

Teacher's Manual

Science



Chapter 1 : Types of Plants

- A.** 1. (b) 2.(c) 3.(a) 4.(b)
- B.** 1. big 2. climbers 3. leaf 4. roots 5. seed
- C.** 1. F 2. T 3. F 4. T 5. T
- D.** 1. (ii) 2. (iii) 3. (i) 4. (iv)
- E.** 1. Mango – Banyan 2. Rose – Tulsi 3. Mint – Coriander
4. Grapevine – Moneyplant 5. Pumpkin – Watermelon 6. Lotus – Seaweed
- F.** 1. Roots give support to the plant and absorb water and minerals from the soil and send them to the different parts of the plant.
2. Stem helps plant to stand straight and carries water and food to all other parts of the plant.
3. Leaves make food for plant.
4. One of the main function of a fruit is to spread the seeds and allow the plant to reproduce.
5. Seed is the basic part of a plant from which a baby plant grows.
- G.** 1. Plants that are smaller than trees are called shrubs. Plants that are small and weak are called herbs.
2. Big, tall and strong plants are called trees.
3. Plants that have a weak stem and need support to grow are called climbers. But plants that have weak stems and grow along the ground are called creepers.
4. The petiole is the part of the leaf that joins it to a stem or branch.
5. Seeds are found inside the fruits.

Chapter 2 : Useful Plants

- A.** 1. (c) 2.(b) 3.(b) 4.(a) 5.(b)
- B.** 1. food 2. many things 3. flavour, taste 4. seeds 5. fresh
- C.** 1. T 2. F 3. T 4. F
- D.** 1. (v) 2. (iv) 3. (i) 4. (iii) 5. (ii)
- E.** 1. Sunflower, Mustard 2. Turmeric, Black pepper 3. Tulsi, Neem
4. Tea plant, Coffee plant 5. Cotton plant, Jute plant
- F.** 1. Sugarcane stem 2. Cotton plant 3. Bamboo plant 4. Rose and jasmine
- G.** 1. Because they give us many useful things.
2. Jute and cotton.

3. The seeds of the plants are eaten as cereals and pulses.
4. We can make furniture, boats, papers, pencils, doors, etc. from the wood of plants.
5. We need spices for special flavour and taste to our food.

Chapter 3 : Useful Animals

- A.** 1. (c) 2. (b) 3. (c) 4. (c)
- B.** 1. cheese 2. leather 3. pet 4. candles 5. Horse
- C.** 1. T 2. T 3. T 4. F 5. T
- D.** 1. (iii) 2. (iv) 3. (v) 4. (ii) 5. (i) 6. (vii) 7. (vi)
- E.** 1. Hen, Duck 2. Buffalo, Crocodile 3. Dog, Cat
- F.** 1. Domestic animals live on farms or in homes.
 2. Elephants, camels, donkeys, horses, yaks, etc. are called beasts of burden.
 3. Dogs, cats and rabbits.
 4. Domestic animals are used as working animals. Animals such as oxen help us to draw water from wells and to plough the fields. The dung of animals like cows, buffaloes, horses and camels is used as manure for crops.

Let's Have Fun :

H	O	N	E	Y	B	E	E	S
E	B	U	F	F	A	L	O	I
N	T	Z	W	X	Y	O	P	L
I	S	N	A	K	E	M	N	K
J	H	Q	T	M	Q	C	O	W
P	E	W	O	S	P	N	L	O
O	E	E	L	X	S	D	Z	R
N	P	R	W	P	S	L	N	M
M	S	Y	U	O	I	P	U	C
A	S	D	F	J	K	L	Z	X

Chapter 4 : Wild Animals

- A.** 1. (b) 2. (b) 3. (a) 4. (c) 5. (b)
- B.** 1. land, water 2. Scavengers 3. Fish 4. Panda, tiger 5. rest
- C.** 1. (iv) 2. (iii) 3. (v) 4. (ii) 5. (i)
- D.** 1. T 2. T 3. T 4. T 5. F
- E.** 1. Giraffe, Elephant 2. Lion, Tiger 3. Crow, Bear 4. Jackal, Vulture
- F.** 1. Some animals eat only plants, grass, leaves and fruits. They are called herbivores.
 2. Some animals kill other animals and eat their flesh. They are called carnivores.

