

**Key to**  
**LIGHT WEIGHT**  
**SERIES**

## Environmental Studies

Book - I to IV

STD - III

**Teacher's Copy**

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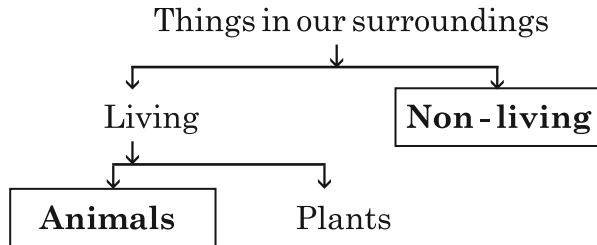
## CONTENTS

Sr. No.	Chapter Name	Pg. No.
	<b>Book - I</b>	
1.	Our Environment	3
2.	So many kinds of animals !	4
3.	Animal Shelters	6
4.	Directions and Maps	8
5.	Understanding Time	9
6.	Getting to Know the Place we Live in	10
	<b>Book - II</b>	
7.	Our Village, Our City	12
8.	Our Need for Water	14
9.	Where does water come from?	15
10.	More about Water	16
11.	Our Need for Air	17
12.	Our Need for Food	18
	<b>Book - III</b>	
13.	Our Diet	20
14.	Inside the Kitchen!	22
15.	Our Body	23
16.	Sensory Organs	24
17.	Pearly Teeth, Healthy Body	27
18.	My Family and Home	28
19.	My School	30
	<b>Book - IV</b>	
20.	Our Community Life	32
21.	Public Services for Community Life	33
22.	Who fulfils our needs?	34
23.	Growing Up and Growing Old	37
24.	Our Clothes	38
25.	Changes in our Surroundings	39
26.	As we Go from the Third to the Fourth Standard	40

**1. Our Environment**

**F.A.**

1. (a) non-living (b) non-living (c) sparrow, pigeon, crow (d) stone lamp, stone grinder, stone necklace
2. (a) True (b) False (c) True
3. (a) The unused pages can be binded together and used as rough book or for some activity purpose.
4. A spider weaves a web to protect itself from its enemies.
5. (a) changes (b) cloth (c) fall off
7. Things in our surroundings



**S.A.**

1. (a) Cotton is used to weave cloth, and make cotton buds to clean ears.  
 (b) Chappals are made of leather, wood, rubber, etc.  
 (c) The sparrow will fly off with fear, if there is a loud noise nearby. The stone will remain unaffected since it is a non-living thing.  
 (d) The house lizard eats insects.  
 (e) Dining table, sofa set, TV showcase.  
 (f) The animals that feed on mice are snake, cats, mongoose, weasels, etc.
2. (a) We get cotton, wool, silk, fruits, vegetable, etc. from our environment. We build houses using clay, stone and wood. We get these materials from the

environment.

(b) The seeds of some plants are scattered by the wind. As a result, seedlings of those plants grow in new places. Thus, plants, too get help from the environment.

(c) Remains of dead animals decay and mix with the soil. Leaves fall off from trees. They too rot and get mixed in the soil. This makes the soil fertile.

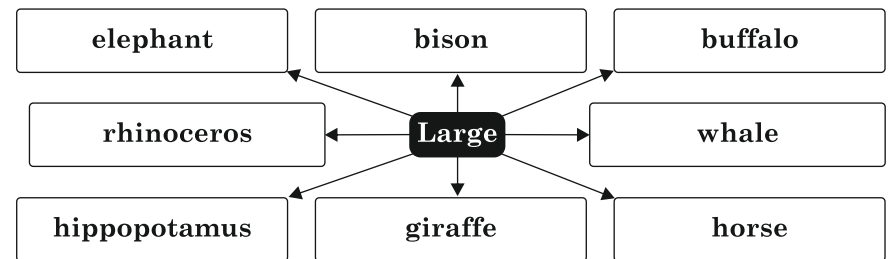
3. Water and air are a part of the environment. All living things need them. Living things also need food. They get their food from the environment, whatever living things need to survive, they get from their environment. Birds build nests. They need cotton, twigs and thread to build them. They get these things from the environment.

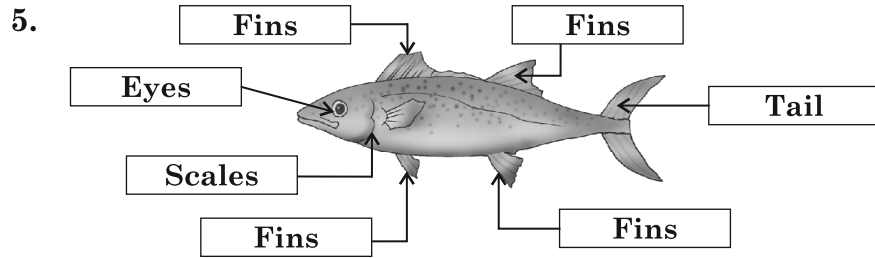
**2. So many kinds of animals !**

**F.A.**

1. (a) birds - sparrow, crow (b) fishes (c) bear, mouse (d) peacock (e) elephant (f) ant (g) spider (h) tiger, zebra, giraffe (i) elephant (j) deer
2. (a) In the sky. (b) In the water. (c) On the land.
3. (a) the cat (b) owl (c) the monitor lizard (ghorpad)

4.





6. There should not be water collection in the environment and also pesticides should be sprayed on regular basis to avoid their growth.
7. black, green, colours, white, brown, off white (cream).
8. **[To be done by students.]**
9. (1) True, (2) False, (3) False, (4) False, (5) True
10. (a) - (2), (b) - (5), (c) - (4), (d) - (1), (e) - (3).
11. (a) no legs (b) 2 (c) 4 (d) 4 (e) 6
12. (a) Glow worm emits light in the dark.  
(b) Chameleon can change its colour as per the change in the environment.

**S.A.**

1. (a) Deer and horse run very fast. Elephant and tortoise move very slowly.  
(b) Cow gives us milk. Some people keep hens. We get eggs and meat from hens. Horses and donkeys are used to carry burdens.  
(c) Mice and rats destroy stored grains, besides gnawing other things in the house. Bedbugs suck our blood.  
(d) Cows, buffaloes and goats give us milk.  
(e) Fish lives in water.  
(f) Birds have feathers on their body.  
(g) Birds have only two legs.

