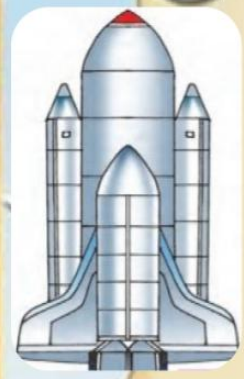
सत्यमेव जयते

Government of Maharashtra









Bridge Course

Standard : Fifth

Subject : Environmental Studies 1

Academic Year 2021-22



Academic Year 2020-21

ज्ञानसेवा तु साफल्यम्

State Council of Educational Research and Training, Maharashtra, Pune 30







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Instructions for students / parents

Namaskar dear students!

In the academic year 2020-21, you could not go to school as usual, but your teachers were trying to bring education to you through various media. Even though our school was not regular, the education continued. Now we are getting ready for the new academic year. This bridge course has been prepared for the purpose of pre-preparation for the academic year 2021-22 as well as a review of the previous year's syllabus.

1. This year's syllabus is based on the important concepts of the previous class, the same concepts have been included in this bridge course.
2. The duration of the bridge course has been fixed at 45 days and it consists of three tests. These tests are based on the Activity Sheets in the bridge course.
3. Each Activity Sheet in the bridge syllabus has been prepared with the aim of clarifying important concepts.
4. The Activity Sheet is constructed as follows:

- **Let's understand:** The concepts included in the Activity Sheet are given here.
- **Reference:** Reference is made to last year's lesson.
- **Learning Outcomes / Competency Statements:** Learning Outcomes and developing competencies that can be achieved through the given Activity Sheet.
- **Let's take a look:** A brief explanation is given to make the concept clearer. It includes tables, concept diagrams, flow charts, figures, etc.
- **Let's Practice:** The questions are designed with a balance of knowledge, understanding, application and skills to further practice the concepts and contents understood.
- **Links for more study:** To strengthen the concepts in the Activity Sheet, video links of related concepts on the Diksha portal are provided.

5. The Activity Sheet should be solved under the guidance of the teacher. Parents and students should keep in touch with the teacher to stay consistent in the study.
6. Attempts should be made to complete it within the time allotted for each Activity Sheet.
7. **The answers to the questions in the Activity Sheet should be solved in a separate notebook and preserve the notebook for internal assessment.**
8. Small activities as well as experiments are given. These should be performed by the students in the presence of parents or teachers.
9. Students should better understand the concept by watching the related videos using the links given at the end of the Activity Sheet.
10. Seek the help of your parents or teachers if you have any problems solving the Activity Sheet. We are confident that you too will successfully complete this bridge course and prepare yourself for the new academic year 2021-22 with confidence.

Best wishes for completing the bridge course with sincerity and self-effort!

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Instructions for teachers

The global crisis of coronavirus outbreak in the academic year 2020-21 has led to many difficulties in direct classroom teaching. We all tried to reach out to the students using various media. We also had great success in it. But due to lack of direct teaching, our efforts were facing many limitations. The crisis is not over yet. There is a question mark over the commencement of schools in the academic year 2021-22. This bridge course is created to review the studies done by our students in the academic year 2020-21, as well as for pre-preparation of the current academic year curriculum.

1. The bridge course is to be completed in a period of 45 days.
2. In this bridge course, the most important concepts of the previous year have been included and presented in the form of Activity Sheets.
3. Each of the Activity Sheets is constructed in such a way that they contain small activities and experiments which can be easily performed by the students using the materials that are readily available .
4. Understand the structure of the Activity Sheet in a systematic way, so that it will be easier to solve.

Let's understand: Here are the key concepts included in the Activity Sheet related to last year's lesson. Much emphasis has been placed on last year's concepts, which have been further expanded this year.

Reference: Reference is made to last year's lesson. Students should be instructed to use their last year's textbook.

Learning Outcomes / Competency Statements: Learning Outcomes and developing competencies that can be achieved through the given Activity Sheet. While solving the Activity Sheet, attention should be paid to the achievement of the learning outcome, as well as to the development of the relevant competency.

Let's take a look: A brief explanation is given to make the concept clearer. It includes tables, concept diagrams, flow charts, figures, etc. Here you can design various other learning experiences. Important points and brief information are provided to make your teaching easier. You can add explanations to those concepts as per available time.

Let's Practice: The questions are designed with a balance of knowledge, understanding, application and skills to further practice the concepts and contents understood. The practice questions in each Activity Sheet should be written by the students in an independent notebook. This will lead to revision as well as writing practice. These notebooks should be submitted after completion of the bridge course.

Links for more study: To strengthen the concepts in the Activity Sheet, video links of related concepts on the Diksha portal are provided. Students should be instructed to watch these videos at this link at home.

5. This bridge course will be useful for understanding various concepts in the present class, for awakening the students' foreknowledge as well as for reviewing the students' learning.

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6. Observe that the students solve the Activity Sheets strictly as per the plan given in the index.
7. The teacher should pay attention to the fact that the students will solve the Activity Sheets in the bridge syllabus honestly and with self-effort. Understand their problems and help them accordingly.
8. After reviewing certain units, the given tests should be attempted by the students. After checking the tests, they should be evaluated by adopting proper criteria and the marks should be recorded.
9. After the evaluation of each test, the students who need therapeutic teaching should be properly guided. Thus all the three tests should be implemented.
10. After completing this 45 days bridge course, you should start teaching your regular course.

Best wishes for the academic year 2021-22 !

