

# Key to LIGHT WEIGHT SERIES

## Environmental Studies : Part 1 Book - I to IV STD - IV

### Teacher's Copy

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**1. The Life Cycle of Animals****F.A.**

1. (a) eggs (b) caterpillar
2. (a) False (b) True (c) False
4. (a) No (b) Yes (c) No

**S.A.**

1. (a) **hatch** : When a hen sits on her eggs to warm them, she is said to be hatching her eggs.  
 (b) **moult** : To shed old skin to make way for new growth.  
 (c) **metamorphosis** : As butterflies grow, they pass through four stages. These are egg, larva, pupa and adult. The adult stage is called butterfly.  
 (d) **Chrysalis** : The pupa stage of butterfly is called a chrysalis.
2. (a) When a hen is hatching her eggs, she becomes aggressive for fear of their safety. She attacks anyone who tries to go near the eggs.  
 (b) The growth seen in the caterpillar is very rapid, it starts eating very fast as soon as it comes out of the egg.
3. (a) Warmth is necessary for the chicks to grow inside the egg, so, after laying them, the hen sits on the eggs.  
 (b) The four stages of the life cycle of a butterfly are egg, larva, pupa and adult.  
 (c) Important changes take place like its legs grow longer, it gets attractive wings. Its growth is completed inside the chrysalis.

4. (a) Different birds take different number of days to hatch stage.  
 (b) adult  
 (c) The caterpillar begins to nibble and eat the leaf, hence leaves have holes.  
 (d) The tiny green living things inside the peapods are larvae or caterpillar of an insect.

**2. The Inter-relationships between Living Things****F.A.**

1. (a) rainy season (b) needs  
 (c) pesticides (d) paangal
2. Banyan tree
3. (a) used as paan  
 (b) to cure health problems of skin, eyes, etc.  
 (c) food (d) to cure cough (e) food
4. (a) orange (b) chikoo (c) figs, custard apples  
 (d) mango (e) banana
5. Different areas in the country have different climatic conditions which are suitable for certain types of farming.

**S.A.**

1. (a) **Arboreal** : This word comes from the Latin word 'arbor' which means 'tree'. Arboreal means 'living in trees'.
2. (a) The rainy season is the season for crops to grow hence we do not get good crop if we do not get good rain.  
 (b) In the field we find a lot of rats who feed themselves on the things grown in the field, the Indian rat snake eats the rats of the field.

- (c) A tiger lies in wait for its prey among tall grasses. Its prey cannot see it in the grass because of the stripes.
  - (d) Domestic animals become dear to us. We look after them well, we feed them, we take them to a vet if they fall ill, these animals too return our affection.
  - (e) As the buffalo treads on the grass, it frightens the insects, which fly out of the grass. The egret on the buffalo's back makes no mistake in swooping down to catch and eat them up.
3. (a) It may destroy the crops.  
(b) Their coats will be thick.  
(c) The fish will die.  
(d) The tree becomes unstable and it cannot support itself. The tree can fall and cause damage or injury.
  4. She must carry and drink a lot of water, she must wear a cap and also carry an energy drink.
  5. (a) Plants give us abundantly, they satisfy our needs, we get food grains, vegetables, fruits, flowers, cotton, etc., from plants.  
(b) Its time for summer, many trees get new leaves, forest appear copper colour because leaves are reddish and shiny, the colour changes to green as leaves grow bigger.  
(c) Tiger lives in the caves for shelter.  
(d) We get silk from silk worm.  
(e) Monkeys being at a height of trees are able to defend themselves from their enemies. They eat fruits of the trees.  
(f) Trees provide shelter and food for different types of birds. The trees are useful for building their nests.

### 3. Storage of Water

#### F.A.

1. (a) wells (b) rain (c) Maharashtra
3. They all get their water from the rain.

#### S.A.

1. (a) **Wells** : Some rainwater seeps into the ground. Wells are dug to obtain this water.  
(b) **Water tanks in forts** : The forts had reservoirs and tanks dug into the stone.  
(c) **Old reservoirs** : Reservoirs were built using stone and mortar.  
(d) **Dams** : Dams are made to store huge quantities of water.  
(e) **Borewells** : Ground water is used with the help of electric pumps hence borewells are dug.
2. (a) Water is a natural resource, all living things need water, hence we must keep in mind its importance when we use water.
3. (a) If we do not store water, we will not have enough water for our needs.  
(b) Wells, water tanks in forts, draw wells, rivers and bunds, old reservoirs, old tanks.  
(c) A dam is built on a running river.  
(d) Water is a natural resource, all living things need water, we must keep this in mind when we use water.  
(e) When the waste from the factories and homes are dumped in the rivers or sea, it pollutes the water and leads in water pollution.
4. Reservoirs built in areas of low rainfall or in areas without a major river. Most of the reservoirs were built using stone and mortar.