2. (a) **Gatecrashers** : Some animals enter our houses even though we don't want them. Mice and rats destroy stored grain, besides gnawing other things in the house. Sometimes we find bedbugs which suck our blood. Spiders make cobwebs in the house. Mosquito, flies, gnats and cockroaches are a nuisance. Though troublesome, these animals have an important place in nature.
3. (a) An insect.  
(b) They both have scales. (c) A zebra.  
(d) Camels are used for transportation and to carry burdens. They can live without water for several days as there is very little water in the desert region.  
(e) Sheep is used to get wool and also used for its meat.  
(f) Hens give us eggs and meat.  
(g) Horse and deer.  
(h) An eagle flies high in the sky.  
(i) Deer has spots on its body.  
(j) horse, lion, zebra.

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**3. Animal Shelters**

**F.A.**

1. (a) Mouse  
(b) The cat has frightened the crows. So that it does not eat the nestlings.
2. (a) The birds use things like grass, straw and twigs to build their nests.  
(b) Rat and rabbit live in burrows.  
(c) The hens live in a coop or henhouse. We humans build their shelter.

3. (a) nest (b) beehive (c) nests (d) burrows (e) caves  
(f) tall trees / dark cavern in mountains (g) coop / henhouse (h) cow shed (i) stable

4. **Fill in the blanks.**

(1) same (2) tailor (3) efforts (4) hyenas (5) stable.

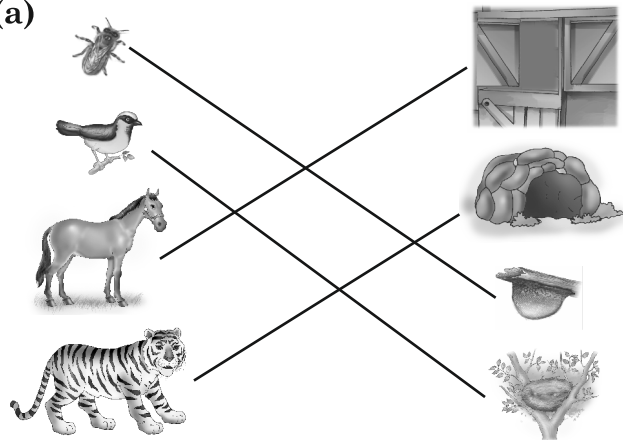
5. Birds build their nests on trees. Since the number of trees are falling down the population of birds in cities is falling hence, we should not destroy trees which are their homes.

**S.A.**

1. (a) **Shelter** : A safe place where one is protected from any danger. A place where one is protected from the sun, rain, wind, etc.

2. (a) We need houses to protect ourselves from cold weather, gusty winds, scorching sun, heavy rains. A house also protects us from thieves.

3. (a)



(b) The reason would be that they are not getting enough food in the forest hence, they come in search of food.

(c) The ant use mud to make anthills.

4. (a) The tailor bird selects a plant with bigger leaves and builds its nest by stitching the leaves together.

(b) The weaver bird chooses a thorny tree which has some branches hanging over water. It builds its nest on the highest of these branches hence, it becomes difficult for animals to reach the eggs.

(c) Birds use cotton, wool and pieces of thread and string. This makes the nest soft and warm inside.

(d) Mice and rats live in the walls or under the floors. They cannot dig holes into cement construction.

(e) Bats live in tall trees or in old deserted tumble down buildings.

**4. Directions and Maps**

**F.A.**

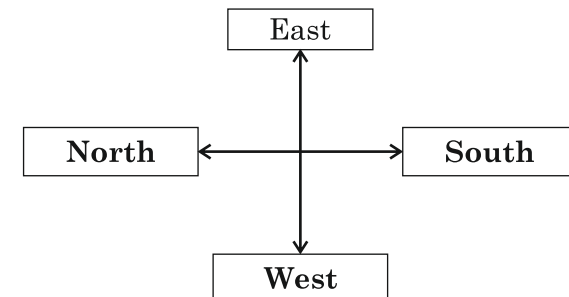
1. (a) East (b) West (c) North (d) South  
2. (b) East (c) West (d) North  
3. (a) Right ear - South / Left ear - North (b) East

**For Mumbai Students**

4. (a) Mumbai (d) Bandra, Santacruz (e) Thane district

**For Thane Students**

4. (a) Thane (e) West  
8. (a)



(b) Rising of the sun (c) South (d) North

S.A.

- (a) The sun is used to determine directions. The direction in which the sun rises is the east. The direction in which the sun sets is the west. If we stand facing east, the north is to our left and the south is to our right. (b) A list of symbols, pictures, signs and different shades of colours are used to present the information in a map. This list is called the index.

---

### 5. Understanding Time

F.A.

- (a) To get information about the date, day, month and year.  
(b) As we finish with a month, we proceed to the next month.  
(c) The numbers in a calendar tell us the number of days in that particular month.
- (a) time (b) water-clocks, clocks, calendars (c) minds
- (a) - (2), (b) - (1), (c) - (4)

S.A.

- (a) We measure time by seconds, minutes and hours.  
(b) Water-clocks, clocks and the calendar are instruments of measuring time.  
(c) To understand time, we divide it into seconds-minutes-hours, day and night, fortnight, month, year.

### 6. Getting to Know the Place we Live in

F.A.

1.

S	P	N	V	L	T	H	O
I	U	A	A	A	H	A	W
N	N	S	A	T	A	R	A
D	E	H	Q	U	N	D	S
H	S	I	I	R	E	A	H
U	Z	K	H	A	D	K	I
D	U	R	G	P	E	N	M
K	O	L	H	A	P	U	R

2.

S	A	S	S	D	N	S
P	N	I	C	E	I	U
I	A	S	H	E	E	P
N	N	T	D	P	C	E
A	D	E	U	A	E	B
C	E	R	O	K	R	A
H	D	E	V	I	K	A

- (a) sickle, spade (b) tractor, balers (c) museums, forts (d) train, bus

- (a) villages (b) nomadic (c) Raigad (d) weekly

S.A.