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Preparatory Bridge Course

Standard : V

Subject: Environmental Studies Part 01

Index

Activity Sheet No.	Name of the Activity Sheet
1st July to 15th July 2021	
1	The Life Cycle of Animals
2	The Inter-relationship between Living Things
3	Storage of Water
4	Water safe for Drinking
5	Water for Every Household
6	Variety in food
7	Nutrition in Diet
8	The value of food
Test No. 01 (Based on Activity Sheets 01 to 08)	
16th July to 30th July 2021	
9	Air
10	Clothes
11	Let's look inside the body
12	Minor illnesses and Home Remedies
13	Directions and Map
14	Map and Signs
Test No. 02 (Based on Activity Sheets 09 to 14)	
31st July to 14th August 2021	
15	My District My State
16	Day and Night

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17	My Upbringing
18	Changes in the Family and Neighbourhood
19	My Delightful school
20	I'll be responsible and sensitive
21	Management of community life
22	Transport and communication
23	Natural disaster
24	Are we endangering our environment?
Test No. 03 (Based on all the Activity Sheets 01 to 24)	

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Preparatory bridge course

Class: V **Activity Sheet : 01** **Subject: Environmental Studies-01**

Let's Understand: Reproduction in animals.

Reference: Std.IV, Chapter 01. The Life Cycle of Animals

Learning outcomes: Understand behavior of animals (e.g. the behavior, life cycle, reproduction in birds, insects, animals.)

Let's take a look: The life process of animals - reproduction.

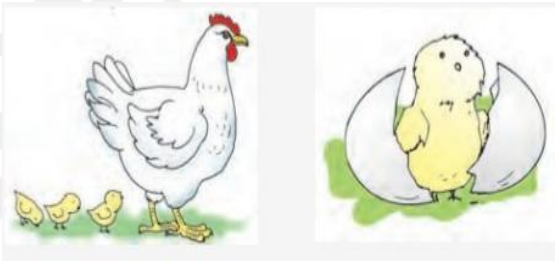
Observe the pictures given below. Write what you see in both the pictures in the notebook.





The picture above shows that there is similarity between the puppies and their mother. There is no similarity between the butterfly and the caterpillar that come out of the egg, but there is a lot of difference. In some animals, the young one grows into an adult animal that looks very different from the young one. This change of form is called **metamorphosis**.

Now what do you see in the next pictures?





The hen lays eggs and the chicks come out of those eggs, while the kitten does not come out of the egg. This means that some animals lay eggs while some animals are born from the tummy of their mother. The process of giving birth to a young one similar to oneself, is called **'reproduction'**.

A kitten is born from its mother's tummy. But some animals like crows, spiders, and lizards lay eggs. Ants, butterflies, fish, frogs and snakes are all animals that lay eggs. But we do not often see their eggs. The eggs of some very small animals are very tiny. We would hardly notice them. But the young ones come out of the eggs and they grow. This means reproduction takes place. For e.g. Birth of a chick from egg (reproduction).

Eggs of hen are big enough to be easily seen. Warmth is necessary for the chick to grow inside the egg. She hatches them. (Sit on them to keep them warm) The chicks inside slowly keep growing .When its growth is complete, the chick breaks the eggshell and comes out. This is a reproduction of hen.



Let's Practice:

Q.1) Look at the picture, what action appears in the picture, write in your words.



_____
_____
_____
_____

Q.2) Look at the picture, you can see the similarity between cat and kitten. Write the pairs of animals and their young ones which show such similarities.
(For example: Cat and Kitten)



_____
_____
_____
_____

Q.3) Identify the odd one out.

a) Crow, lizard, dog, spider _____

b) Fish, frog, hen, snake _____

Q.4) Observe the animals in your surrounding which lay eggs and make a list of them.

_____
_____
_____

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Q.5) List the animals born from eggs and born from the tummy of their mother. Write it in the given below.

Egg-born animals	Animals born from mother's tummy
_____ _____ _____ _____ _____ _____	_____ _____ _____ _____ _____ _____

Link for more study :

Animal Growth

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924959823708161387 46

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Activity Sheet : 02

Let's Understand : The needs of living beings, the impact of changes in seasons on living beings

Reference : Std. IV, Chapter 02 The Inter-relationship between living things.

Learning outcomes : 1. Suggests various ways to protect health.

2. Maintains observations/experiences/information in different ways and establishes the relationship between the cause and consequences of various events in the surrounding.

Let's take a look : Our needs - Study the following picture, what do you think?





Food, water, air, clothing, shelter are our basic needs. You must have recognized them from the observation of the above pictures. It is through the surroundings that these needs are fulfilled. We have many such needs, and these needs belong to all living beings. But there is a difference in the needs of every kind of living being. e.g. There is a difference between the water required by the rat and the elephant. Any type of living thing will be found only where all its needs are fulfilled. Let's take an example of a tiger. A tiger lies in wait for its prey among grasses and sometimes takes shelter in dense vegetation, tall grasses or caves in hills. So he hunts deer, nilgai, bison and feeds on them.





On the other hand, we keep various animals to meet our needs. They are used for milk, meat and eggs. Some animals are useful for carrying burdens or drawing carts. The dog guards our house, while the sheep give us wool. Similarly, we also need plants eg. food, vegetables and fruits. Accordingly human beings take care of animals and plants with love because animals and plants give to us abundantly. They satisfy our needs.

The effect of the changes in the season on living beings: Children, you know the seasons. These seasons affect the living beings! If you look at the following picture you will notice.





What does the above picture show? What do you think? Summer, rainy and winter are our seasons. The change of these seasons affects the living beings. It is very hot in summer so we wear cotton clothes. We use umbrellas, hoods and raincoats in the rainy season and warm clothes are required in winter. Man is affected by all the three seasons, so do other living beings. In winter many trees shed their leaves while mango trees start blooming. The coats of many furry animals become thicker. By the month of March, we begin to feel the heat, many trees get new leaves. The call of the koel is heard. This is the season for mangoes, jackfruit and cashew nuts. While in June black clouds make their appearance and rain begins. Due to this rain grass and plants grow. Sometimes in the evening there is a seven-coloured rainbow in the sky. We hear the loud noise of frogs. Agriculture blooms. It becomes green everywhere. All these effects are due to change in season.

Let's Practice :

Q.1) Identify the **need** in the following sentence. Write it in front of the sentence.

A) You have to eat twice. _____

B) To avoid cold and wind, home should be required. _____

C) We need warm clothes in the cold. _____

D) The cow is thirsty. _____

Q.2) Write in front of the pictures, the months of the seasons in the picture.



_____

_____



_____

_____



_____

_____

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Q.3) Think and write.