5. (i) We must never waste water while brushing teeth.  
(ii) The tap should be closed when not in use.  
(iii) Avoid shower bath, since you use more water instead use water from buckets to have bath.

#### 4. Water Safe for Drinking

F.A.

1. (a) dissolve (b) solution (c) rehydration  
(d) harm (e) lighter, heavier (f) alum
2. (a) True (b) False (c) True (d) True (e) False
3. (a) The first container in which we have swirl a piece of alum.  
(b) It takes hardly few minutes.  
(c) Almost 30 minutes or even more.

4. Things	These sink	These float
Given in the lesson	steel spoon, nail, screw, stones coins, soil	eraser, sharpener, leaves
Other things	scissors, pen	pencil, spectacles

S.A.

1. (a) **Solution** : When a substance dissolves in water, a mixture of that substance and water is formed. This mixture is called the solution of that substance.  
(b) **Settling** : The process of allowing heavier particles to settle to the bottom of still water is called 'settling'.  
(c) **Filtration** : If we strain muddy water, it helps to make it clean. This process is called filtration.

(d) **Potable water** : Water that does not endanger our health in any way when we drink it is called safe drinking water or potable water.

(e) **Micro organism** : a living thing that cannot be seen by the naked eye or even with a magnifying glass.

(f) **Microscope** : an instrument for looking at very very small things which we cannot see with our eyes or even through a magnifying glass.

2. (a) Sea water is salty to taste because it is nothing but a solution of salt that occurs naturally. We cannot use seawater for drinking.  
(b) The components of different wells are different hence water of different wells may have different tastes.  
(c) The things that float are lighter than water. The things that sink are heavier than water.
3. We can use a strainer to separate rava, use strainer which allow rava to pass.
4. (a) Water, lemon juice, sugar and salt.  
(b) Since it may contain harmful micro-organism it.  
(c) Stir the solution with a spoon.  
(d) Oil floats on water.

#### 5. Water for Every Household

F.A.

1. (a) diesel, electricity (b) Machines (c) Water
2. (a) Wrong (b) Right (c) Right (d) Right
3. (a) - (4), (b) - (1), (c) - (2), (d) - (3)



S.A.

1. (a) **Contamination** : Water when mixed with dust and other rubbish, it makes the water impure, such water is called contamination of water.
2. (a) Water becomes dirtied due to some reason, is the only water not fit to drink but otherwise water does not become stale.  
(b) Brass and copper pots as well as earthen pots were used to store water earlier but now people use plastic or steel for convenience and also because it is less expensive.  
(c) Water tanks are placed at a height so that water can flow easily from a higher level to the lower level through the pipes.
3. (a) Inform the municipality for the same.
4. (a) We need water for drinking, cooking, washing, bathing, etc.  
(b) If we dip our hands in the water to take it out, the dirt on our hands can enter the water, hence we use a dipper to take the water and replace the lid at once, tap on the container becomes easier to take the water and it also prevents contamination.  
(c) (i) While you brush your teeth, don't keep tap running. (ii) Do not throw away the water used for washing vegetables, fruits, etc., use it for watering your plants.  
(d) Large cement or plastic tanks should be installed on the roofs of our house. Water from these tanks can then be piped to the kitchen, bathroom, toilet. When taps are fitted on the pipes, water can be taken or shut off according to the need.

## 6. Variety in Food

F.A.

1. (a) staple (b) Agriculture (c) diet
2. (a) Mango, since it is a fruit and can be eaten raw.  
(b) Paratha, since it is the only food item made of wheat.  
(c) Mysore pak, is a sweet dish not made of wheat.
3. (a) Grain - Parathas, Makki ki Roti, Soup  
(b) Vegetable - Gravy vegetable / Sambhar  
(c) Vegetable - Normal vegetable
4. (a) Rajasthan is famous for its food specially its dalbati.  
(b) Bangalore - homemade chocolates.
5. (a) Banana (b) Mango (c) Mango  
(d) Winter (e) Summer
6. (a) Rice (b) Wheat (c) Rice  
(d) Rice needs a lot water for its growth, since due to coastal area in southern part of India. Rice is grown on a large scale.