- Weekly market** : Market that sells all essential items, mainly food grains, vegetables, farming implements, clothes, etc., on weekly basis is called a weekly market.
- (a) When settlements were formed, they began to grow bigger. Many settlements merged together to

form villages, many villages merged together to form a town.

(b) A town has buildings such as temples, schools, mosques, churches, grocery shops, hospitals, bank, etc.

(c) A town becomes famous because of a religious place, fair or fort.

3. (a) **Shivram Hari Rajguru** : He was an important revolutionary in India's struggle for freedom. He was one of the three famous revolutionaries, Bhagat Singh, Rajguru and Sukhdev. Rajguru was born in Khed in Pune district. After elementary education he moved to Amravati. At 15 years of age, he went to Benaras to study Sanskrit. He took part in revolutionary activities and became a martyr for the country.

(b) **Sant Gadge Maharaj** : Real name was Debuji Zhingraji Janorkar. He belonged to Shendgaon in Daryapur taluka of Amravati district. Sant Gadgebaba raised social awareness through keertans. During his keertans, he would ask people, 'Why are our people poor? Because they do not have education. He appealed to the people to get educated.

(c) **Donkey Market-Jejuri** : There are different types of markets. For example, flower markets, fruit markets as well as animal markets to buy and sell animals such as donkeys and horses. Jejuri in Pune district and Madhi in Ahmadnagar district are known for their donkey markets. Malegaon in Nanded district is known for its horse and donkey markets.

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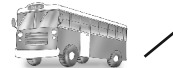



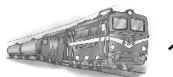

## BOOK - II

### 7. Our Village, Our City

F. A.

- | 1.  | City                               | Village                                      |
|-----|------------------------------------|--|
| (a) | Big buildings                      | Small houses / huts                          |
| (b) | Modern dresses                     | Traditional dresses                          |
| (c) | Modern means like bus, train, etc. | Old means like bullock cart etc.             |
| (d) | Large / Small scale industries.    | Cottage or handicraft industries.            |
| (e) | School, colleges, hospitals, etc.  | Primary health centre, small primary school. |
2. (a) grains, vegetables (b) bicycles, automobiles  
(c) train, aeroplane, bus (d) bullock cart, horse carts
3. letter, mobile, telephone.

4. **Column 'A'** **Column 'B'**

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

5. (a) vegetables, onions, wheat. (b) motorcycles, books, TV, radio.
7. (a) villages (b) Means of transport, communication (c) Ahirani, Malvani, Varhadi (d) Marathi
8. **For Mumbai** - (d) Haji Ali, Mahalakshmi, Girgaon Chowpatti  
**For Thane** - (a) Vasai fort, Arnala fort (b) Ports

**S.A.**

1. (a) bus and horse  
(b) Letter and mobile phone
2. (a) **Means of transport** : As man's needs increased, he invented new means of transport. Earlier, goods were transported by animals like bullocks, elephants, camels, horses and donkeys. Vehicles such as bullock cart and horse carts were used. Then ships, automobiles and trains were invented followed by aeroplanes.  
(b) **Dialects** : Man uses languages to talk to each other and communicate his thoughts to other people. The same language is spoken in different ways in different regions. Different dialects of the same language like Marathi form in different regions, e.g., Ahirani, Malvani and Varhadi.

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## 8. Our Need for Water

**F.A.**

1. (a) It bleeds when we get a cut.  
(b) Juice flows out when we squeeze a slice of lemon.
2. (a) Bathing of animals in such places should be stopped, people should not wash their clothes where the water is used for drinking.

(b) An artificial pond or lake should be built in the forest so that water can be made available for the thirsty animals.

3. (a) thin (b) bathe (c) keep (d) wild (e) important (f) seeped
4. Sometimes the pipes which carry water are broken due to which the impurities get mixed with the water and makes the water unclean.
5. (a) lemon, cucumber (b) parrot, pigeon (c) elephant, deer, lion (d) drinking, cooking, cleaning

**S.A.**

1. (a) When there is a lack of water in our body, we feel thirsty.  
(b) Wild animals also need water. They come to a waterhole in the forest when they are thirsty. So people go there to see the wild animals.  
(c) Rainwater seeps into the soil. Roots of plants spread deep into the soil and absorb the water.  
(d) Water is present in the blood. It keeps our blood thin.  
(e) When there is a lack of water in our body we feel thirsty so we drink water.  
(f) Cows, buffaloes and goats come to the source of water to satisfy their thirst.  
(g) Juice flows out of the grated cucumber and the lemon slice, Therefore we know that there is water.  
(h) Plants need water to grow. Farmers water the crops in their fields, hence farming is not possible without enough water.  
(i) Population in big cities is very high hence, cities need more water.

2. (a) Because watermelons and cucumbers have water in them.  
(b) Pumpkin has water in itself hence the water in which it cooks, comes from pumpkin itself.

---

### 9. Where does water come from?

F.A.

1. [To be done by students.]  
3. (a) rain (b) springs (c) rainwater  
4. (a) springs, streams, rivers, lakes.  
(b) mountains, hills, plains.  
5. **For Mumbai Students :**  
(a) Arabian Sea (b) Antop hill, Sion hill  
**For Thane Students :**  
(a) Arabian Sea (c) Sahyadri Mountain (e) Tansa Lake, Vaitarna Lake

S.A.

1. (a) **Water bodies** : Flowing water and stores of water are examples of water bodies. Springs, streams, rivers, lakes are all water bodies.  
(b) **Land forms** : Due to the high and low levels of land at different places, land gets different forms. Mountains, plains, hills, hillocks are some of the land forms.  
2. (a) Pipelines are used to carry water from distant wells, lakes and water tanks to our homes. In some areas, water is also supplied through tankers.  
(b) All the water we get is rainwater. Rivers, lakes and springs are all formed because of the rain.  
(c) There will be shortage of water if we do not collect rainwater.

- (d) Rain also falls on high places like mountains. This rainwater flows downhill. Numerous rivulets of water flowing downhill join together to form a river.  
(e) Some rainwater seeps into the ground. This water comes out in the form of springs.

