

Elements of Science - 3

1. Living and Non-living things

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Non-living things 2. living things 3. Movement
4. Grow 5. stomata

C. Match the following:

1. Mountain ————— (a) a hen
2. Woman ————— (b) non-living thing
3. All living things ————— (c) a calf
4. Cow ————— (d) living thing
5. Chick ————— (e) breathe

D. Write 'T' for true statements and 'F' for false statements.

1. F 2. T 3. T 4. F 5. T

E. Answer in a sentence or two.

1. Living things are things which have life in them.
2. Non-living things are things which have no life in them.
3. (i) Living things grow.
(ii) Living things feel.
(iii) Living things breathe.
4. (i) Non-living things can't feel.
(ii) Non-living things can't grow.
(iii) Non-living things can't breathe.

F. Answer briefly.

1. They are things which don't have any life in them.
2. (i) They need food and water.
(ii) They breathe.
(iii) They grow.
(iv) They feel.
(v) They reproduce.
3. We can show it with the help of the mimosa plant. Whenever someone touches it, the leaves of the mimosa plant get closed so they feel.
4. Animals move from one place to another in search of food and shelter.

Hots

A cat has thick fur on its body which protect it from cold. A cat can feel the warmth or coldness, so it is living thing.

2. Parts of a Plant

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. root 2. edible 3. stem 4. kitchen 5. photosynthesis

C. Match the following.

- | | | |
|------------|---|------------------------|
| 1. Stem | — | (a) produce seeds |
| 2. Fruits | — | (b) root |
| 3. Fibrous | — | (c) Edible stem |
| 4. Potato | — | (d) leaf |
| 5. Lettuce | — | (e) supports the plant |

D. Answer in a sentence or two.

1. It is the part of the plant that grows above the ground.
2. It is green because of the pigment chlorophyll present in the leaves.
3. The sweet fragrance and the bright colours of the flowers.

F. Answer briefly.

1. Plant has two parts · Root which grows below the ground and Shoot which grows above the ground.
2. This type of root is a main root having several hair-like roots like mango, neem etc.
3. Tap Root is a main root having several small hair-like roots while Fibrous Root is a group of roots growing from the end of the stem.
4. It supports the plant helping it to grow straight above the ground. It also carries water and minerals from roots to leaves. It stores food.
5. The flat part of leaf is called leaf blade. The leaf is attached to stem by stalk. The lines across the leaf are called veins.

Hots

No, it isn't possible as air is required for the seed to grow which is absent in our stomach.

3. Feeding Habits of Animals

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Squirrel 2. animals 3. Snake 4. Butterfly 5. plant

C. Match the following.

- | | | |
|-------------|---|-----------------------------------|
| 1. Cow | — | (a) laps up milk |
| 2. Dog | — | (b) sucks human blood |
| 3. Frog | — | (c) uses a long trunk for feeding |
| 4. Elephant | — | (d) chews the cud |
| 5. Mosquito | — | (e) swallows food as a whole |

D. Answer in a sentence or two.

1. They need food for energy to grow and stay healthy.
2. They eat both plants and the flesh of other animal like Bear, Crow.
3. They decay and decompose the remains of dead plants and animals like fungi and bacteria.

E. Answer briefly.

1. It happen when herbivores chew food a little and swallow them and later they bring them back to their mouth and chew them for hours.
2. They have sharp, strong and broad teeth in front of the mouth to bite off the leaves and grass.

3. Leeches have a circular mouth with toothed jaws for sticking onto the skin of humans and animals.

Butterflies have a long, thin tube to suck nectar into their mouth.

Hots

1. It is because of the types of teeth found in them. Lion has sharp, long and curved teeth while snakes don't have any teeth.
2. If all plants die, then ultimately all living things will die.