7.	District / State	Food item	Main ingredient
	Karnataka	Fish, rice, idli, dosa	Rice
	Jalgaon	Brinjal, Bhareet	Bajra, brinjal
	Maharashtra	Rice bhakari, Nachani, bhakari	Rice, nachani

8.	Summer	Rainy	Winter
	Mango	Jamun	Apple
	Watermelon	Custard apple	Kiwi
		Litchi	Strawberries

S.A.

- (a) Every region is famous for a particular crop, since it is grown there more, hence there is one staple food in every region.

(b) Each region differs in matter of climate, soil, hence there is diversity in the crops growth, hence staple food of people vary according to region.

(c) Since the rainfall in southern part of India is high, rice is grown on large scale.
- (a) Chapatis, Parathas, Puri, halwa

(b) Soyabean, rice bran oil, sunflower oil.

(c) [To be done by students.]
- (a) **Agriculture** : is the main occupation in all parts of our country. It is mainly dependent on rainfall. In regions of high rainfall crops such as rice, coconut, ragi, are grown. Wheat, toor, soyabean are grown in regions of moderate rainfall. Jowar, bajra and moth beans are grown in regions of low rainfall.

## 7. Food and Nutrition

F.A.

- (a) vitamins and minerals (b) staple (c) taste buds
- (a) - (5), (b) - (4), (c) - (1), (d) - (3), (e) - (2)
- Banana, custard apple, pineapple, papaya, watermelon, etc.

- (a) Wheat, Bajra, Jowar (b) Milk

(c) Sesame, peanut (d) egg, chicken, meat

(e) mango, tamarind, bitter gourd, chilli

(f) Raddish, cucumber
- (a) sweet (b) salty (c) sour (d) bitter (e) sour
- (a) **Steps** : Semi warm milk should be taken in the bowl, add a spoon of curd to it, leave it for 5 to 6 hours, after that you will see the entire bowl of milk is now curd for you.

(b) **Steps** : Soak moth beans in semi warm water for entire night, next day tie all the moth beans in a piece of clean cloth and make a bag, tie it tight after 6 to 8 hours moth beans are sprouted.

S.A.

- (a) **taste buds** : The tiny peaks on the tongue, they are called taste buds.
- (a) While preparing food items, some of the constituents in the food stuffs can get destroyed.

(b) So that we can do all our work with a lot of energy.

(c) Since food will taste well even in the absence of garlic.

(d) Since the lemon juice is sour when it is added to rice and dal, it becomes more tasty.
- (a) Monikatai told that there are tiny peaks on the tongue. They are called taste buds. These taste buds tell us the different taste.

(b) Fruits contain a lot of vitamins and minerals also.

(c) Tamarind, lemon, etc., contain sour element.

- (d) There are wide variety in our foodstuffs we use different foodstuffs for different purposes, hence there are variations in our diet.
- (e) Yes, adding such food items make the dish more nourishing and it also makes the dish look attractive and tasty.
- (f) Sugarcane.

\* \* \* \*

## BOOK - II

### 8. The Value of Food

#### F.A.

1. (a) humid (b) threshing (c) air  
(d) fruits (e) labour
2. (a) Fields (b) Forest (c) Sea  
(d) Fresh water (e) Orchards (f) Animals
3. (a) - (3), (b) - (4), (c) - (2), (d) - (5), (e) - (1)
4. There are people who gather and sell amlas which in forests, some people have farms for growing amlas.

#### S.A.

1. (a) We get food after the efforts of many people, and there are many poor people who don't have food to eat, hence food shouldn't be wasted.
2. (a) The field is ploughed and then crush the lumps of soil, finally the farmer would level the field to make it ready for sowing.  
(b) The grain is transported by means of trucks or goods trains.  
(c) First sort out any stones or rubbish to clean the grain, they get it milled into flour, the flour is kneaded into lumps and then flattened into a bhakari and roasted.  
(d) Saltpans  
(e) potato, onions, garlic, ginger, sweet potato, etc.  
(f) *Kanagi* (Kothi) is store house of grains. Farmers use it to store their food grains e.g. *Bazra*, *Jawar*, etc.  
(g) '*Tiphan*' is used as seed drills for sowing.