A) Ants and Elephants have a difference between their food and water requirements. Think and write three pairs of animals which will have such a difference between their requirements of food and water.

_____

_____

_____

B) According to the seasons some changes take place in living beings. e.g. Winter - The leaves of trees fall off. You may have experienced some such changes, write them in front of the following seasons.

1) Rainy _____

2) Winter _____

3) Summer _____

Q.4) Reena has to go for a camp in winter. What instructions will you give her so that she will not suffer from the cold?

_____

_____

_____

Q.5) Guess who I am?

An age old tree with a thick strong trunk gives deep, dark shade from the scorching sun.
Like an old man's beard with many strands, it has ropes for swinging from every branch.

_____

Links for more study :

Changes according to seasons

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_3124864411417722882395 1

Needs of living beings

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Activity sheet: 03

Let's Understand : Traditional sources and new sources of water

Reference : Std.IV, Chapter 03 Storage of Water

Learning outcomes : Explain the process of production and receipt of essential commodities from the source to home. (e.g. Food, Water, Clothing)

Let's take a look :

You know that some rainwater flows away over the ground and some water seeps into the ground. All living things use this water throughout the year. If this water is not stored then all will not get enough water. For this it should be stored and used economically. There are various methods of storing water for this. There are traditional and recent systems in it (water stores and systems). After observing the following pictures you will come to know about old water stores. If such stores are there in your area, observe it and get information about it.

Traditional sources (old water stores)- If you observe the following pictures you will notice the traditional/old water stores of water.






There were many methods of storing water in our state in the olden days, nowadays those stores are rarely used. Their remains can be seen. Water in some of these stores never gets depleted. Well, draw-well (*aad*), river, lake etc. are included in it.

1) **Well** - Some rainwater seeps into the ground. Wells are dug to obtain this water.

2) **Lake and tank on the fort** - Earlier the forts had reservoirs and tanks dug into the stone for the people who used to live there.

3) **Draw-wells** - In the past, draw-wells were dug to get drinking water. They were small wells from which water was drawn using a small pot (*pohra*) tied to a rope. Atpadi in Sangli district had a draw-well in every Wada.

4) **River and bunds** – Earthen or masonry bunds were built across rivers to store their water.

5) **Old lakes** – These were built in areas of low rainfall or in areas without a major river.

6) **Old tanks (*Houd*)** – Earlier, in some large cities tanks were used to store water. Some of them are still in use.

Recent Sources (New Arrangements) - Below are some new water bodies in the picture, have you seen such water bodies in your area? Note how these water bodies are useful to you.

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1) **Dam** - Huge quantities of water can be stored. As a result, more land was brought under cultivation and cities began to grow. It became possible to set up factories and generate electricity.

2) **Borewells** - Due to the onset of use of electricity the borewells were dug to draw very deep water through the electric pump. It is very deep and narrow.

3) **Panpoi** - People outside the house or on the way need water to drink. For which water is provided free of charge by filling the big clay jars with water, that is panpoi. Some individuals or organizations start such water bodies. Therefore, people get drinking water. Panpois are very useful, especially in summer.

Water is a natural resource, it is used by all living things. Water is life, we must keep this in mind when we use water.

Let's Practice :

Q.1) While using water and water bodies mark ✔ in front of the correct habit from the following.

1)	The use of water should be unlimited.	
2)	Water is used carefully in Aadarsh's house.	
3)	Raju always throws garbage in the lake.	
4)	Mother washes clothes near the river every day.	
5)	The Sarpanch facilitated panpoi in the village.	

Q.2) Identify an odd one out.

a) Dam, Borewell, Old tank (Houd), Panpoi _____

b) Draw-well, Well, Houd, Borewell _____

Q.3) How does water come to your house? Write the journey of that water to the house by discussing it with your parents.

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_____

_____

_____

_____

Q.4) What good habits must we cultivate in order to use water economically?

_____

_____

_____

_____

Q.5) See the following picture. Where do you get to see such a source of water? Write its use in your words.



_____

_____

_____

Links for more study :

Storage of water

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_3130639311658598401497

Panpoi

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Activity sheet : 04

Let's Understand : Solution, Potable water

Reference : Std.IV, Chapter 04 Water safe for Drinking

Learning outcomes : Register observations/experiences/information in different ways and establish the relationship between causes and consequences to evaluate the patterns of various events in the surroundings. (Dissolving, filtration, settling, boiling)

Let's take a look :

Let's try this:

1] Take water in a glass and taste it. 2] Water has no taste. Now, add some sugar to it and mix it. Now taste it. The water in the glass may have been sweet. 3] Now ask your mother to cut the lemon, take it and squeeze in that sweet water. This time lemon seeds will also fall into the water. 4] Taste again, now the water must have been sour and sweet. 5] Add some ice cubes to it and also put a whole lemon without cutting it along with the ice cubes. 6] Now observe the things in that water.

While observing, you will see uncut lemon is settled at the bottom of the water, ice cubes and lemon seeds have floated on the water, sugar has dissolved in water, so the taste of water became sweet.

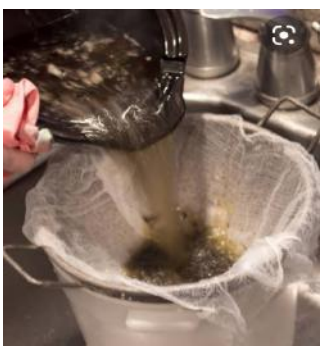
What does this reveal? Some substances dissolve in water, while some substances do not dissolve in water. Heavy objects sink into water, while light objects float and dissolved substance spreads evenly in the entire water of the glass.

Solution: When a substance dissolves in water, a mixture of water and that substance is formed. This mixture is called the solution of that substance.

Potable water: Water that does not endanger our health in any way when we drink it is called safe drinking water or potable water. Drinking water should be potable.

When we get muddy water through the tap during the rains, we allow it to settle before using it. If necessary, we use alum or we filter it. This reduces the muddiness of water. Water looks clean and transparent. So is it now safe for drinking?