3. Some animals like to eat both plants as well as flesh. They are called omnivores.
 4. Some animals feed on the flesh of dead and decaying animals. They are called scavengers.
- G.**
1. Animals that live in forest are called wild animals. Lion and tiger.
 2. Lion and fox live in forest.
 3. Scavengers help in maintaining the cleanliness of the forest.
 4. The animals that may be extinct soon are called endangered animals. Tiger, panda and rhinoceros.
 5. People kill the wild animals because they can get meat, and some of the animals skins, bones and other parts like elephant's teeth are very costly.

Let's Have Fun :

A	F	S	N	A	K	E	L
L	K	G	H	F	R	O	G
T	C	M	L	I	O	N	K
U	O	Z	P	W	O	L	F
R	W	Y	B	E	A	R	P
M	C	R	O	W	H	A	U
P	S	G	H	O	R	S	E
D	E	E	R	T	V	G	S

Chapter 5 : Bones and Muscles

- A.** 1. (c) 2. (c) 3. (c) 4. (b)
- B.** 1. shape 2. 206 3. food, exercise 4. Walking, swimming
- C.** 1. T 2. T 3. F 4. T
- D.** 1. (iv) 2. (iii) 3. (i) 4. (ii)
- E.**
1. It helps us to think and remember. It controls the whole body.
 2. Lungs help us to breathe.
 3. It pumps the blood to all parts of the body.
 4. It helps in digestion of food.
- F.**
1. The bones in our body form a framework. This framework of bones is called the skeleton. It gives shape and support to our body. Without the skeleton, we would not be able to stand straight.
 2. Bones shape our body and help us to stand up straight. They protect our delicate organs.
 3. Skeleton protects our brain, heart and lungs.
 4. With joints we can bend our body.

Let's Have Fun :

A	T	U	G	H	M	S	T	I
C	L	E	G	S	B	A	L	U
L	T	P	E	A	R	B	U	O
M	O	G	S	G	A	R	N	P
P	N	O	S	E	I	U	G	Q
Q	G	K	H	T	N	T	S	R
R	U	H	E	E	Y	E	S	G
Z	E	I	A	P	X	W	N	H
N	Y	L	R	T	U	V	P	I
E	E	M	T	K	L	M	O	J

Chapter 6 : Keeping Safe

- A.** 1. (c) 2. (a) 3. (a) 4. (c) 5. (c)
- B.** 1. talk 2. socket 3. sharp 4. medicines 5. zebra crossing
- C.** 1. F 2. T 3. F 4. T 5. T 6. F
- D.** 1. (v) 2. (iv) 3. (i) 4. (ii) 5. (iii)
- E.** 1. Doctor 2. Police 3. Traffic police 4. Swimming instructor 5. Fire man
- F.** 1. We should follow the safety rules because we can protect ourselves from accidents and injuries.
2. Safety rules mean protecting oneself from any harm.
3. Safety at home : (i) Do not play with sharp objects.
(ii) Do not touch electric plugs and wires.
Safety at school : (i) Do not run in corridors or on the stairs.
(ii) Do not stand or jump on desks and chairs.
4. We should not leave our toys on the floor because it may hurt someone very badly.
5. The immediate help given to an injured person before a doctor arrives is called first aid.

Model Test Paper - 1

- A.** 1. (a) 2. (c) 3. (c) 4. (b)
- B.** 1. T 2. F 3. T 4. T
- C.** 1. shape 2. 206 3. food, exercise 4. Walking, swimming
- D.** 1. Plants that have a weak stem and need support to grow are called climbers. But plants that have weak stems and grow along the ground are called creepers.
2. Because they give us many useful things.
3. Domestic animals are used as working animals. Animals such as oxen help us to draw water from wells and to plough the fields. The dung of animals like cows, buffaloes, horses and camels is used as manure for crops.