## 9. Air

### F.A.

- (a) 50 (b) rare (c) to one of the (d) air (e) more
- (i) Smoke from the factories is a source of air pollution. (ii) Smoke from vehicles are also a source of air pollution. (iii) Crackers burnt during celebration and festivals are cause air pollution.

4.



The man is putting air in the tyre.



The girl is blowing the balloon.



The man is pumping air in the tyre of the bicycle.

### S.A.

- (a) To remove the air present in the syringe.
- (a) (i) in the car tyres. (ii) in the tyres of the bicycle. (iii) to blow balloons etc.  
(b) The smoke gets mixed with the air when wood or coal burns.  
(c) Steam get mixed with air, when water boils.
- (a) **The atmosphere** : The earth on which we live is round in shape like a ball. There is air all around the earth. If we go higher above the earth, we find that there is air till a height of almost 50 km.

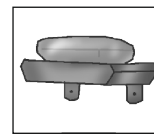
## 10. Clothes

### F.A.

- (a) cloth (b) Cloth (c) Nylon, rayon  
(d) Handlooms, powerlooms

- (a) - (3) - (ii), (b) - (1) - (iii), (c) - (2) - (i)

3.



- Boharin

- (c) ✓

- (a) Cotton, nylon, rayon, wool, jute, etc.

(b) Soap bars, detergent powder, liquid soap, etc.

(c) Soap nuts, washing soda, hinganbet, limestone, etc.

- If old clothes are still in a good condition, they can be given to those who need them.

### S.A.

- (a) There is diversity in clothing due to cultural and geographical differences.  
(b) Clothes get dirty on being used. Due to dust and sweat.  
(c) We must always wear clean clothes in order to remain healthy and look neat and tidy.  
(d) Even if clothes become old, they can still be used hence clothes are durable.
- (a) (i) In rainy season, we use umbrellas and rain coats and wear nylon or rayon clothes. (ii) In summer season, we wear loose cotton clothes. (iii) In winter season we wear woollen clothes.  
(b) We get silk from silk worm.
- (a) **Swadeshi goods** : In order to win independence for our country, Mahatma Gandhi started a people's movement. He called upon them to use only those things that were produced in our

country. For this purpose, he began to use a charakha or a spinning wheel to make thread. Charakha Mandals were then established nationwide which gave the message of using only 'Swadeshi' goods.

### 11. A Look inside the Body

F.A.

- (a) the mouth and the stomach (b) two  
(c) contraction (d) aware (e) complex
- (a) True (b) True (c) True (d) True
- (a) - (2), (b) - (4), (c) - (1), (d) - (3).

S.A.

- (a) **Internal organ** : an organ that is situated inside the body. It cannot be seen from the outside.  
(b) **Contraction** : becoming smaller  
(c) **Relaxation** : becoming larger again
- (a) When we run too fast the breathing takes place very fast and our heart beat is also fast, it makes us pant.  
(b) The body is structured in such a way that the internal organs remain safe within the cavities inside the head and the torso.  
(c) A network of blood vessels is spread throughout the body, blood flows through them continuously, the air we breathe in is carried to all parts of the body through the blood.  
(d) The brain is situated in the cranial cavity, it is a very important internal organ. It controls all that we do. Injury to the brain can make one disabled for life. It can even cause death.

- (e) When we breathe in, the lungs expand a little, that is why our chest swells up when we breathe in.
- (a) The biscuits in the pack were not broken into pieces.
- (a) An organ that is situated inside the body. It cannot be seen from the outside.  
(b) Abdominal cavity and pelvic cavity.  
(c) Heart and lungs.  
(d) Injury to the brain can make one disabled for life. It can even cause death hence, the brain need to be totally protected.  
(e) Organs on the outside of our body are called our external organs. For eg. ears, nose, arms and legs.  
(f) The flexible walls of the oesophagus makes it possible to carry the food from the throat to the stomach easily.

### 12. Home Remedies for Simple Illnesses

F.A.

- (a) yellow (b) snake (c) dabbed dry

2.	Get cured quickly	Do not get cured quickly
	(1) Cold	(2) Chikungunya
	(4) Bruising	(3) Malaria
	(5) Stomach upset	(6) Typhoid
	(8) Sprained ankle	(7) Scorched fingers

- Gargle throat with warm water when suffering from cough, a lemon sherbet for vomiting, a tincture of iodine if there is a cut, bruise or a small wound.
- (a) Wrong (b) Right

S.A.