We will take more information about this.



(1) Muddy water (2) Filtration (3) settling (4) Boiling

Drinking water should be potable. Pure water does not have taste, colour and smell. Do not drink water if it has a foul smell or if it has a colour.

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By drinking such water people can fall ill. There are many types of micro-organisms around us. Even if harmful microorganisms are present in water, we are unable to see them. Even if the water with such microorganisms is transparent, would it be potable or safe for drinking?

During the rainy season, we often hear of an outbreak of diarrhoea or gastritis. At such times, we need to boil the water that has been cleaned by settling and filtration. Only then does it become safe for drinking.

Let's Practice :

Q.1) Even if the water looks transparent, what is the reason that it is not safe for drinking?

_____

_____

_____

_____

Q.2) Let's think.

A) What has to be done to dissolve sugar in water quickly?

_____

_____

_____

B) Rava (semolina) and Sabudana (sago) have got mixed together, how will you separate them?

_____

_____

_____

Q.3) During the rainy season if you get muddy water through the tap, how will you make it potable?

_____

_____

_____

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Q.4) Classify the following items and complete the chart.

(Stones, Sugar, Wood, Pen, Nail, Salt, Oil)

Objects dissolving in water	Objects floating on water	Objects that sink in water

Q.5) Write down what will happen.

A) Raju drank muddy water.

_____

_____

_____

B) Seema put oil and lump-sugar(khadisakhar) in water.

_____

_____

_____

Links for more study :

Solution of the substance

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249654826598413876 5

Potable water

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249660895232013876 7

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Activity Sheet : 05

Let's Understand : Storage of water, water distribution system

Reference : Std.IV, Chapter 05 Water for Every Household

Learning outcomes : Explain the process of production and receipt of essential commodities from the source to home. (e.g. Food, Water, Clothing)

Let's take a look :

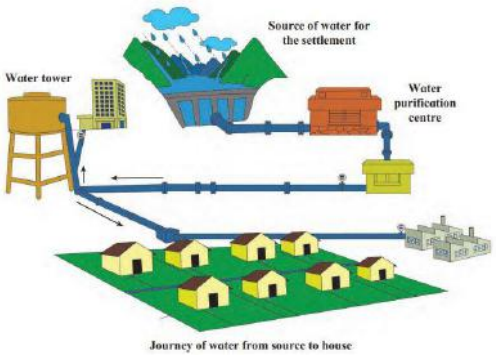
In the following picture some water storage utensils are shown, let's identify their names.



We constantly need water. Water has to be stored in the house so that water can be taken as per requirement. We keep the drinking water containers covered. Due to this dust and other rubbish does not fall in the water. We use a dipper to take the water and we replace the lid at once. But the best method of taking water is to have a tap on the container.

Water does not become stale - Some people throw away the drinking water filled in the house on the previous day and refill the other water. They think, water becomes stale. But this is a misconception. Throwing away that water means wasting good water. We should use drinking water for other purposes only if it gets dirtied due to some reason.

Let us see how water purification and distribution takes place in large quantities, observe the figure below.



It can not be sure that the water from all the sources can be used as it is for drinking. That is why a large water source is identified near a settlement. Water from it

is brought through large pipes to a common place. There, the water is made safe for drinking. This is called purification of water. Arrangements are made to distribute this water all over the town or city. This is called distribution of water.

Even today, in some places, water is drawn from wells or borewells for use at home. But, it needs to be ensured that the water is potable. If it is not, then it should be boiled for the purpose of drinking, so that it will not endanger our health. In some places, water is supplied by transporting it by means of tankers.

Let's Practice :

Q.1) Write whether the following statements are Right or wrong?

a) Suraj did not keep a lid on the pot after drinking water from it. _____

b) Nisha waters her plant with the water she has used for cleaning the dishes.

_____

c) When water comes in the tap, Sai empties her pot and fills it again._____

d) Reshma carries drinking water with her when she goes for a picnic. _____

Q.2) Find out.

a) Which is the largest source of water in your village/ city? _____

b) Do you have a water purification plant in your village/ city? _____

c) Where is drinking water stored in your school? _____

Q.3) If every family has to bring the water they need daily from the river, then-

a) What problems are they facing?

_____

_____

_____

b) What benefits are they getting?

_____

_____

_____

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Q.4) How to use water economically? Write in your own words.

_____

_____

_____

Q.5) Write two slogans giving the message to save water. (e.g. Saving water, save life)

_____

_____

_____

Q.6) Draw a picture of the source of water from which water comes to your house.



Links for more study :

Storage of water

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249666841804813876 9

Care for drinking water

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31248644118458368023952

Water Supply of village

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249675500748813877 2

SCERT Maharashtra

Activity Sheet : 06

Let's Understand : Food Crops and their diversity according to different regions.

Reference : Std. IV, Chapter 06, Variety in food.

Learning outcomes : According to districts and states- food crops, famous food dishes and the reasons for their variations in different regions are considered and shown in maps.

Let's take a look : Agriculture is the main occupation of our country. It is mainly dependent on rainfall. The rainfall received in all regions is not the same. In regions of high rainfall, crops such as rice, coconut, ragi and varai are grown. Wheat, toor and soyabean are grown in regions of moderate rainfall. Jowar, bajra and moth beans are grown in regions of low rainfall. To help crops to grow well, good seeds, fertile soil, sufficient sunlight and water are needed. According to the seasons a variety of grains, fruits and vegetables are grown in our country.

Example: Observe the following pictures and identify the crops –



High rainfall



medium rainfall



low rainfall

The main crop grown in any region is used to make various items in that region. For example, jowar is grown on a large scale in the plateau region of Maharashtra. *Hurda, Lahya, Bhakari, Ghugra, Papad, Sandge, Ambil, Dhapate, Dhirde* etc. are all preparations of Jowar enjoyed in that region. In Konkan or the coastal region rice, coconut and coconut oil are widely used. In central Maharashtra jowar, bajra, groundnut, soyabean, sesame and mustard are more commonly used. Note that this variety in crops is due to the change in climate and soil. The crops grown in a region determine the diet of the people in that region.

