 Ans: Fish and seagull lives in water habitat.

(b) **THICK THE RIGHT ANSWER.**

1. Whole the year _____ covered with ice:
 (a) Northern areas (b) Southern areas
 ✓ (c) Arctic areas
 2. All living things:
 (a) Do not have habitats ✓ (b) Have different habitats
 (c) Have some habitats
 3. In freezing cold make their homes:
 ✓ (a) Poplar bears (b) lions (c) horses

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Homes protect animals from cold, heat and ENEMIES.
 2. Dense forest is habitat of WILD ANIMALS.

3. Different kinds of ANIMAL are found in arctic areas.
4. More than (ONE THIRD) of world is occupied by water.
5. Environment of animals is affected by light TEMPERATURE and water.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. The place where animals live is called habitat. (✓)
2. Dangerous beasts live on mountains. (x)
3. Non living things can survive on ice. (x)
4. Giant living things live under water. (x)
5. Desert is called that area where rain precipitates scantily. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Wald habitat	Crocodiles seagull heron
Oceanic habitat	Camel tiger rat
Riverine habitat	Whale dolphin fish
Desert habitat	Penguin polar bears
Arctic habitat	Lion tiger fox jackal

Unit 4

**NEEDS AND CHARACTERISTICS OF LIVING THINGS
EXERCISE**

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: What is the function of ingredients in food for living things?
 Ans: The function of ingredients in food for living things are growth and health.
- Q2: How do plants prepare their food?
 Ans: Plants absorb sunlight to prepare their food.
- Q3: How light is useful for us?
 Ans: Light is useful for us to see things.
- Q4: Why light is necessary for plants?
 Ans: A light is necessary for plants to prepare food.
- Q5: How do children resemble to the parents?
 Ans: Fish and seagull lives in water habitat.

(b) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Food provides living things with ENERGY.
2. Plants absorb SUNLIGHT to prepare food.
3. Living things need OXYGEN gas to breathe.
4. Different kinds of MOVEMENT are found in animals.
5. Animals inherit these characteristics from their PARENT.

(c) **THICK THE RIGHT ANSWER.**

1. For the survival, all living things need of:
 - (a) Sweet Home
 - (b) Best Friends
 - ✓ (c) Food and Energy
2. Prepare their food themselves:
 - ✓ (a) Plants
 - (b) Human being
 - (c) Animals

3. Our body keeps quantity of water:
 (a) 50% to 60% ✓ (b) 60% to 70% (c) 60% to 75%
4. Many animals flitter on their hand legs as:
 (a) Tortoise ✓ (b) Frog (c) Cat

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

- All living things prepare their food themselves(x)
- Living things need oxygen gas to survive. (✓)
- Human body has 80% water. (x)
- Plants prepare their food in the sunlight. (✓)
- Changing process is called growth. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
All living things	Make movement
Necessary to breath	Swim
Children resembled are	Oxygen gas
Trees also	To their parents
Fishes in water	Eat food

Unit 5

BALANCED DIET

Exercise

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: Which thing is needed more in the food?
 Ans: Carbohydrate is needed more in the food.
- Q2: Why is protein necessary?
 Ans: Protein is necessary to maintain the breakage in our body.
- Q3: From which sources do we get fat?
 Ans: Fats are obtained from butter, ghee, milk and animals fats.
- Q4: In which things vitamin C is found?
 Ans: Vitamin-C is found in orange.
- Q5: What is meant by mineral?
 Ans: Mineral means those things which are obtained from earth such as edible salt.

(b) **THICK THE RIGHT ANSWER.**

- According to the characteristics food is divided into:
 (a) Four groups ✓ (b) Six groups (c) Eight groups
- Which ingredient is used mostly in our food:
 (a) Fat (b) Vitamin ✓ (c) Carbohydrate
- A normal man should drink water at least:
 (a) Two glasses ✓ (b) Two liters (c) Five liters
- If food lacks vitamin "C" would decay:
 (a) Hands (b) Frog ✓ (c) Teeth

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

- We get most of our **FOOD** from plants and animals.
- Our body needs a **BALANCED** diet to grow.
- Fat is **OBTAINED** from butter, ghee, milk, and animals.