1. (a) Because he must have broken his bone.
2. (a) Extract of vasaka leaves used for treatment of bronchitis, asthma, fever, dysentery, cough and breathlessness.  
(b) The sore throat, difficulty in swallowing are the signs, which tell us that the person is suffering from cold.  
(c) If there is sprain in the body, balm is applied, sometimes even for headache.  
(d) A clinical thermometer is used to measure temperature of the human body.
3. (a) Since she ate an ice-cream.  
(b) The doctor advised her to take complete rest for three weeks.  
(c) If we have a cold we can inhale steam at bed-time or take hot fomentations on the chest.  
(d) Without a doctor's advice, one should never take any medicine that must be swallowed.
4. (a) **Home remedies** : If an illness is one that gets cured readily, one can try a home remedy. For e.g. gargle throat with warm water if you get cough. Elderly, experienced people on the family sometimes suggest such cures.

### 13. Directions and Maps

F.A.

1. (a) East and West  
(b) South  
(c) North, South, East, West

2.

Picture	Direction	Picture	Direction
	North		South
	North-West		East
	West		North-East
	South-West		South-East

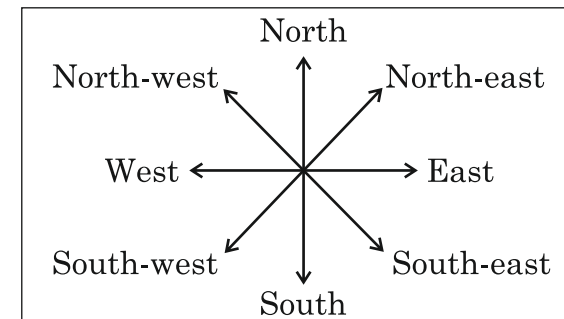
3.

Picture	Main Directions
Well	South and West
Street Lamp	South and East
Fort	North and East

4. **Directions** : North, East, South, West

**Sub directions** : North-East, South-East, South-West, North-West

6.



7. (b) [To be done by students.]

(c) [To be done by students.]



S.A.

1. (a) **Directions** : North, South, East, West are called directions.  
(b) **Sub-directions** : Many things lie between two main directions. To determine the direction in which they lie, we use sub-directions.  
(c) **Compass rose** : Draw the diagram showing the direction and sub-directions on a small card. It is known as the compass rose.
2. (a) Directions are always parallel to the ground. That is why a map must always be aligned to the local directions.  
(b) Directions and sub-directions have been determined by man on the basis of the rising and setting of the sun. Thus, Nature can be our guide.
3. (a) We use compass rose.  
(b) Maps are comparatively quite small. Therefore, the distance between these places has to be shown in a very limited space on a map. The scale used on the map helps to calculate the actual distance or area.

\*\*\*\*

## BOOK - III

### 14. Maps and Symbols

F.A.

1. 





Natural	Man-made
a river, trees, mountain, a hill, grass, birds	a house, a road, a dam, a school, a water tower, bridge
2. Hospital, school, coconut trees, banyan tree, market, temple, church, park, railway station, etc.
3. **[To be done by students.]**
4. (a) Raigad, Sindhudurg, Ratnagiri, Kolhapur, Nashik, Pune, Gadchiroli, Akola, Amravati, Nanded, Latur, Beed, Osmanabad, Aurangabad, Satara and Sangli.  
(b) Jalgaon, Yavatmal, Ratnagiri, Thane.  
(c) Raigad, Pune, Nashik, Aurangabad, Jalna, Nagpur, Latur.  
(d) Mumbai City, Thane, Ratnagiri, Sindhudurg, Raigad.  
(e) **Man-made objects** : District Head quarters, Major places / stations, Forts, Air Transport centres, Port, National Highway, Railways.  
**Natural objects** : Hot water spring, Caves  
(f) National Highway  
(g) Arjuni Morgaon, Desaigand, Brahamapuri, Mul
5. (A)

S.A.

1. (a) **Natural things** : The things which are provided by nature is called natural things.

(b) **Man-made things** : Man made objects are made from natural resources.

(c) **A sketch** : Pictures of the place, certain symbols are drawn, symbols represent is also mentioned against each of them, such a picture is called a sketch.