Observe the following picture and discuss the fruits you have seen.



Let's Practice :

Q.1) Look at the given pictures. In which district of Maharashtra, the following food items are specifically prepared ? Write the name of that district below the picture.







_____ _____ _____

Q.2) Name any two food items which are made at home from the following crops.

A) Wheat _____ _____

B) Coconut _____ _____

C) Corn _____ _____

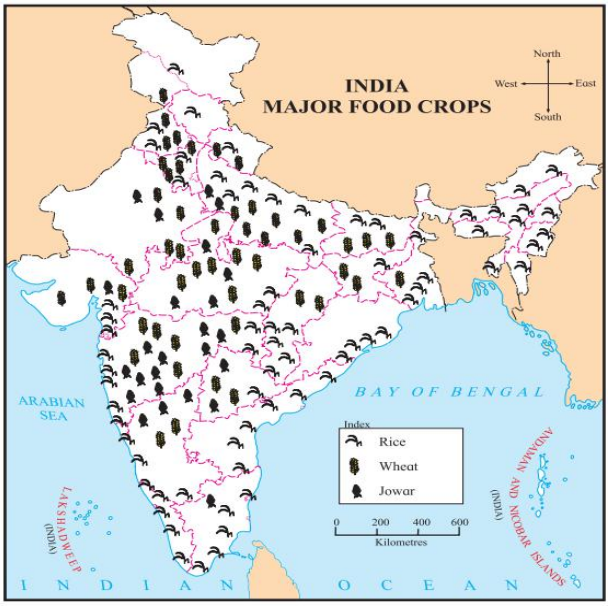
D) Rice _____ _____

Q.3) Name the ingredients required for the preparation of *Dosa* .Try to make *Dosa* with the help of your mother.

_____

_____

Q.4) Observe the map and answer the questions given below–



A)Which food crop is grown on a large scale in the coastal region ?

_____

B)Which food crops are grown in North India ?

_____

C) Which food crops are grown in Maharashtra?

_____

D) Which food crop is grown on a large scale in the Southern part of India?

_____

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Links for more study :

Variety in food - 1

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31248628645400576023745

Variety in food -2

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_313095848370970624110 41

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_313292496984260608138780

SCERT Maharashtra

Activity Sheet : 07

Let's Understand : Variety in Food, Nutrition in Food.

Reference : Std. IV, Chapter 07, Nutrition in Diet.

Learning Outcomes: Explain the process of formation and acquisition of things essential for life, from source to home. (Example: food, water, clothes)

Let's take a look :

Variety in Food - Observe the following picture and list the foodstuffs given below.



In our daily diet, we eat some foodstuffs in raw form and we eat some variety of foodstuffs prepared from other foodstuffs by processing them. For example, butter, curd, buttermilk, *shrikhand*, *and lassi* are prepared from milk. We get flour from jowar, bajra to make bhakri. To make sweets, we may use either sugar or jaggery which we get from sugarcane. This suggests that there is variety in the foodstuffs we use.

Nutrition in Food – As there is variety in the foodstuffs we use, there are differences in people's likes and dislikes. The food constituents that meet the different needs of our body are present in all our foodstuffs in varying quantities. Following are the benefits of these food constituents -

1) Some of these food constituents give energy to our body.
2) Some of these food constituents help our body to grow.
3) Some of these food constituents help to nourish our body.
4) Some of these food constituents give the ability to fight diseases and make our bones strong.
5) And for all the functions of our body to go on smoothly, we need to drink plenty of water.

It suggests, if our body is to work properly, it must remain healthy. We must include all the food constituents in our diet. While preparing food items, some of the constituents in foodstuffs can get destroyed. We can take the following precautions to maintain the nutrition in food.

1) While cooking food we must add only as much water as is necessary.

2) We should use a pressure cooker or cover the food with a lid while cooking it.
3)Sprout pulses before using them. Use them while the sprouts are still small.
4)Use whole grain flour without sifting.
5)Eat fruits like chikoos, figs, grapes, and apples along with their skins.

Let's Practice :

Q.1) List the foodstuffs used in our daily diet which are prepared from milk.

_____

_____

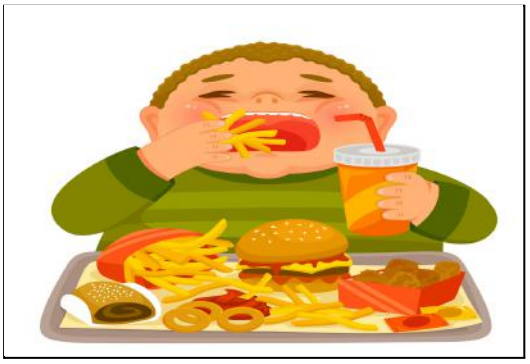
_____

Q.2) Draw the pictures of foodstuffs which we eat raw from our daily diet in the empty space given below.

(Such as Carrot, Radish, Cucumber, Apple, Mango, Tomato)

Q.3) Observe the following pictures and list the foodstuffs into nutritious foodstuffs and junk foodstuffs.





Nutritious foodstuffs	Junk foodstuffs.

Q.4)Write two names of the following –

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A) Sprouted pulses – 1. _____

2. _____

B) Fruits which are eaten along with their skin – 1. _____

2. _____

C) Foods prepared by fermentation – 1. _____

2. _____

Links for more study :

Nutrition in Foodstuffs
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_312486420632723456138 73

Constituents of Diet
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_313292497082048512138 784

SCERT Maharashtra

Activity Sheet : 08

Let's Understand : Farming tasks, to avoid the wastage of food.

Reference : Std. IV, Chapter 08, The value of food.

Learning outcomes : Explain the process of formation and acquisition of things essential for life, from source to home. (Example: food, water, clothes)

Let's take a look :

Tasks in farming –

By seeing the following two pictures, we come to know how the Bhakari reaches us. For this, the farmers have to put in a lot of effort and they have to do much hard work. Farmers perform many tasks on their farms.





For growing crops farmers perform many tasks from ploughing to storage of grains in sacks.