4. Birds

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. fly 2. oar 3. crane 4. sharp 5. duck

C. Match the following.

- | | | |
|------------|---|-------------------------|
| 1. Duck | — | (a) long and thin legs |
| 2. Crane | — | (b) broad and flat beak |
| 3. Sparrow | — | (c) hooked beak |
| 4. Hawk | — | (d) short and hard beak |

D. Write 'T' for true statements and 'F' for false statements.

1. T 2. T 3. T 4. T

E. Answer in a sentence or two.

1. They are called flight muscles.
2. Hen.
3. They have wading feet.
4. They have 4 claws · 2 in front and 2 at the back.

F. Answer briefly.

1. They fly because of their wings and their light weight body.
2. These broad and flat beaks have holes in them from which water flows out ensuring that the little plants and the insects stay inside the beak as food.
3. A hoopoe bird has a curved, long and slender beak to pull insects from holes in ground.
4. A bird needs a home to be safe from enemies and bad weather. It makes its nest using straw, grass, twigs, feathers, paper, cotton, wool, mud and leaves.

Hots

It is because different birds have different food habits.

5. Housing and Clothing

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. villages 2. very strong 3. clean 4. fibres 5. cold

C. Match the following.

- | | | |
|-------------|---|---------------------|
| 1. Window | — | (a) silk |
| 2. Wool | — | (b) summer |
| 3. Raincoat | — | (c) let sunlight in |
| 4. Cotton | — | (d) during rains |
| 5. Cocoons | — | (e) sheep |

D. Answer in a sentence or two.

1. We should sweep and mop the floor regularly.
2. Thy protect our body from the heat of the sun, rain, cold, dust etc.
3. They are materials that are used to make cloth.

E. Answer briefly.

1. It should have plenty of fresh air and sunlight. it should have doors and windows to let in fresh air and sunlight. There should be an open space such as a veranda.
2. (i) Every thing should be kept in their proper places.
(ii) The floor should be kept and mopped every day.
(iii) There should be curtains for doors and windows.
(iv) Household wastes should be thrown into dustbins.
3. Natural fibres are fibres obtained from plants and animals like cotton, jute, wool and silk.
Man-made fibres are fibres manufactured by human beings like nylon and polyester.
4. In the rainy season, we should wear clothes of waterproof materials as they do not absorb water and dry up quickly.

Hots

Summan will get as woollen clothes absorb water quickly.

6. Safety and First-Aid

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. physical 2. accident 3. sharp 4. run 5. sharpener

C. Match the following.

- | | | |
|--------------|---|----------------------|
| 1. Wet hands | — | (a) First-aid box |
| 2. Subway | — | (b) Electric shock |
| 3. Cotton | — | (c) Sharp object |
| 4. Knife | — | (d) Underground path |

D. Write 'T' for true statements and 'F' for false statements.

1. T 2. F 3. T 4. F 5. F

E. Answer in a sentence or two.

1. They happen due to our carelessness.
2. It is an immediate help given to the injured person.
3. Dettol, band-aid, bandage, cotton.

F. Answer briefly.

1. We should be careful to avoid accidents as accidents may cause physical injury which can be dangerous.

2. We shouldn't play with electrical gadgets because we may get an electric shock and get injured.
3. We should cross the road at a zebra crossing only and look on both sides before crossing.
4. We should not leave our toys on the floor because someone can get hurt by toppling over them.
5. (i) we should not panic.
(ii) We should not crowd near the injured person.
(iii) we must call a doctor or elders immediately.

Hots

1. To save the head from any injuries in case of an accident.
2. Because in subways, there are no vehicles.

7. Our Body





A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Cells 2. sense organs 3. skeletal system
4. respiration 5. Digestive

C. Match the following.

- | | | | |
|-----------------------|---|-----|---|
| 1. Nervous system | — | (a) |  |
| 2. Digestive system | — | (b) |  |
| 3. Circulatory system | — | (c) |  |
| 4. Respiratory system | — | (d) |  |

D. Write 'T' for true statements and 'F' for false statements.

1. T 2. T 3. F 4. T 5. T

E. Answer in a sentence or two.

1. It is the building block of our body.
2. It is a group of cells performing similar function.
3. There are five sense organs.
4. There are 206 bones in the body.