3. (a) There is a shortage of water in some places because adequate efforts are not made to store rainwater.  
(b) Pipelines are used to carry water from distant wells, lakes and water tanks to our homes.

---

### 10. More about Water

F.A.

1. (a) Put the bottle of oil in semi hot water. The oil will pour out easily.  
2. **Description** : water, rangoli, spoon  
**What does this mean?**  
Rangoli doesn't dissolve in water.  
3. (1) True (2) False (3) False (4) False  
4. (1) Pure (2) transparent (3) shape (4) solid  
5. (a) glass, water (b) wood, steel (c) salt, sugar  
(d) juice, water (e) oxygen, carbon-dioxide

S.A.

1. (a) Because there is a lot of moisture in the atmosphere.  
(b) Because crystals of potassium permanganate get dissolved in water.  
(c) Because jaggery dissolves in water.  
(d) Because as we go high the air becomes thinner and it is very cold as we go high.



(e) Because the steam remains inside and doesn't flow out.

(f) Water is a transparent liquid hence, we can see a nail that has sunk to the bottom of the water.

(g) Sugar gets dissolved in water and hence sugar disappears making the water sweet.

2. (a) **Transparent** : If you can see through a substance, it is said to be transparent.

(b) **Opaque** : If you cannot see through a substance, it is said to be opaque.

(c) **State** : The form in which a substance may be found.

(d) **Water vapour** : The form in which water is held in the air.

3. (a) Pure water means water that has no colour, taste or smell.

(b) (i) Water is transparent. (ii) Water does not have a shape of its own. (iii) Some substances dissolve in water.

(c) (i) liquid (ii) solid (iii) gaseous.

---

## 11. Our Need for Air

F.A.

1. (a) breathing (b) air (c) need

2. (a) False (b) True (c) False

3. Bubbles rise up in the water.

S.A.

1. (a) **Inhalation** : We breathe in air through our nose. That is inhalation.

(b) **Exhalation** : We breathe out air through the nose. That is exhalation.

(c) **Respiration** : Inhalation and exhalation are together called breathing. We breathe continuously. This is called respiration.

2. (a) Because while he is sleeping the respiration process goes on.

(b) Since, the amount of oxygen in the air reduces and carbon-dioxide increases due to respiration.

3. (a) We fill air into a balloon when we blow it.

(b) We need air to breathe.

(c) If we look carefully, we can see a dog's chest going up and down. It tells us that the dog also breathes.

(d) A cat needs air to breathe.

4. (a) **Fish's respiration** : Fish lives in water, fishes are able to use the air that is dissolved in water. Some people keep fish in a glass tank called an aquarium. The amount of air dissolved in the water can get reduced. Therefore more air is continuously added to the water in the aquarium.

---

## 12. Our Need for Food

F.A.

1. Goat - leaves of the plant, Butterfly - nectar of the flower, Caterpillar - leaves of the plant, Mosquito - sap from the plants

2. (a) Food (b) Bengal gram (c) flesh (d) Mosquitoes (e) sunlight

3. Woodpecker eats insects, tree sap, seeds, flower nectar, nuts, etc. They drill on trees and extract insects with their long sticky tongues from deep within the hole of the tree.

4. **Eat flesh** : lion, wolf, shark

**Do not eat flesh :** elephant, donkey, deer

5. Tiger hunt their prey while vultures eat the flesh of already dead animals.
6. Animals search for ready food in nature and eat it . While plants prepare their own food with the help of sunlight, water and air.

**S.A.**

1. 

(a) A potted plant is not growing well. Provide enough sunlight, water to the plant.

(b) In order to make our body function properly, we need food.

(c) Because they are starved, and are forced to enter nearby villages, kill and carry away cattle.

(d) To protect the crops from the birds.

(e) Air and water come together in the leaf. In the presence of sunlight, plants make their own food using the water and air in the leaves.
2. 

(a) We will become weak and slowly and gradually we will look and become sick also.

(b) They are starved so are forced to enter nearby villages.

(c) Foxes dare to enter human settlements, but are not as strong as tigers. They cannot kill cattle . They are mostly content with stealing fowl.
3. 

(a) **Oilcake** : The fibrous part that is left after extracting oil from seed such as groundnut etc. is pressed into slabs. This is called oilcakes.

(b) **Ambon** : A fermented mixture of oilcakes, jaggery and coarse particles of grain mixed in water and used as animal feed.

4. 

(a) **Baby gain height and weight** : Food helps our body to grow. It helps to repair the wear and tear of our body. It also gives strength. Good and healthy, nutritive food given to child from time to time makes the child gain weight and height and also the child remains cheerful.

**(b) Food of animals** : Horses eat Bengal gram soaked in water. Goats and sheep eat shrubs and grass. Cats drink milk. Wild animals hunt animals and eat their flesh. Deer, bisons and nilgai eat green grass and leaves.

**(c) Plant's food** : The roots of plants absorb water from the soil. There are many tiny pores or openings on the surface of leaves. Air enters the leaves through these pores. In the presence of sunlight, plants make their own food.

\* \* \* \*

## BOOK - III

### 13. Our Diet

#### F.A.

- (a) Carry a tiffin box and a waterbottle. Eating meals at regular intervals will make you feel fresh and energetic.

(b) A fresh lemon sherbet since, it is natural and very good during summer season.
- Sedentary work** : sorting out stones from rice, reading a book, drawing a picture, weeding the garden.

**Physical labour** : playing kho-kho, cycling, sweeping the floor, climbing a mountain, carrying loaded trunks.
- (a) True (b) False (c) False (d) False
- (a) summer season (b) every season (c) summer season
- Vegetables** : bitter gourd, cabbage, cauliflower, brinjal, beans etc.

**Fruits** : bananas, apples, pineapples, papayas, watermelon etc.
- (a) man, woman (b) meals (c) tempted

#### S.A.

- (a) Because age is the factor due to which diet may differ from person to person.

(b) Because state of health affects the diet of the person.

(c) Age, physical labour and state of health cause diet to differ from person to person.