We will take the information of all these farming tasks.

1) **Ploughing-** For cultivating the crops, farmers first plough the fields, then crush the lumps of the soil. Formerly for this, bullocks were used, but nowadays tractors are being used.

2) **Sowing-** The pre-monsoon showers make the hot soil humid. This is the time for sowing. Within some days, the seeds sprout and seedlings are seen above the ground Along with those weeds also flourish, but the farmers remove these weeds.

3) **Harvesting-** After those ears of crops appear on every stalk. The grain forms and the grains grow fuller. When the ears of crops are full, all those ears must be cut and gathered. This is called harvesting.

To understand the next two tasks, we will do one activity, take two similar portions of dried toor beans pods, shell the toor beans pods from the first portion and now put the other portion in a cloth bag and tie its mouth. Pound the bag lightly with a stone or beat it with a stick. Now observe both portions of toor beans , after doing both the activities, we see that the second activity is faster than the first one. In the second activity, Toor beans have come out faster than in the first activity. Based on this activity, farmers perform the next two tasks after harvesting crops.



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4)**Threshing and winnowing –** In the machine, threshing and winnowing are easily done. When there were no machines, bullocks were made to help with the threshing. The harvested ears are put into a machine. The grains get separated and fall into a bag tied to the machine. The chaff and other rubbish get blown off.

5) **Storage–** The grain obtained after winnowing is filled in sacks. Proper care is taken to make sure that it will not be attacked by insects or other pests such as mice and rats.

To avoid wastage of food



After observing the following picture, we understand that some people take plenty of food on their plates but do not finish it. Actually we should take only as much food as we want. Food should not get wasted. We get the food through the efforts of so many people, so we should take enough care that food will never get wasted. The foodstuffs we eat in our diet come from many different places such as fields, lakes, the sea and forests. For this, the work like transporting the grains, selling, cooking etc. have to be done. Then only the food appears on our plate.

Farmers transport food grain after a lot of hard work. Not only Bhakari but to get other foodstuffs also a lot of hard work is done by many people in different occupations. The efforts and labour of many other people are also required for storing, transporting and marketing them as well as preparing the various dishes we eat. All these processes are expensive.

So, we must all take care to ensure that food is not wasted.

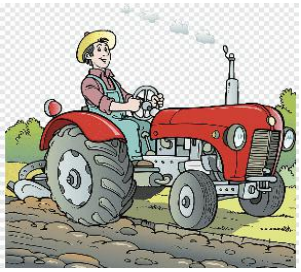
Let's Practice:

Q.1) In the following boxes, some words related to farming are hidden, find and round those words.

n	h	u	m	i	d	f	a	r	m
u	a	b	a	j	r	a	m	u	d
t	r	a	c	t	o	r	a	g	i
h	v	r	h	j	u	m	p	o	d
r	e	a	i	o	g	e	r	y	e
e	s	i	n	w	h	r	i	c	e
s	t	n	e	a	t	a	s	k	o
h	e	y	g	r	o	u	n	d	x

Q.2)Guess the following farming tasks and write.







---------- ---------- ----------

Q.3) Sachi does not know the importance of food, she always wastes food. How will you make Sachi understand the importance of food?

_____

_____

Q. 4) Write the following farming tasks in proper order.

Farming Tasks	Proper order
1)To sow the seeds.	
2)To separate grains from ears with the help of a machine/bullock.	
3) To cut and gather the ears.	
4) To plough the field with a tractor/plough.	

Q.5) Some people eat *Singadas* and *Makhanas.* Name the plants from which we get these foodstuffs. Obtain the information about - how these foodstuffs reach us.

Links for more study :

Value of food
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_312486413934600192239 17

Story of bhakari 1
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924972322734081387 8

Story of bhakari 2
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924972656558081387 89

Story of bhakari 3
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924972952207361387 90

SCERT Maharashtra

State Council of Educational Research and Training, Maharashtra, Pune 30

Preparatory Bridge Course Test: 01

Class: V **Subject: Environmental Studies Part 01** **Marks: 10**

Activity sheets : 01 to 08 **Time: 30 Mins**

Q. 1) A) Mark a tick in front of animals which are born from their mother's tummy. **1 Mark**

Goat ☐ Hen ☐ Lizard ☐ Human ☐ Spider ☐

B) Identify the odd one **1 Mark**

1. Foos, clothes, soil, air _____
2. Dam, borewell,old tanks, panpoi _____

C) Complete the correlation. **1 Mark**

Rain : raincoat : : winter : _____

Heavy rainfall : rice : : medium rainfall : _____

Q. 2) Write which substances dissolve in water and which float on water from the substances given below . **2 Marks**

(ice, seed of lemon, Khadi Sakhar, matchstick)

Dissolving substances _____---

Floating substances _____---

Q. 3) If your mother throws out leftover water from the previous day then what would you suggest to her? **1 Mark**

_____

Q.4) Write the dishes prepared with the help of following crops. **1 Mark**

1) Jowar _____

2) Rice _____

Q. 5) Rewrite the correct statement. **2 Marks**

A) Microbes present in water get killed by filtration.

_____

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B) One should remove husk from the flour while preparing chapati .

_____

Q.6) Arrange the following agricultural work in a proper sequence .

(Preparation of soil, Harvesting, Ploughing, Threshing, Sowing) **1 Mark**

1) _____ → 2) _____ → 3) _____ →

4) _____ → 5) _____

* * *

SCERT Maharashtra

Activity Sheet : 09

Let's Understand : Atmosphere, air are a mixture of several gases.

Reference : Std.IV, Chapter 09 –Air.

Learning outcomes : Keep the records of observation / experience /information in various ways and establish relation between causes and their effects to guess the pattern of various events taking place in the environment.

Let's take a look :

Air



As shown in the above picture, do this activity under the guidance of parents/teachers and discuss it with the given questions below.

1) Did the shape of the balloon change?
2) Why did the shape of the balloon change?

After doing the above activity, you must have understood that we feel the air, it is filled inside the balloon, but we cannot see the air. This means, the place that appears to be empty contains air.