F. Answer briefly.

1. The human body is made up of tiny units called cells which are the structural and functional unit of our body.
2. Sense organs connect us to the surroundings like eyes, ears, nose, tongue and skin. These organs help us to see, hear, smell, taste and feel.

3. In this system, the mouth chews the food and sends it to the stomach where it is mixed with digestive juices which break down the food into simpler substances. Then, the food goes into the small intestine for further digestion. The digested substances go into blood and reach all parts of the body.
4. In this system, the heart acts like a pump. It pushes the blood to different parts of our body through small and large blood vessels. Oxygen and other nutrients are carried by pure blood to different parts of our body.
5. Undigested food goes into the large intestine which sends the undigested food out of our body through the anus.

Hots

Then it would difficult for us to play, work or grow.

8. Food and Health

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. body 2. healthy 3. cereals 4. more 5. uncovered

C. Match the following.

- | | | |
|-----------------------|---|---------------------------|
| 1. Energy giving food | — | (a) fruits and vegetables |
| 2. Body-building food | — | (b) diseases |
| 3. Protective food | — | (c) cake and sugar |
| 4. Germs | — | (d) pulses |

D. Write 'T' for true statements and 'F' for false statements.

1. F 2. T 3. T 4. F 5. T

E. Answer in a sentence or two.

1. Because it gives us energy to move, to work, to study and to play.
2. We need energy to keep our body active.
3. A complete food is a food which provides energy, helps in growth and keeps the body healthy.

F. Answer briefly.

1. Banana and apple are two food items that help to keep us healthy.
2. Protective food is a food which prevents us from falling sick frequently.
3. Milk is called a complete food as it provides energy, helps in growth and keeps the body healthy.
4. Some food items are cooked as it makes the food softer and easy to digest.

Hots

Vegetables fall under the category of protective food.

9. Air, Water and Weather

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Oxygen 2. water vapour 3. hot 4. storm

C. Match the following.

1. Umbrellas and raincoats — (a) gale
2. Clouds gather up — (b) rainy day
3. Sun shines brightly — (c) cloudy day
4. Strong wind — (d) sunny day

D. Write 'T' for true statements and 'F' for false statements.

1. T 2. T 3. T 4. F 5. F

E. Answer in a sentence or two.

1. It contains gases, water vapour, dust, smoke and germs.
2. Breeze is a gentle wind while Storm is a strong and noisy wind.
3. Weather is of 5 types - Hot, Cold, Cloudy, Windy and Rainy.

F. Answer briefly.

1. It is the continuous movement of water between land, water bodies and air is called water cycle.
2. Weather affects our daily life as we depend on it to choose what to wear, what to eat and what to do.
3. The five main seasons are summer, winter, monsoon, autumn and spring. In summer, it is very hot and hot winds blow. In winter, it is very cold and sometimes snowfall is received. In the monsoon season, it rains heavily. In autumn, trees shed their leaves. The flowers are in full bloom during spring.

Hots

1. Cloudy days are cooler than sunny days as the wind which blows is cooler than in summer.
2. We wear light coloured clothes on sunny days as they reflect heat and keep us warm.

10. Our Universe

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. third 2. orbit 3. 24 4. orange 5. $29\frac{1}{2}$

C. Match the following.

1. Constellation — (a) fixed position in the sky
2. Pole star — (b) day and night
3. Amavasya — (c) saptarishi
4. Top most layer of earth — (d) no moon
5. Rotation — (e) crust

D. Write 'T' for true statements and 'F' for false statements.

1. T 2. F 3. T 4. T 5. T

E. Answer in a sentence or two.

1. It is the fixed path taken by planets to go around the sun.
2. It is a heavenly object which moves around a planet.
3. It is a group of stars in a familiar pattern.