(d) Since she is old and has weak teeth.

(e) Because wasting food is a very bad habit.

- (a) **Diet** : We eat some food preparations as part of our meals every day. We also eat some snacks between mealtimes. Besides, we might also have milk, tea, coffee, etc. All that we eat or drink during the day is together called our diet.
- (a) Rice, jowar, bajra are major crops which people include in their meals. Wheat is a major crop to make chapatis. Fish is eaten in plenty in the coastal region. Vegetables and fruits are also part of our diet. During festivals we eat sweets, etc.

(b) We should eat all the dishes made at home. Sprouted pulses and leafy vegetables should be included in our diet. We should also have yoghurt and buttermilk. Cold drinks and other food products, we see in advertisement are not good for health.
- (a) No, we need variety in our meals otherwise we will be bored and will not feel like eating.

(b) No, people cook different food stuff as per their choice.

(c) Mango is a seasonal fruit, it is available only during summer season.

---

### 14. Inside the Kitchen!

#### F.A.

- (a) steaming (b) boiling (c) frying (d) roasting / frying (e) boiling (f) boiling
- Kheer, basundi, ras malai, ice cream, milk shakes etc.
- Tikkis, curry with harbhara, stuffed parathas etc.
- Cucumber, tomatoes, onions, radish etc.
- (a) roasted (b) cooking (c) fuels (d) combustible

6. **Masala Papad** : Roast a papad, cut tomatoes, cucumbers, onions, green chillies, coriander, etc. into small pieces. Add salt, red chilli powder and put the mixture over the papad, delicious masala papad is ready to eat.

S.A.

1. (a) Because coal gives out smoke which is black making the kitchen walls also black.
2. (a) **A combustible substance** : A substance that can burn is called a combustible substance. For e.g., camphor.  
(b) **Fuel** : A combustible substance that can be used conveniently for obtaining heat is called a fuel. For e.g., coal, kerosene, etc.
3. (a) Food stuffs become tastier and easier to digest when cooked.  
(b) Burning wood is a troublesome task. It lets out a lot of smoke. Trees have to be cut for wood which is harmful for the environment.  
(c) It is easy to use. It lights quickly and does not give out smoke. Cooking on gas also saves time.
4. (a) **Methods of supplying heat for cooking** : Many people prefer to use cooking gas as fuel. Some people use firewood, coal-burning stove, kerosene stoves for cooking. We also get hot plates for cooking on electricity. Some people use biogas and solar cookers.

## 15. Our Body

F.A.

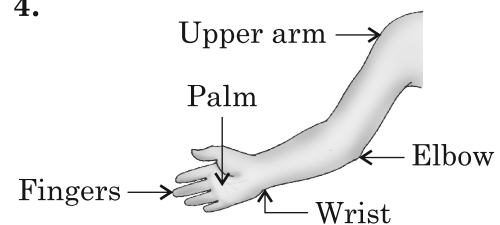
1. (a) hip-joint (b) shank (c) movements (d) alike
2. (a) True (b) True (c) True (d) True

3. By helping the friend to write notes from your book, or writing it for the friend in his / her notebook or rough book.
4. The person will not be able to move from one place to other since there is no movement and also the leg cannot be bended.

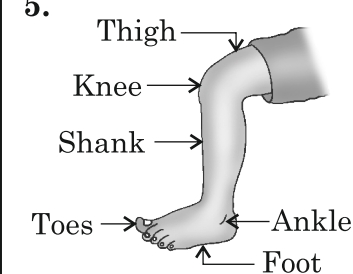
S.A.

1. (a) **Organ** : A part of the body that is used for a particular purpose is called an organ. For e.g. legs for walking, ears for hearing etc.  
(b) **External organ** : Organs that are outside our body are called external organs. For e.g. legs, arms, ears, nose etc.
2. (a) By dragging or jumping.
3. (a) The chest, abdomen and back together make up the torso.  
(b) Upper arm, forearm and hand.  
(c) Thigh, shank and foot.  
(d) The part that joins the head to the torso is the neck.

4.



5.



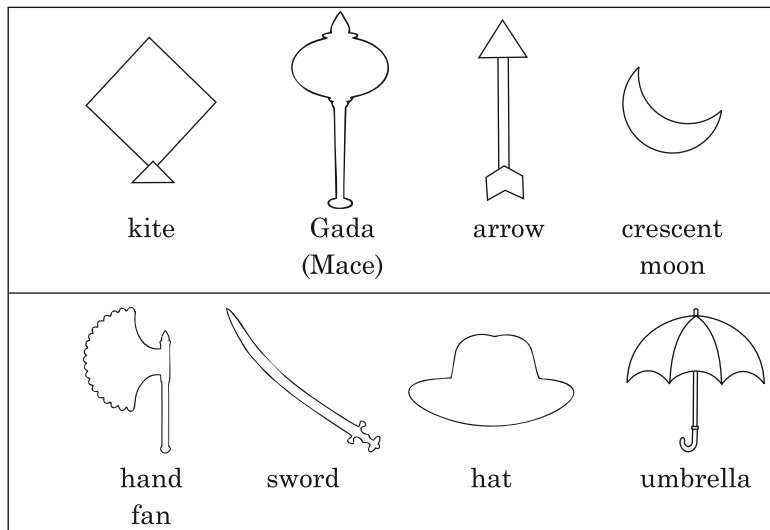
6. (a) **Parts of our body we can bend** : The neck bends forward as well as backward, turns left or

right. We can bend our arm at the shoulder, elbow or wrist. The fingers of our hand can bend too. We can bend our torso only at the waist. Our legs can bend at the hip-joint, the knees and ankles, our toes too can bend.