2. (a) Man made objects are made from natural resource.  
(b) Realistic pictures of trees and buildings are not shown in it, in their place, certain symbols are drawn.  
(c) Certain symbols are used to show elements of the environment on a map, like  house,  tree,  fort,  port, etc.

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### 15. My District, My State

F.A.

1. (a) hamlets, settlements (b) Mumbai  
(c) Arabian (d) pesticides, fertilisers
2. (a) - (3), (b) - (4), (c) - (1), (d) - (2)
3. (a) [To be done by students.]
4. [To be done by students.]
5. (a) **Kharif season** : Rice, Wheat, Tur.  
**Rabi season** : Jowar, Bajra, Moth, Beans.  
(c) The production of crops depends on the climate, soil and availability of water.
6. [To be done by students.]
7. (a) Satpuda mountain (b) Western ghats  
(c) Arabian Sea (d) Western ghats  
(e) Sahyadri mountain (f) Godavari  
(g) River Bhima, River Nira, River Tapi

(h) River Vaitarna, River Ulhas

(i) Satmala Range, Harishchandra Balaghat Range, Mahadeo Range

(j) Vaitarna, Jayakwadi, Koyna

(k) Vaitarna, Godavari, Koyna

(l) Thal Ghat, Bor Ghat, Tamhini Ghat, Varandha Ghat, Kumbharli Ghat, Amba Ghat, Phonda Ghat, Amboli Ghat.

8. [To be done by students.]

9. (a) Nashik, Jalgaon, Satara, Sangli, Aurangabad

(b) Nandurbar, Dhule, Jalgaon, Buldhana, Akola, Amravati, Wardha, Nagpur, Chandrapur, Yavatmal, Beed, Aurangabad, Washim.

(c) Mango, Chikoo, Vegetables, Banana, Coconut.

(d) Akola, Amravati, Wardha, Nagpur, Yavatmal.

(e) Raigad, Ratnagiri and Sindhudurg.

10. [To be done by students.]

S.A.

1. (a) Akola, Amravati, Wardha, Nagpur and Yavatmal are the districts where oranges grow.  
(b) Raigad, Ratnagiri and Sindhudurg.  
(c) Malvani and Konkani  
(d) River Vainganga  
(e) Dhule, Nashik, Aurangabad, Ahmadnagar, Pune, Solapur, Satara and Sangli.  
(f) The Bombay Reorganisation Act came into effect on 1<sup>st</sup> May 1960 (formation of the State) hence, 1<sup>st</sup> of May is celebrated as Maharashtra Day.

## 16. Day and Night

F.A.

1. (a) 24 (b) day (c) night (d) June 21
2. (a) True (b) True (c) True (d) True
3. [To be done by students.]

S.A.

1. (a) **Day** : The part of earth which receives sunlight is called day.  
(b) **Night** : The part of earth where sunlight does not reach, it is night.  
(c) **Rotation of the earth** : The spinning of the earth around itself is called the rotation of the earth.
2. (a) The earth turns around itself that is why we have day and night on the earth.  
(b) On the day of new moon, the moon rises when the sun rises. It sets when the sun sets. It crosses the sky with the sun during the day. That's why we can't see the new moon in the sky.  
(c) Since the days are shorten and nights are longer in winter.  
(d) The days are longer and nights are shorter, it is summer when the nights are longer and the days are shorter it is winter.
3. (a) The earth gets light from the sun.  
(b) The earth's shape is like that of a very large ball.  
(c) We say that it is day in the half that gets light.  
(d) The other half where sunlight does not reach, it is night.

4. (a) **The spinning of the earth** : around itself is called the rotation of the earth.  
(b) **The cycle of day and night** : The earth turns around itself. That is why we have day and night on the earth.

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## 17. My Upbringing

F.A.

1. (a) good (b) upbringing
2. (b) Skating, karate, cooking, etc.
3. (a) Pratap (b) didi (c) Heena
4. (i) Brushing teeth (ii) Riding a bicycle (iii) Listening to stories - Good manners (iv) Cooking (v) Bathing a buffalo.

S.A.

1. (a) We learn many different things while we are growing up, they lead to the development of certain habits, likes and dislikes.  
(b) If people from another place happen to be our neighbours, we naturally get to know about their food and festivals which may be different from ours, this is how we become familiar with diversity.
2. A lion cub is not able to hunt as soon as it is born, it is taught how to hunt by its mother and other lionesses in the pride. A cub is pampered by all of them until it is three months old. Then, it begins to learn how to hunt. It takes two to three years for a cub to become adept at hunting.