F. Answer briefly.

1. We notice that when a ship sails into the sea, its lower part disappears from our sight first and the top part of the flag can be seen till the last.
2. The crust is the outermost layer of the earth. the core is the centre of the earth which is made up of liquid metals and is very hot. The mantle is very hard and is made up of molten rocks.
3. Mercury, venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.
4. The earth spins around the sun from west to east direction. The past of the earth facing the sun has day and the other part away from the sun has night.
5. Crescent moon, Half moon, Full moon and Gibbous moon are the different stages of the moon.

Hots

It is because they are very far from the earth as compared to the sun and the moon.

11. Solids, Liquids and Gases

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Solids 2. Liquids 3. Milk 4. gas 5. solid

C. Match the following.

1. Oxygen ——— (a) Solid
2. Pencil ——— (b) Form of water
3. Milk ——— (c) gas
4. Ice ——— (d) Liquid

D. Write 'T' for true statements and 'F' for false statements.

1. F 2. F 3. F 4. T 5. F

E. Answer in a sentence or two.

1. They have fixed shape and size.
2. They have fixed volume but not fixed shape.
3. They have neither fixed volume nor fixed shape.
4. A block of ice changes into water on melting.

F. Answer briefly.

1. Solid has a fixed shape and occupies fixed space. Liquid has no fixed shape but occupies a fixed space. Gas has no fixed shape and does not occupies a fixed space.
2. Melting is the process of change of solid into liquid while Freezing is the process of change of liquid into solid.
3. Evaporation is the change of liquid into gas on heating while condensation is the change of gas into liquid on cooling.

4. When ice is heated, it melts to form water. When water vapour is cooled, it condenses to form water.

G. Look at the pictures and fill in the blanks.



Process is known as **Condensation**.

Hots

1. The particles of the perfume intermixes with the air. As the rate of diffusion is very high in gases, they spread throughout the room in very less time.
2. Water droplets form on the outer surface of the container containing a cold substance due to Condensation. The temperature of the container is cold enough to cool down the water vapour in the surrounding air, so it turns from gaseous to liquid state.

12. Light, shadow, Force and Sound

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. non-luminous 2. ears 3. force
4. shape 5. sound

C. Write 'T' for true statements and 'F' for false statements.

1. F 2. F 3. T 4. F 5. F

D. Answer in a sentence or two.

1. Noise is a loud and unpleasant sound.
2. They are objects which give us light.
3. Source of Light, object and wall.

F. Answer briefly.

1. Luminous object are objects which give out light while non-luminous objects are objects which don't give out any light.
2. A shadow is formed when something comes in the way of light. It is always formed in the opposite direction of light.
3. We can move objects by pushing or pulling them. we can also stop moving objects or change their direction by using force.
4. A sound is whatever we hear. Like the honking of vehicles, mobile ring tones, chirping of birds etc.
5. Pleasant sounds are sounds which are pleasant and make us feel happy like chirping of birds. Unpleasant sounds are sounds which are very loud and irritate us.

Hots

1. She will have to take an object and place it under a light.
2. Rubber ball which elongates on hitting the ground.

13. Rocks and Soil

A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. Rocks 2. Soil 3. Clay 4. Loamy 5. Nutrients

C. Match the following.

- | | |
|---------------------------------------|--------------------------------|
| 1. Remains of dead plants and animals | (a) water present in the soil |
| 2. Loamy | (b) fertile soil |
| 3. Moisture | (c) live inside the soil |
| 4. Soil rich in nutrients | (d) form humus |
| 5. Earthworms | (e) suitable for growing crops |

D. Write 'T' for true statements and 'F' for false statements.

1. F 2. T 3. F 4. F 5. T

E. Answer in a sentence or two.

- It refers to the topmost layer of the earth.
- They are- humus, muddy water, clay, sand and gravel.
- It is a mixture of clay and sand.