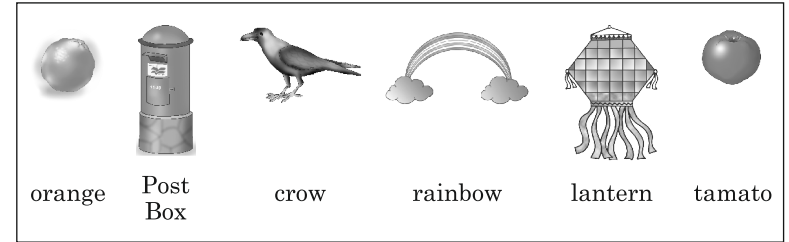
## 16. Sensory Organs

### F.A.

1. (a) beautiful (b) train (c) pure or impure (d) skin (e) chilly
2. (a) tongue (b) ears (c) eyes (d) nose (e) tongue (f) skin
3. By using sign language.
4. By the smell that comes out of yoghurt tells you that it cannot be eaten.
5. (a) yellow (b) red (c) green (d) white (e) yellowish red
6. eyes, ears, hands, legs.
7. (a)



### (b)



### S.A.

1. (a) **Sign language** : Is a means of communication where we use signs and body language to communicate.  
(b) **Sensory organs** : An organ that tells us about our surroundings. For e.g. eyes, ears, nose, tongue and skin.
2. (a) Because the rain water when mixed with dry mud gives us a muddy smell.  
(b) It makes us alert before hand.
3. (a) **eyes** : It is with our eyes that we can see, it tells the colour and shape of any thing.  
(b) **ears** : We hear with our ears, it tells us whether the sound is sweet or harsh. Sound of bird or animals also tells the direction a sound is coming from.  
(c) **nose** : We can smell with a nose. Also whether the smell is fragrant or foul.  
(d) **tongue** : We can taste with our tongue and find if the food is bitter, tasty, sour, hot etc.  
(e) **skin** : We come to know if something is hot or cold, rough or smooth, because of our skin.
4. (a) Head is bent forward, the person is holding the pan steady with the tongs in her left hand. With the spatula in her right hand stirring the peanuts in the pan.

(b) An organ that tells us about the surrounding. It is our eyes, ears, nose, tongue and skin which tells us about our surrounding.

(c) Eyes for seeing, ears for hearing, nose for smelling, tongue for tasting, skin for feeling.

(d) We need co-ordination to get any task done smoothly. Lack of co-ordination gives rise to mistakes.

5. (a) **Co-ordination in our movements** : We carry out many task. For every task we make different kinds of movements. We use different parts of our body for different movements.

(b) **Overcoming disability** : Some disabilities can be corrected by medical treatment. In some cases we can take the help of other people. Some devices can be used to overcome disability.

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## 17. Pearly Teeth, Healthy Body

F.A.

1. (a) milk teeth (b) particles (c) tooth paste (d) tongue (e) teeth

2. (a) ✗/✓ (b) ✓/✗

3. (a) Wrong (b) Right (c) Right (d) Wrong

4. (a) False (b) True (c) True (d) False (e) False

5.

Can be eaten easily without teeth	Cannot be eaten easily without teeth
upma, khichdi, soup, shrikhand, banana, porridge, dhokla.	chakli, nuts, meat, paratha, chivda, sugarcane, bhutta.

6. (b), (c), (f).

S.A.

1. (a) **Milk teeth** : The teeth that we get when we are babies, are called milk teeth.

(b) **Permanent teeth** : Milk teeth start falling when we are seven or eight years old and new teeth take their place these are permanent teeth.

2. (a) The best way to brush your teeth is by using a brush and toothpaste, we can clean the gaps between teeth properly. Besides, the foam of the toothpaste helps the particles stuck between teeth to come loose and get washed away.

(b) Food stuff can remain inside the nails, which may enter your mouth while eating and can make you sick.

(c) There are lot of impurities, dust and other things in the environment which may get stuck to the grapes.

(d) We eat a lot of food stuff throughout the day. If it gets stuck in between the teeth, the food will get rotten and make our teeth weak.

(e) So that a person can keep himself clean after coming from out.

(f) Since they do not take care of their teeth.

3. (a) If we don't clean the food stuck in between the teeth, the gums get affected.

(b) If we eat with unclean hands, the dirt on the hands goes into our stomach and make us sick.

(c) By using a brush and toothpaste, we can clean the gaps between the teeth properly. The foam of the toothpaste helps the particles stuck between teeth to become loose and washed away.

(d) If we don't keep ourselves clean, we may contract different diseases.

(e) If our teeth are dirty, foul substances go into our stomach and we fall ill.

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## 18. My Family and Home

### F. A.

1. (a) Right (b) Right (c) Wrong (d) Right
2. (a) affection (b) nuclear (c) family (d) rubbish (e) Festivals
3. (a) aunts and uncles from the mother's and father's side and their children are called extended family.  
(b) We are related to them through on parents.  
(c) On several occasions like birthdays, festivals, marriages, etc.
4. (a) storing water, cooking, cleaning, etc.  
(b) The chores are done by family members with love and affection.  
(c) I like to bring things from the nearby shop, I also like to clean / wash fruits and vegetables.  
(d) We do each other's chores to help and reduce the burden.
5. **[To be done by students.]**
6. ✓ : Flowers, Paper, Rangoli  
✗ : Thermocol, Plastic, Chemical colours  
Thermocol is artificial, it affects the environment. Plastic bags also pollute our environment. Chemical colours are also dangerous for mankind and hence, should be avoided.
7. (i) We should throw rubbish in the dust bin. (ii) We should keep the floor of the house clean. (iii) We

should keep walls and windows clean.

### 8. **[To be done by students.]**

9. Pearl beads necklace, big beads earrings, copper plates, earthen ware.

### S. A.

1. (a) **Small family** : Some families consist only of parents and one or two children. Such families are called small families.  
(b) **Big family** : Some families consist of grandparents, aunts, uncles, brothers, sisters and cousins. Such families are called big families.  
(c) **Extended family** : Our family is linked with many other relatives. Aunts, uncles and their children from the parents side are all related to our family. Such a family is called an extended family.
2. (a) In a family we are secure in every way.  
(b) Clean house makes us feel relax and comfortable, while a mess is a source of irritation for us.  
(c) Wet garbage is useful for making manure and dry garbage is recycled.
3. (a) Our family provides us with food, clothing and shelter.  
(b) Our parents take care of us when we fall ill.  
(c) Members of an extended family come together during festivals, birthday, any other type of celebrations.  
(d) Festivals include songs, dances, rangolies, games, competitions and races.
4. (a) **Disposal of e-waste** : The use of electronic devices like mobiles, CDs, DVDs, pen drive and computers has increased greatly. When these things

are damaged, they become useless. This gives rise to e-waste. The disposal of e-waste is a big problem.