4. Scavengers help in maintaining the cleanliness of the forest.
- E.**
1. It helps us to think and remember. It controls the whole body.
 2. Lungs help us to breathe.
 3. It pumps the blood to all parts of the body.
 4. It helps in digestion of food.

Chapter 7 : Our Food

- A.** 1. (a) 2. (a) 3. (a) 4. (c)
- B.** 1. Food 2. grow, bones 3. Water 4. slowly, chew
5. Energy-giving 6. uncovered
- C.** 1. F 2. T 3. F 4. F 5. T 6. T
- D.** 1. (iv) 2. (i) 3. (v) 4. (ii) 5. (iii)
- E.** 1. Milk, Eggs 2. Fruits, Dry fruits 3. Wheat, Rice
- F.**
1. All living things need food to survive. Food gives us energy and helps us to grow and be healthy.
 2. Food items that help us to grow and build our bones and muscles strong are called body-building food.
 3. Vegetarians eat only plants and plants products. Non-vegetarians cook and eat meat of animals.
 4. Water carries food around the body. It helps to throw out wastes from the body.
 5. Meal is the food we eat at a fixed time everyday. We eat three main meals in a day. They are breakfast, lunch and dinner.

Let's Have Fun :

Food	Raw	Cooked	Both
Onion	✓	✓	✗
Pineapple	✓	✗	✗
Potato	✗	✓	✗
Meat	✗	✓	✗
Carrot	✓	✓	✓
Cucumber	✓	✓	✓
Tomato	✓	✓	✓

Chapter 8 : Housing and Clothing

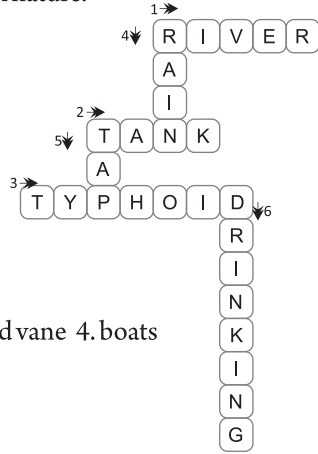
- A.** 1. (a) 2. (b) 3. (b) 4. (c) 5. (b)
- B.** 1. towns, cities 2. Eskimos 3. animal skin 4. heat, cold, dust
- C.** 1. F 2. F 3. F 4. T 5. F
- D.** 1. (iii) 2. (ii) 3. (iv) 4. (i) 5. (v)
- E.** 1. It is made on long pieces of wood or metal. Water cannot enter or wash away these houses as they are high above the ground.
2. It is a house on wheels. It can be easily taken from one place to another.
3. Wooden houses made on boats are called houseboats.
4. An igloo is a house built from thick ice sheets.
- F.** 1. Because woollen clothes do not let cold air pass through them. They keep us warm.
2. Because stilt houses are high above the ground. Water cannot enter or wash away these houses.
- G.** 1. House is a place, where we live safely. It protects us from heat, cold, rain and wind.
2. The kuchcha houses made of mud, straw and bamboo.
3. People living in hilly areas make houses with sloping roofs because snow and water can slide down easily.
4. Wooden houses made on boats are called houseboats.
5. We wear cotton clothes in summer because they absorb sweat from our body and keep us cool on a hot day.

Chapter 9 : Water

- A.** 1. (a) 2. (c) 3. (c) 4. (c) 5. (c) 6. (a)
- B.** 1. tap 2. closed 3. waste 4. steam 5. rain 6. steam 7. Sun 8. Ice
- C.** 1. (iii) 2. (iv) 3. (ii) 4. (i) 5. (vii) 6. (v) 7. (vi)
- D.** 1. F 2. F 3. T 4. T 5. T
- E.** 1. Evaporation 2. Freezing 3. Melting 4. Condensation
- F.** 1. Plants need water for process of making food and to grow.
2. Human beings need water for various activities like drinking, bathing, cleaning, washing clothes, cooking food, etc.
3. (i) Rain water can be collected and used for watering plants, cleaning cars and floors.
(ii) We should not waste water while bathing or washing.
4. (i) Never throw garbage and left over in a source of water.
(ii) Do not bath or wash clothes in a source of water.