Atmosphere : Observe the adjacent picture keenly. One girl is climbing the mountain. She has a bag and one oxygen cylinder on her back and she has put a mask on her nose. Now think ,Why has the girl taken an oxygen cylinder? What do you think?

As the girl will climb higher on the mountain, the girl will face difficulty in breathing. That means as we go higher, the air becomes thinner. So, the girl faces difficulty in breathing and she has to carry the oxygen cylinder with her.



The earth on which we live is round in shape like a ball. As we go farther from the earth, air exists nearly up to 50 km. This covering of air all around the earth is called the **atmosphere**.

As we go farther from earth, the layers of the atmosphere become thinner i.e., the layers of the air close to the earth are very close to each other and the ones which are higher levels are not so close. The air at greater heights is rare.

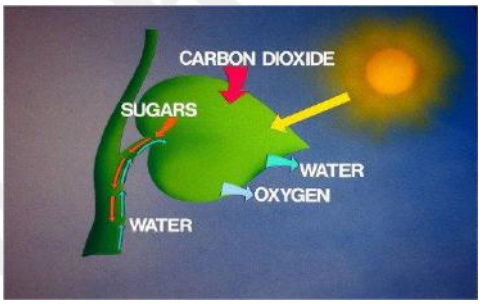
Air is the mixture of several gases :

(Try this activity on page no. 58. Do this with the help of the teacher / parent and report what you learn from that action.)

In this activity, which of the constituents of air helps burning ?

Oxygen : The constituent of air that helps burning is called oxygen gas .The oxygen in the air is used both for burning as well as for respiration.

Carbon dioxide :



Observe the adjacent picture keenly. In this process of making food, which gas the plant is taking?

The gas is carbon dioxide.

Plants make their food using carbon dioxide from air. Example. The gas that fizzes out from soda-water is carbon dioxide.

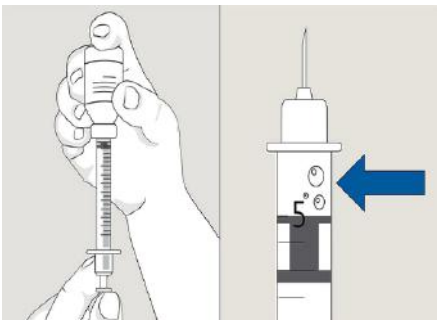
Nitrogen : Though water and good soil is available, increase in production(yield) of crops is not possible, for this, fertilizers of good quality are required. Due to this proper growth of crops occurs. The gas required for the production of fertilizers is nitrogen gas. The largest part of the air is made up of nitrogen gas.



Vapour : The glass becomes very cold, when ice is placed in it, droplets settle on its outside. It means water is also present in gaseous form. There are many such gases. Thus, air is the mixture of several gases.

Let's Practice :

Q.1) Do the activity.

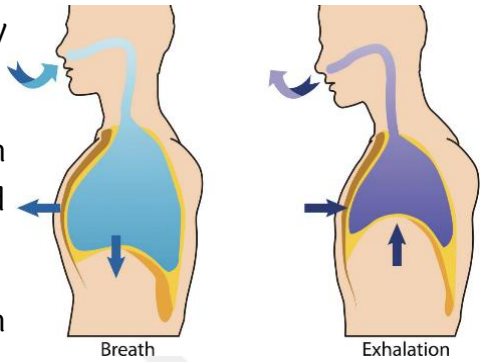


Before taking the liquid medicines in a syringe for injection, the piston of the syringe is pulled inside.

Why is this so ?

Do this activity , note your observations in a notebook.

Q.2) Observe the adjacent figure keenly. Do the activity yourself.



Write which gas we take inside our body through the nose and similarly also note down the gas released outside the body through the nose. Name this process.

Q.3) Specific information about some gases is given below, identify the gas and write.

1)The largest part of the air is occupied by this gas. _____

2) This gas is used for respiration. _____

3)Plants use this gas for making food. _____

Q. 4) Air is shown with the help of a circle, writing the name of the gas from the bracket given below, in front of the colour.

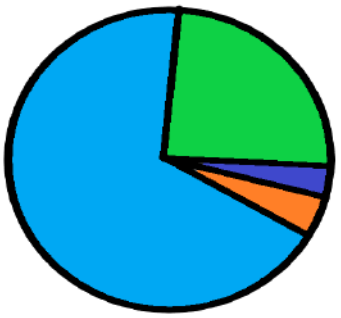
(Nitrogen, Oxygen ,Carbon dioxide ,other gases)

1) Sky Blue colour : _____

2) Green colour : _____

3) Blue colour: _____

4) Orange colour : _____



Links for more study :

1) Air
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249736183808013879 2

2) Gases in air
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249744471654413879 5

3) Let's do

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249738857676813879 3

SCERT Maharashtra

Activity Sheet : 10

Let's Understand : Types of clothes, Diversity in clothing.

Reference : Std. IV, Chapter 10 Clothes.

Learning outcomes :

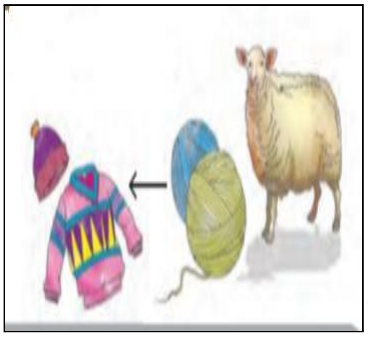
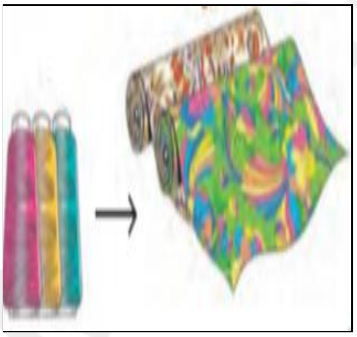
1) Explain the process of formation and acquisition of things essential for life, from source to home. (Example: food, water, clothes)

2) Tell that the diversity in clothing is due to geographical and cultural reasons.