## 19. My School

### F. A.

1. (a) punctuality (b) Books (c) opportunity
2. (a) ✓ (b) × (c) ✓
3. (b) Cultural programmes are organised, followed by speech by our Principal.  
(c) Studies, discipline and activities.  
(d) Kho-kho, hockey, cricket, basket ball, etc.  
(e) Children throw the rubbish in the dustbin. Maids also keep our school clean.  
(f) We don't mess up the classroom and use the dustbin.  
(g) sports.  
(h) walking / school bus / private van.
4. (a) Mahatma Jotirao Phule was the pioneer of women's education in India. He established the first girl's school.  
(b) Savitribai Phule was the first female teacher in India. She worked for the upliftment of women and untouchables in the field of education and literacy.  
(c) Maharaja Sayajirao Gaikwad opened eight schools for girls and a training college for lady teachers. He introduced free and compulsory primary education.  
(d) Rajarshi Shahu Maharaj issued a declaration that it is the responsibility of each parent to send their children to school when they attain schooling age. If delayed then each parent was fined Rs. 1 per

month. He had scholarship programs for students from the backward sections of the society.

- (e) Pandita Ramabai was a pioneer in the education and emancipation (liberating / freeing) of women in India.
- (f) Maharshi Dhondo Keshav Karve was the pioneer of Widows Education in India. He started the first University for woman with five students in Pune.
- (g) Dr. Babasaheb Ambedkar ensured that the backward classes got education.
- (h) Karmveer Bhaurao Patil founded the Rayat Education Society. His main role was in educating backward castes and low income people.
- (i) Dr. Panjabrao Deshmukh established Shivaji Education Society. This society became the second largest in Maharashtra.

### S. A.

1. (a) In school we learn how to get along with others. We get to know about a lot of people. We realize that we are a part of society.  
(b) There is a ban on employing children below the age of 14 years in factories, mines and in other hazardous occupation.  
(c) Everyone should be able to use school facilities hence, certain rules should be followed while using school facilities.
2. (a) kho-kho, kabaddi, lezim, etc.  
(b) Library, playground, computer lab, school buses, assembly hall, etc.  
(c) A teacher resolves the quarrel, and solves problems in community life amicably.



**20. Our Community Life****F. A.**

1. (a) groups (b) companions (c) interdependent
2. (a) - (2), (b) - (1), (c) - (4).
3. (1) (i) Accept your losing gracefully. (ii) Play the game with true spirit of sportsmanship. (iii) Play the game honestly.  
(2) (i) Always follow the traffic signal. (ii) Don't be in a hurry. (iii) Don't speed up your vehicle.  
(3) **At School** : punctuality, cleanliness, discipline obedience, respect.  
**At Home** : cleanliness, helping each other, discipline
4. (a) we will have no one to grow crops, fruits and vegetables for us.  
(b) the society will be illiterate.  
(c) people will not be cured when they are sick.  
(d) foul smell will spread all over making us sick.
5. (a) × (b) ✓ (c) ✓ (d) ✓ (e) ✓

**S. A.**

1. (a) **Community** : Living in the company of our family, neighbours and other people means living in a community.  
(b) **Rules** : are necessary for smooth running of community life. They bring discipline to community life.
2. (a) For smooth functioning of the games.  
(b) Co-operation and unity makes the games and sports activities to be done with more determination.

3. (a) We live with our parents, brother and sister and grandparents.  
(b) Company and love of our family members make us feel secure.  
(c) Rules should be followed for smooth running of our day-to-day affairs.

**21. Public Services for Community Life****F. A.**

1. (a) banks (b) postal service (c) co-operatives
2. (a) **GRAM PANCHAYAT**  
(b) **MUNICIPALITY**  
(c) **MUNICIPAL CORPORATION**
3. Transport, schools and hospitals. The local government provides service of water supply and public hygiene. The benefits are that the facilities are cheaper than private so poor can afford it also. Everyone gets help immediately.

**S. A.**

1. (a) **Local government** : The administration of a place, be it a city or a village, is run by the government. It is known as local government.  
(b) **Municipal corporation** : A municipality runs the administration of a town and big cities.  
(c) **Gram Panchayat** : A gram panchayat runs the administration of a village.  
(d) **Co-operatives** : Institutions formed by people's co-operation are called co-operatives.
2. (a) In order to save water the gram panchayat had to fix faucets on the taps.


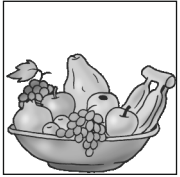


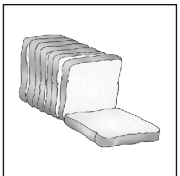
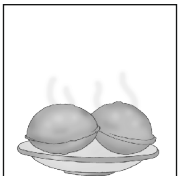


- (b) Since the services are available for everyone.
3. (a) Facilities available for everyone are called public services.  
 (b) Transport, bank, postal service etc.  
 (c) Water supply and public hygiene.
4. (a) **Postal Service** : is useful for keeping in touch with our friends and relatives. Letters can be sent to any part of the world.

## 22. Who fulfils our needs?

### F. A.

1. (a) garment factory (b) Fruit (c) cars / vehicles  
 2. (a) people (b) Agriculture (c) potter (d) Kolhapur

3.

			
crops	fruits	garland	car
			
bread	puris	tyre	sugar

4. **Grown in fields** : crops, fruits  
**Made at home** : bread, puris  
**Made in factories** : breads, car, tyre, sugar
5. [To be done by students.]

6.

	Raw material	Industry	Finished product
(a)	Sugarcane	Sugar factory	Sugar
(b)	Cotton	Garment industry	Shirt / Jeans / Frock
(c)	Bamboo	Basket weaving	Baskets
(d)	Maida	Bakery	Biscuits / Bread

### For Mumbai Students

7. [To be done by students.]

### For Thane Students

7. [To be done by students.]