4. CARBOHYDRATE is needed most in our food.
5. Vitamin CAPITALIZED in English.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Food has been divided into six groups. (✓)
2. Our body needs scant quantity our vitamin (✓)
3. We should drink water at least five liters (x)
4. Great quantity of carbohydrate is found in fruit too. (✓)
5. Of all consumable minerals is salt in our daily life. (x)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Carbohydrate	Tangelo, Orange, lemons
Proteins	Butter, ghee, animals fat
Fats	Suger, rice, different kinds of beans
Vitamin C	Edible salt
Of all consumable minerals	Meat, chicken, eggs

Unit 6

SOIL

Exercise

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: Which places are full with soil on earth?
 Ans: Plains and fields are full with soil on earth.
- Q2: Which soil is better for crops?
 Ans: Fertile soil is better for crops.
- Q3: What are characteristics of alluvial clay?
 Ans: Alluvial is the finest kind of clay. It has slimness. Due to slimness of particles it has strength.
- Q4: Which kind of land is in the forest?
 Ans: Fertile land is in the forest.
- Q5: How is soil formed?
 Ans: Soil is formed by the breakage of different kinds of hills.

(b) **THICK THE RIGHT ANSWER.**

4. Almost every part of the earth has:
 (b) Trees (b) Animals ✓(c) Soil
5. The clay which flows with rivers is:
 (a) Fertile ✓(b) Friable (c) Hill sand
6. Soil is mostly fertile in:
 (a) Mountainous areas(b) Deserts ✓(c) Rivers

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

6. Our life is incomplete without SOIL.
7. Due to its CHARACTERISTICS soil is of many kinds.
8. SOIL of rivers is very fertile.

9. We get to know the condition of soil through its

COLOUR

10. Clay is called **FINEST** kind of soil.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Soil is present almost in every part of the earth. (✓)
2. The Soil found on banks of rivers is barren. (x)
3. Alluvial is the finest kind of Soil. (✓)
4. Hill sand is used for making pots. (x)
5. Land in the forest is not mostly fertile. (x)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Characteristics of Soil	Alluvial clay
Soil has two	With breakage of hills
Soil comes into existence	Hill sand
Clay used in all construction	Main characters
Clay for making pots	Colour and formation

Unit 7

SOLAR SYSTEM

EXERCISE

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: What is sun made up of?

Ans: The sun is made of burning gases. These gases contain 75% hydrogen and 25% helium.

Q2: Why are stars not seen during day time?

Ans: Stars are not seen during day time because during day time they are hidden due to the sun reflection.

Q3: Which is the planet where life exists?

Ans: The earth is the only planet where life exists.

Q4: How do artificial planets useful to us?

Ans: Artificial planets send different kinds of pictures from the space to the earth. With the help of these picture it becomes relatively easy to know about the space.

Q5: What is difference between a star and planet?

Ans: Stars are stationary stars are giant ball of gases while planets orbit surrounding their stars. Plants are made up of hilly ball.

(b) **THICK THE RIGHT ANSWER.**

1. The word "Shams" is:

(a) Trees ✓ (b) Urdu (c) Persian

2. The number of planets in solar system is:

(a) Six ✓ (b) Eight (c) Ten

3. Stars shine:

(a) With own light (b) With reflection of other planets ✓ (c) With reflection of sunlight

4. There are two planes which do not have moon:

(a) Mars and Jupiter ✓ (b) Venus and Mercury (c) Saturn and Earth

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. The nearest planet is SUN.
2. There are EIGHT planets in solar system.
3. The number of planets in solar system is EIGHT now.
4. The planet EARTH all the time and orbits on its axis.
5. Countless stars make a group which is called GALAXY.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. The sun is a ball of the hottest burning gases.(✓)
2. In 2006 Pluto Planet was excluded from Solar System. (✓)
3. Apart from the earth life exists on Mars. (x)
4. The nearest planet to the sun is Jupiter. (x)
5. The earth has only one moon. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
The planets in Solar system are	25%
Planets always	In 2006
Quantity of helium gas in the sun	Eight
The earth has only	One Moon
Pluto was excluded	Revolve

Unit 8

HEAT ENERGY**EXERCISE**(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: For which living things heat is necessary?
 Ans: Heat is necessary for living things to maintain life.
- Q2: How do we get much food?
 Ans: We get much food by cooking.
- Q3: What happens if fire does not use carefully?
 Ans: If fire is not used carefully it can go out of control and it can harm instead of benefit.
- Q4: Which kind of energy get by rubbing hands?
 Ans: We get heat energy by rubbing hands.
- Q5: What food do fishes use in winter season?
 Ans: Fish use cholesterol in their bodies in winter season.