5. Three forms of water are Solid, liquids and gases.
6. Water on boiling changes into steam. Steam is also called water vapour.
7. Water cycle is a continuous process in nature.

Let's Have Fun :



Chapter 10 : Air

- A.** 1. (c) 2. (c) 3. (a) 4. (c) 5. (b)
- B.** 1. water vapour 2. dust particles 3. wind vane 4. boats
- C.** 1. T 2. F 3. T 4. F 5. T 6. T
- D.** 1. (iv) 2. (iii) 3. (i) 4. (v) 5. (ii)
- E.** 1. Moving air is called wind.
2. We can know the direction of wind with the help of a wind vane. A wind vane is fixed high up on a building.
- F.** 1. All living things need air for breathing.
2. Impure air is called polluted air.
3. We should plant more trees because plants take in carbon dioxide and give out oxygen.
4. When wind blows gently, it is called breeze.
5. The strong and fast wind are called storms. They can cause damage to houses, crops, trees and animals.

Chapter 11 : Weather and Season

- A.** 1. (b) 2. (c) 3. (a) 4. (b) 5. (a) 6. (c)
- B.** 1. direct 2. Rain 3. spring 4. summer 5. shed
- C.** 1. T 2. F 3. T 4. T 5. F
- D.** 1. (i) 2. (ii) 3. (iii) 4. (iv)
- E.** 1. Rainy day 2. Hot day 3. Cold day 4. Cold day
- F.** 1. We carry umbrellas or wear raincoats to protect ourselves in the rain.
2. We can keep ourselves cool by wearing loose, light-coloured cotton clothes. We should drink plenty of water.
3. The Sun shines directly over us during summer. This makes the air warm.
4. The Sun, wind, clouds and rain bring changes in the weather.

Chapter 12 : Rocks and Minerals

- A.** 1. (a) 2. (a) 3. (c)
- B.** 1. rocks 2. marble 3. graphite 4. gemstone 5. Coal

- C.** 1. (iii) 2. (iv) 3. (ii) 4. (i)
- D.** 1. Marble and sandstone 2. Coal and chalk 3. Diamond and gold
4. Ruby and emerald
- E.** 1. Rocks are found on the surface of the Earth, under the ground and also below the sea.
2. Hills and mountains are made of rocks. We see many different kinds of rocks around us.
3. Granite is used to make floors and kitchen slabs.
4. Diamond is used for cutting the glass.
5. Coal is used mainly as fuel.

Chapter 13 : Light and Shadow

- A.** 1. (c) 2. (a) 3. (a) 4. (a) 5. (a)
- B.** 1. kill 2. opposite 3. things 4. morning, evening 5. noon
- C.** 1. F 2. T 3. T 4. F
- D.** 1. (v) 2. (iv) 3. (ii) 4. (i) 5. (iii)
- E.** 1. The Earth spins like a top. This movement of the Earth is called rotation.
2. A sundial is an instrument that tells the time like a clock.
- F.** 1. Sun gives us heat and light. The Sun makes life possible on Earth.
2. A shadow is a region of darkness, where light is blocked. When you walk in the light a dark patch on the ground follows you. This dark patch is called a shadow.
3. The colour of the shadow does not change with the colours of the clothes.
4. Shadow is formed when an opaque object is placed in the path of light rays.

Model Test Paper - 2

- A.** 1. (a) 2. (b) 3. (a) 4. (c)
- B.** 1. F 2. F 3. T 4. F
- C.** 1. opposite 2. things 3. morning, evening 4. noon
- D.** 1. Meal is the food we eat at a fixed time everyday. We eat three main meals in a day. They are breakfast, lunch and dinner.
2. Wooden houses made on boats are called houseboats.
3. Water cycle is a continuous process in nature.
4. When wind blows gently, it is called breeze.
5. Diamond is used for cutting the glass.
- E.** 1. Marble and sandstone 2. Coal and chalk 3. Diamond and gold
4. Ruby and emerald