3. (i) We develop good habits. (ii) We learn to carry out tasks ourselves. (iii) They appreciate it when we can do all these things properly.
4. (a) **Baba Amte** : Spent his entire life in social service. His lifelong goal was to serve people suffering from leprosy and also other handicapped people, and to help them stand on their own feet. In this mission, he was helped immensely by his wife, Sadhanatai. His work is being carried on by his sons and his daughters-in-law.

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### 18. Changes in the Family and Neighbourhood

#### F.A.

1. (a) migration (b) diversity
3. [To be done by students.]
4. (a) Cell phones (b) Internet (c) SMS
5. Due to the help we give each other, our relations with our neighbours become friendly.
6. We exchange food, our joys and sorrows and help to solve various common problems.

#### S.A.

1. (a) **migration** : Moving from one place to another in order to live there is called 'migration'.
- (b) **means of communication** : The things used to communicate with friends and relatives far away are called means of communication.
- (c) **big family** : A lot of people are required to do the work needed in agriculture, many relations stayed together and formed a big family.

(d) **small family** : People began to migrate to places where they could find work, big families were scattered into many small families.

2. (a) **Big families are scattered** : into many small families, because people began to migrate to places where they could find work.
- (b) **Relations with neighbours become friendly** : due to the help we get from each other, our relations with our neighbours become friendly.
- (c) **Birds also migrate** : in search of food and shelter.
3. (a) As the family grew, it became impossible to feed everyone through farming alone. Trade and other new occupations developed.
- (b) People migrate for jobs, occupations or education, as we migrate we see the diversity in our country.

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## BOOK - IV

### 19. My Delightful School

F.A.

1. (a) help (b) child
5. Cricket, badminton, foot ball, volley ball, etc.

S.A.

1. (a) There may be children who speak different language at home, because of this we see a lot of diversity.  
(b) Every child should get the joy of learning in school. The government has also provided many facilities for the education of girls.
2. (a) We make many friends in school. We study with each other's helps. We play together and share our tiffins. We take part in school functions and go on trip together. We come together to clean and decorate the classroom.  
(b) If we help each other, we can succeed at anything, work becomes enjoyable. In school we first understand our mutual needs and help each other, the joy in learning increase.
3. (a) All children with special needs have the right to education. Many parents of children with special needs send their children to school with great determination. The government also has many schemes for them.

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### 20. I'll be Responsible and Sensitive

F.A.

1. (a) doctors (b) Braille (c) television
2. (a) False (b) False

3. (a) Deaf people use ~~Braille~~ / sign language.  
(b) Blind people can cross the road using white cane / ~~wheel chair~~.

4. (a) X (b) ✓ (c) X (d) ✓ (e) ✓ (f) X (g) X (h) X

S.A.

1. We have been successful in eradicating polio in our country. The World Health Organisation has praised India for this achievement, the phrase is related to polio.
2. (a) Grandparents are often at home all day they have great affection for their grand children, they feel happy when we speak to them lovingly.  
(b) Some people have physical handicaps because of illnesses or accidents or they may be born with them. They suffer many inconveniences and much discomfort at public place.
3. (a) Old people only pastime is talking to their children and grand children.  
(b) We should take doctor's advice and take care accordingly.

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### 21. Management of Community Life

F.A.

1. (a) Management (b) Proper co-ordination  
(c) representatives
2. (i) Getting up at.  
(ii) Morning studies and evening studies.  
(iii) School timings.  
(iv) Play-timings. (v) Sleeping time etc.
3. (i) Has the classroom been properly cleaned.  
(ii) Is there chalk and a duster in the classroom?  
(iii) Is the board clean?



- (iv) Checking these things regularly. Writing good thoughts on the board and maintaining discipline in the classroom is the responsibility of class representatives.

S.A.