(b) **THICK THE RIGHT ANSWER.**

1. We mostly eat food:
 (a) Uncooked ✓ (b) Cooked (c) Half cooked
2. The energy obtained by sun is called:
 (a) Kinetic energy (b) Electricity ✓ (c) Solar Energy
3. To get energy on the earth, the cheapest fuel is:
 ✓ (a) Wood (b) Petrol (c) Kerosene
4. The name of instrument used to measure temperature is:
 (a) Barometer (b) Manometer ✓ (c) Thermometer

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Every living thing needs HEAT to survive.
2. During winter the temperature is very COLD in our country.

3. On the sunlight **CROPS** ripe.
4. Thermometer is a glass **HAS WHICH** mercury inside it.
5. Human temperature is **98.6** Celsius.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Heat is necessary for every living thing. (✓)
2. Food does not need heat at all. (x)
3. Paper can catch fire with sun rays. (x)
4. Thermometer is a plastic rod. (x)
5. All mammals' body temperature is remain same.(✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
We eat food	Wood
Energy receives from the sun	Cooking on fire
The cheapest fuel	Areas of equator
Human temperature	Solar energy
The greatest temperature	98.6 Fahrenheit

Unit 9

MACHINES

EXERCISE

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: Which are simple machines?

Ans: Lever, wedge, Inclined plane, wheel and axle, pulley and screw are simple machine.

Q2: How many kinds of pulley are?

Ans: There are two kinds of Pulley.

Q3: What work can we get from screw?

Ans: Screw is used to hold two things together.

Q4: In which machine, hook is used to lift things?

Ans: In Pulley, hook is used to lift things.

Q5: Which tool is used to cut any wood?

Ans: Axe is used to cut any wood.

(b) **THICK THE RIGHT ANSWER.**

1. Till today simple machines have been invented:

(a) Five ✓ (b) Six (c) Eight

2. With the help of lever:

(a) can be cut ✓ (b) Load can be lifted
(c) wood can be slashed

3. Knife, dagger and saw are example:

(a) Lever (b) Pulley ✓ (c) Wedge

4. With movable pulley load can be lifted:

(a) More than twice time (b) More than five times ✓ (c) More than ten times

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Everything which eases our work and helps us is called **MACHINE**.
2. Those simple machines which have been in human

use are 6 in number.

3. Lever is a simple machine consists on a BAR.
4. With the help of wedge we can CUT many things.
5. Doctors use a special kind of LEVER to bring out teeth.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Simple machines are difficult in use. (x)
2. With the help of lever heavy load can be lifted.(✓)
3. There are four kinds of pulley. (x)
4. With the help of chisel, we can cut the stems of trees. (✓)
5. Screw is used to join any two things together. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Lever	To lift load with the help of rope
Pulley	Carry load from one place to another place.
Wedge	To join two thing together.
Wheel	Machine like a bar
Screw	Machine for slashing or breaking

Unit 10

**SOUND
EXERCISE**

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: How do we hear sound?

Ans: We hear sound with the help of air.

Q2: What is meant by melodious sound?

Ans: The sound which makes pleasant effect is called melodious sound.

Q3: What sound is distasteful for the ears?

Ans: Loud sound is distasteful for the ears.

Q4: Which sound would be heard?

Ans: If the Vibration is far away from ears we hear low sound.

Q5: What is meant by resonance?

Ans: The repetition of sound from any source is called resonance.

(b) **THICK THE RIGHT ANSWER.**

1. Pitch of musical sound is:
(a) Low ✓ (b) High (c) Very high
2. The high pitch sound is for ears:
(a) Melodious ✓ (b) Harsh (c) Inaudible
3. Vibration is produced in flute:
✓(a) By kicking (b) By rubbing (c) By blowing
4. We can feel vibration:
(a) With help of loud-speaker
(b) By hearing sound ✓
(c) By remaining silent

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. When VIBRATION produces in something we hear sound.