F. Answer briefly.

- Soil is important for the growth of plants. It gives them water and minerals which are like food for plants.
- Rocks crack and break up into smaller pieces due to the action of Rain, sun's heat, wind and ice. The smaller pieces keep breaking down till a powdery mass is formed which is soil.
- It is good for growing plants as it is a mixture of clay and sand and has enough air for the plants to breathe. It also is rich in humus.
- Soil is of 3 types, , sandy soil, clayey soil and Loamy soil.

Hots

- They add cow dung to the soil to make it fertile as it is a manure.
- Dirt is simply the small fine particles of rocks while soil refers to those small particles of rocks which have air, water and humus in them.

14. Measurement





A. Tick (✓) the correct answers.

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

B. Fill in the blanks with the help of given words.

1. metre 2. kilogram 3. 37 4. 12 5. litre

C. Match the following.

- | | |
|--|--------------|
| 1.  | (a) time |
| 2.  | (b) capacity |
| 3.  | (c) mass |
| 4.  | (d) length |

D. Write 'T' for true statements and 'F' for false statements.

1. F 2. T 3. T 4. F 5. T

E. Answer in a sentence or two.

1. It is the amount of liquid, a container can hold.
2. They show the hours and minutes.
3. kilogram.

F. Answer briefly.

1. We measure length in metres using scale, metre-rod and inch tape.
2. It is the amount of liquid, a container can hold. We measure the liquid objects in litres.
3. It is the degree of hotness or coldness of a body or environment.
4. It is the period between two events or activities. We measure time in seconds, minutes, hours etc.

Hots

We need measurement in our daily life to do things in a systematic manner and avoid any inconvenience.

Model Test Paper - 1.

A. Multiple choice questions.

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

B. Write T for true and F for false statements.

1. T 2. F 3. T 4. T

C. Fill in the blanks.

1. Stem 2. eat 3. teeth 4. fibres

D. Match the following.

- | | | |
|-----------------|-------|--------------------|
| 1. Mimosa Plant | _____ | a. Decomposer |
| 2. Stem | _____ | b. Synthetic fibre |
| 3. Bacteria | _____ | c. Touch me not |
| 4. Pigeon | _____ | d. shoot |
| 5. Polyester | _____ | e. Perching bird |

E. Answer the following questions

1. (i) Non-living things can't feel.
(ii) Non-living things can't grow.
(iii) Non-living things can't breathe.
2. It fix the plant firmly in the soil.
It absorbs water and minerals from the soil which is needed by the plants to prepare food.
3. It is the chain formed when plants are eaten by animals and these animals are eaten by other big animals.
4. It is the temporary relief given to the injured person before the arrival of the doctor.
5. It is formed of the brain, spinal cord and the nerves. They work in tandem and control all the actions of the body. They also send and recieve signals and information all over the body.

Model Test Paper - 2.

A. Multiple choice questions.

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

B. Fill in the blanks.

1. Luminous 2. long 3. soil 4. Humus 5. length

C. Match the following.

- | | | |
|-------------------|---|-------------------|
| 1. Energy | — | a. strong wind |
| 2. Carbon dioxide | — | b. Group of stars |
| 3. Gale | — | c. Frozen water |
| 4. Constellation | — | d. physical work |
| 5. Ice | — | e. Breathe out |

E. Answer the following questions

1. It is the dark image of something.
It is formed when something comes in the way of light.
2. **Clayey soil** is the soil which contains mostly clay particles. It is generally found in riverbeds.
Sandy soil is the soil which contains a lot of sandy particles. It is found in seashores and deserts.
Loamy soil is the soil which is a mixture of both clay and sand. It is rich in humus.
3. It is the quantity of liquid which a vessel can hold. Liquid objects are measured in millilitres and litres.
4. They need more body - building food than adults because most of the body's growth happens in the childhood.
5. The cycle of processes by which water moves between Earth's oceans, atmosphere, and land, precipitation as rain and snow, runoff in streams and rivers, and returning to the atmosphere by evaporation and transpiration.