1. (a) **Management** : To do any kind of work smoothly and in an efficient and systematic manner, the planning involved to achieve goal is called management.  
(b) **School Management Committee** : To make sure that the school run smoothly a school management committee is formed.  
(c) **Constitution** : After independence a 'constitution' was framed for our country, the constitution provides the fundamental framework for governing the country.
2. (a) The school management tries to understand the difficulties of parents, students and teachers, it gives guidance and helps smooth functioning of the school.  
(b) If there is no fixed time, students would come to school whenever they wished this will create confusion, and hamper the process of learning.  
(c) Rules guide us about how to behave in society, because of rules, we can be sure that everyone will behave in a particular manner.
3. (a) The first step in management is to prepare an outline of how and when the work is to be done.  
(b) Because of rules, we can be sure that everyone will behave in a particular manner.
4. (a) **Management** : is necessary for any work to be done properly. A detailed plan is necessary for group work. If work is carried out according to the

plan, it is done smoothly and on time. The school management committee works to ensure that all round development of children. The local government body provides facilities for the daily needs of people.

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## 22. Transport and Communication

F.A.

1. (a) faster, safer (b) wheel  
(c) gestures, facial (d) modes
2. (a) - (2), (b) - (3), (c) - (1).
5. (a) We use the above means of transport to carry goods and people from one place to another.  
(b) The bullock cart.  
(c) Wheels.
6. Bullocks, donkeys, horses, camels, etc.

S.A.

1. (a) **Communication** : Obtaining or sending various types of information is called communication.
2. (a) Recently the use of mobile phones are increased however sparrows are disturbed by the waves coming from mobile phones. That is why sparrows are disappearing from our environment.
3. (a) Fish communicate with help of its body movements.  
(b) Street play, puppet show, etc. are used to promote the pulse polio campaign in rural areas.  
(c) TV is the means of live entertainment and means of transmission.  
(d) Textbook is used to provide information on a particular subject on a particular topic for a particular age group.



## 23. Natural Disasters

F.A.

- (a) Waves (b) areas where people are living  
(c) helpless (d) heaps
- Natural disaster :** (a), (c), (f), (e).  
**Man-made disaster :** (b), (d), (g), (h).
- (a) Floods (b) Nashik, Nagpur (c) Tsunami

4.



Flood



Earthquake

S.A.

- (a) **Disaster :** a very serious mishap, one in which people or animals can get injured or die.  
(b) **Natural disaster :** Mishaps have natural causes, they are called natural disasters.  
(c) **Man-made disaster :** Disaster that are caused due to man-made cause is called man-made disaster.
- We will allow people from the neighbouring village to come and stay in our village for few days.
- (a) Showers of rain in winter is good for the crops.  
(b) Hailstorms can injure people as well as animals, it damages crops and orchards.  
(c) The current of flood waters is very strong. It is dangerous to swim in flood waters.  
(d) A tsunami comes with so much force that vehicles on the coast along with the people in them get thrown away to quite a distance. Vehicles are crushed, people inside get injured or die.

## 24. Are we Endangering our Environment?

F.A.

- (a) storage (b) wheel (c) Man (d) bag (e) work
- Car, bus, truck, bike, etc.
- (a) Kacha roads are now pakka roads, a lot new buildings coming up, new shops opened, vegetable shop are now available.

S.A.

- (a) Because of the increasing population, the drainage system in cities fails sometimes.  
(b) The food produced in the country began to fall short of the needs of the growing population. So our scientists developed improved methods of farming, hence farmers grow more than one crop in the year.  
(c) As the population keeps growing, the demand for things we get from the environment also grows in leaps and bounds, the number of vehicles increased, their smoke began to cause.
- (a) Cities became crowded as people left their villages in search of work, the number of vehicles increased.
- A city is crowded, populated, polluted but have a lot of facilities, a village has olden way of leading life close to nature but no facilities, a forest is totally a backwards meant for only animals.
- The waste from factory pollutes the river, the water becomes dirty and sometime harmful chemical makes water unfit for animals and human beings use.
- (a) Car, bus, truck, train, aeroplane, ships, submarines, etc.

- (b) In order to set up new colonies, people used open space and fields around the cities, and to build new houses and colonies, the trees there had to be cut down.
  - (c) Malaria, dengue, filaria, chikungunya.
6. (a) **Using diesel and petrol sparingly :** Petrol and diesel is available in very small quantity compared to its demand hence we should use it sparingly so that it is made available for the next generation also.
- (b) **Saving water :** Water is the most need of the human beings, rain is the main source of water, we should not waste, water and save it so that it can be used when we have summer or no rains.
- (c) **The progress made by human beings :** Man used fuel and invented vehicles, he build roads and railways for transportation, factories are set up to manufacture various things. He build houses with best facilities he made his life easier and prosperous.

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