### S. A.

1. (a) **Occupation** : Different people work to fulfil our various needs, such work is called an occupation.  
 (b) **Agro based occupation** : Sheep rearing, poultry, animal husbandry and fruit processing are all occupations dependent on agriculture. They are called agro based occupation.
2. (a) Because their work fulfils some of our need as well as their own needs.  
 (b) People carry on the work that their father and grandfather did before them.  
 (c) The materials man needs for various occupations are obtained from nature hence, we must respect nature.
3. (a) We will not be able to use the resources given to us by nature and hence, there will be a huge loss in matter of agricultural products.  
 (b) Poultry industry, handicraft industry, etc.  
 (c) Automobile industry, garment industry, poultry industry.

4. (a) **Agriculture** : is an important occupation in our country. Everyone in the country gets food because farmers work in the field.
- (b) **Types of occupations** : nature based, occupation (e.g., agriculture, fishing), manufacturing (e.g., making automobiles, making pots) Trade e.g., selling farm produce, providing service (teacher, doctor)
- (c) **Agro-based occupation** : Sheep rearing, poultry, animal husbandry and fruit processing are all occupations dependent on agriculture. They are called agro-based occupation.

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### 23. Growing Up and Growing Old

F.A.

1. (a) happy (b) exercise (c) Fruit
2. (a) True (b) False (c) True
3. [To be done by students.]
4. [To be done by students.]
5. [To be done by students.]
6. (a) By six months. (b) After one year. (c) After six months. (d) After one year. (e) Since, they don't have teeth. (f) Since, they can't walk.

S.A.

1. (a) **Germination** : The sprouting of seeds is also known as germination.
2. (a) To prevent the disease it may contract later.  
(b) Since, some benefit from regular exercise.  
(c) Seedling absorbs water and begins to grow.
3. (a) The skin becomes loose.

(b) Children keep growing in height until the age of eighteen.

(c) Good habits and good food help to maintain good health. We benefit from regular exercise.

(d) At the proper stage of plants growth, the plant begins to flower.

(e) By holding her kittens in its mouth.

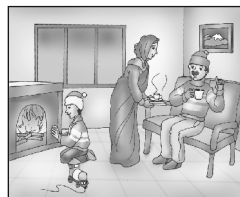
4. (a) **Growth** : A little baby is born, the baby grows. At the age of six, children start school. They keep growing in height until the age of eighteen. After forty there are changes. The body becomes weak and one day death occurs.

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### 24. Our Clothes

F.A.

1. (a) four (b) season (c) uniforms
- 2.



(a) winter

(b) summer

(c) rainy

**Clothes :** (a) Warm (b) Light cotton (c) Rain coats

3. [To be done by students.]
4. (a) doctor (b) fireman (c) soldier (d) nurse (e) soldier
5. **Party dress** : I like to wear decent, neat and clean clothes. Party dress is worn during various functions and celebration. In school we wear it during festivals and birthdays.

S.A.

1. (a) summer, winter and rainy.

(b) Because as the weather changes, we need different clothes to protect our bodies against such changes in weather.

(c) postman, soldier, policeman.

(d) Gujarati - ghagra choli, Marwari saree, Punjabi shalwar suit.

2. The clothes worn by soldiers match the environment around them. This is done so that enemy soldiers cannot spot them easily. They use khaki clothes in deserts, green clothes in jungles and white clothes in snowy areas like the Himalayas.
3. (a) **Variety of clothing** : There is a lot of variety in clothing according to the weather. Traditional costumes are worn during festivals like bright clothes woven with golden thread.

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## 25. Changes in our Surroundings

F. A.

1. (a) nocturnal (b) ruminant (c) Birds (d) soft
2. (a) True (b) True (c) False (d) True (e) False
3. (a) Phases of moon (b) nocturnal (c) full moon (d) new moon
4. [To be done by students.]
5. [To be done by students.]
6. [To be done by students.]

S. A.

1. (a) **Rumination** : Animals swallow the food while grazing. Later they bring back the swallowed food into their mouth again, a little at a time and chew it.

Then they swallow the chewed food. This is called rumination.

(b) **Nocturnal** : Some animals sleep during the day. They search for food at night and are called nocturnal animals.

2. (a) So that the moisture from amla is lost, and it is dried up.
3. (a) When the sun gradually begins moving higher in the sky. Shadows become shorter.  
(b) When the moon appears like a narrow, curved shape it is called a crescent moon.  
(c) Thirty days.  
(d) Morning glory, hibiscus, lotus, sunflower, etc.  
(e) The sun slowly begins shifting to the west. The shadows begin moving to the east and become longer.  
(f) There is no shadow at all.  
(g) Fifteen days.  
(h) To collect the nectar from the flower.
3. (a) **From dawn to night-time** : Birds are the first to sense the end of the night. Their chirping begins from early dawn. Buds blossom, bees collect nectar, people go to work.  
(b) **Phases of the moon** : The moon rises at different times every night. If you search for the moon at a fixed time every evening you will see it in different places. The shape of the moon also changes. This is called phases of the moon.

## 26. As we Go from the Third to the Fourth Standard

### F. A.

1. (a) 15th August, 1947 (b) nature (c) Plants, animals
2. [To be done by students.]
3. (a) So that, we are more disciplined and well behaved citizens of our country.  
(b) Yes, it is our responsibility.  
(c) We must help them in the day-to-day chores.  
(d) By taking care of them
4. (a) Yes, the fingerprints of both are different.  
(b) Yes, they are different.

### S. A.

1. (a) We spoil the beauty of the garden and affect nature.  
(b) A foul smell spreads all over, making everyone sick.
2. (a) We must maintain and preserve our historical places. It not only damages the structure, but also spoils the beauty.  
(b) It will make the place look untidy and also affects the environment.
3. (a) We will live in a systematic and disciplined way, enter the place without harming ourselves and others.  
(b) The environment provides us with everything hence, I like everything about my environment.  
(c) Co-operation is required and we depend on one another to be a part of our society.

4. (a) **Independence** : We got independence on 15th August, 1947. We respect our freedom and are proud to be Indians.

(b) [To be done by students.]

\* \* \* \*