2. There are some sound which are for the ears.
3. To hear different kinds of sounds, there is a special organ called **EAR**.
4. In evening during Ramadan **SIREN** is heard.
5. Double sound is called **RESONANCE**.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Sound is a kind of Energy (✓)
2. Low pitch sound is distasteful. (x)
3. Pitch of sound can be increased or decreased. (✓)
4. Vibration can be produced in a flute by kicking (x)
5. Those animals which have bigger ears can easily hear sound. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Sound is a kind of	With help of vibration
Sound is produced	Siren
Melodious voice	High pitch
Distasteful voice	Energy
Useful sound	Low pitch

Unit 11

ELECTRICITY

EXERCISE

(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

- Q1: What is meant by energy?
 Ans: Energy means the force which has ability to do something.
- Q2: Which electricity distributing departments are there in our country?
 Ans: Wapda and Hesco are department in our country which distribute electricity.
- Q3: What is meant by sparking of light?
 Ans: The sparking of light is called lighting.
- Q4: What is meant by conductor and insulator?
 Ans: Thing which conduct heat and electricity are called conductors. Things which do not conduct heat and electricity are called insulator.
- Q5: How is electricity generated by coal?
 Ans: When coal is burnt it produces heat. With this heat water is boiled to evaporate. With this steam, engines are operated to produce electricity.

(b) **THICK THE RIGHT ANSWER.**

1. Electricity generated with water is called:
 - (a) Hydro power ✓
 - (b) thermal power
 - (c) Electrical power
2. A thing in which electric current flows is called:
 - (a) Conductor ✓
 - (b) Crystal
 - (c) Insulator
3. Light sparks with:
 - ✓ (a) Moving charge
 - (b) static charge
 - (c) by positive charge
4. The name of scientist who invented the battery is:
 - (a) Electron Volta
 - (b) Pedro Volta
 - ✓ (c) Alessandro Volta

(c) **FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE**

1. Energy means the force which has ABILITY to do something.
2. Generation of electricity by petrol is too EXPENSIVE.
3. The electricity can be DANGEROUS for us if it is used carelessly.
4. Electricity travels by WIRES from one place another place.
5. The biggest means of generating electricity is COAL.

(d) **TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.**

1. Only one department distributes electricity in our country. (x)
2. If a naked wire of electricity is touched, it jolts shock. (✓)
3. Those things through which electrical current can pass are called conductors. (✓)
4. Electricity can pass through glass easily. (x)
5. Battery invented an Italian scientist. (✓)

(e) **MATCH THE COLUMNS:**

Column (A)	Column (B)
Electricity generated by water	Coal
Kinds of electricity are	Electrostatic charge
Lighting sparks with	Two
The biggest source of power generation	By petrol
Expensive electricity	Hydro power

Unit 12

USE OF MAGNET**EXERCISE**(a) **WRITE SHORT ANSWERS OF THE FOLLOWING QUESTION:**

Q1: How can nails be protected against rust?

Ans: The protect nails from getting rested, they are dipped in kerosene.

Q2: Why is magnet used in refrigerator doors?

Ans: The inner side of refrigerator door is magnetize. As a refrigerator is made of iron so that magnetic attraction keeps the door close, and the cooling does not seep.

Q3: How does electrical bell function?

Ans: In electrical bell, magnetism is created with help of electricity. This magnetism draws the hammer towards the bowl by this mechanism and electrical bell works.

Q4: What things are in an electrical bell?

Ans: There is small iron hammer and an iron bowl in an electrical ball.

Q5: If a magnet is hung freely where do its poles direct?

Ans: If a magnet is hung freely it directs towards north or south poles.

(b) **THICK THE RIGHT ANSWER.**

1. Magnet is used in refrigerator so that:

- (a) Door should remain close ✓
- (b) It should accumulate much ice
- (c) There should be much cooling

2. The biggest use of magnet is:

- (a) In drawing nails
- (b) In fridge
- (c) In electrical bell ✓

3. Magnet attracts:

- (a) Plastic things

✓(b) Iron things

(c) Wooden things

4. Through glass magnetic waves can pass:

(a) Easily ✓(b) Hardly (c) Never

(c) FILL IN THE BLANKS WITH RIGHT WORD OR PHRASE

1. To protect nails from getting rusted, they are dipped in KEROSENE.
2. The inside of refrigerator door is MAGNETIZED.
3. In electrical bell magnetism is created with the help of ELECTRICITY.
4. When the electrical circuit goes off, HAMMER comes to its position again.

(d) TICK (✓) THE TRUE AND (X) THE FALSE STATEMENT.

1. Magnet attracts everything towards itself. (x)
2. Fridge is need for every home now a days (✓)
3. An electrical bell has a hammer and a chisel.(x)
4. Arch can be made from magnet. (✓)

(e) MATCH THE COLUMNS:

Column (A)	Column (B)
Use of magnet in refrigerator	Can hardly pass
Magnet in electrical bell	In shape of thin plates
Poles of magnet	Electromagnet
Use of magnet in telephone	Inside of door
Magnetic waves through glass	Northward and southward