Let's take a look :

At your home there are a variety of clothes, observe each type of cloth, the thread used for it and note it.

Types of clothes :


Types of threads :

Cloth or fabric is made of different materials. The cloth is made by intertwining threads from different sources. The threads which we obtain naturally from cotton, wool, jute, silk are called natural threads and the threads obtained from tar-like materials are called artificial threads.

Observe the following pictures , why is the diversity seen in clothing? Think of it.






From the pictures it is seen that the people living in different localities wear different clothes. The diversity in clothing is due to cultural and geographical differences.

Human beings use different clothes according to the different climates. We use cotton clothes in summer, woollen clothes in winter, clothes made from artificial threads like nylon in the rainy season.

Let's Practice :

Q.1) Observe the picture and answer accordingly.



A) State the type of thread, from which the lady in picture is weaving the cloth?

_____

_____

B) In which season mostly the cloth woven by her is used?

_____

_____

C) Due to which reason the diversity in clothing is seen in Maharashtra?

_____

_____

_____

Q.2) In India there are some places which are famous for specific types of cloth. Write the names of any such two places and also the name of the famous cloth material at that place.

Place	Famous cloth
A) _____	1) _____
B) _____	2) _____

Q.3) Which type of cloth must be used on the following occasions, what do you think?

A)Seema is going for a picnic at hill station.

_____

_____

_____

SCERT Maharashtra

B) Rohan is going to his uncle's village during summer vacation.

_____

_____

_____

Links for more study :

1)Types of clothes
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_312486440762 08947223948

2) Types of threads
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924975071641601387 97

3) Diversity in clothing
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924976329441281388 01

SCERT Maharashtra

Activity Sheet : 11

Let's Understand : The senses

Reference : Std. IV, Chapter 11, Let's look inside the body

Study Conclusions **:** 1) Know the importance of health care

Learning outcomes : Record observations / experiences / information in different ways (your senses and their functions)

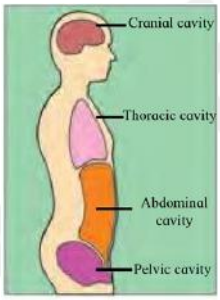
Let's take a look :

Place your palm in the middle of the chest, but slightly to the left, as shown in the picture below, what do you feel?

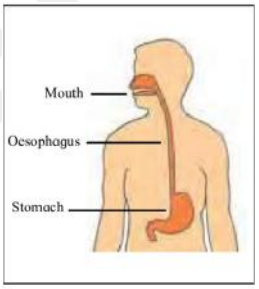


You may feel a heartbeat starting inside the chest. Like the external organs(e.g. eyes, ears, nose, etc.), there are organs inside the body. These organs are not visible from the outside, they are called internal organs.

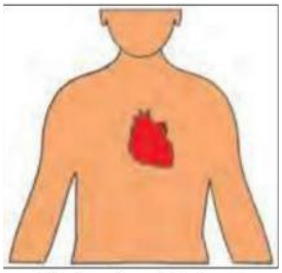
Internal organs :

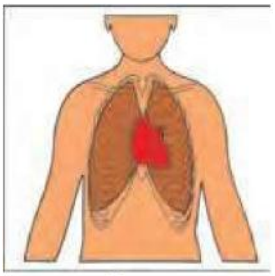


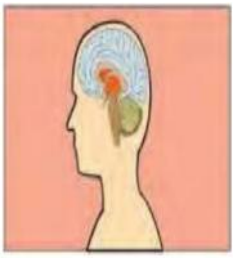
The cavities in our body



Oesophagus


The location of the heart


Lungs


The brain in the cranial cavity

The intestines are located in cavities in different parts of the body.

Some organs

A) **Mouth and stomach** are the intestinal organs that work to digest food. The oesophagus or gullet carries the swallowed food from the throat into the stomach.

B) **The heart** is in the centre of the thoracic cavity but slightly to the left and is about the size of a fist. The contraction and relaxation of the heart helps to keep the blood flowing through the blood vessels throughout the body.

C) **The lungs** are in the thoracic cavity. A pipe-like internal organ carries the air we breathe in into the lungs.It is called the **windpipe**. It separates into two branches.Each branch is called a **bronchus**.

D) **The brain** is protected inside the skull. The brain controls movements, senses emotions, and so on.

Let's Practice :

Q.1) Tell me, who am I?

A) My work is to get the grass from the mouth to the stomach.

_____

B) My work is to keep the blood circulating throughout the body.

_____

Q.2) Why do you feel tired after exercising?

_____

_____

_____

Q.3) Why do you sometimes feel overwhelmed while eating?

_____

_____

_____

Q.4) Is it necessary to wear a helmet while travelling on a bike? Write the reason.

_____

_____

_____

Q.5) In the textbook page No. 71, do the action in 'Try it', write what happened and why it happened.



_____

_____

_____

_____

_____

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Links to more study :

Heart

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924977492705281388 05

The senses

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924976910254081388 03

Oesophagus
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SCERT Maharashtra

Activity Sheet: 12

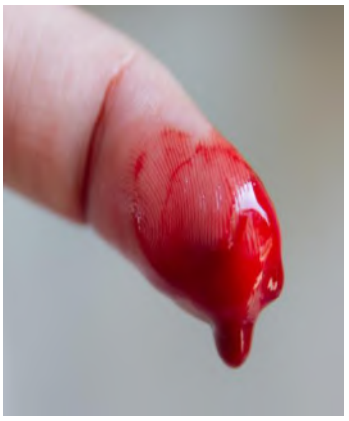
Let's Understand : Home remedies, health care

Reference : Std. IV, Chapter 12, Minor Illnesses and Home Remedies

Learning outcomes : Record observations /experiences/information in different ways, understand the measures to protect health. Informs health services.

Let's take a look :

Observe the pictures given below keenly. Have you experienced any of the injuries?





Students, you get minor injuries. Sometimes we get a cut, bruise, a small wound, sprained ankle, vomiting due to indigestion, have a cold or a headache, and sometimes a sore throat. What do you do in such a situation? At this time we apply balm, take a sip of hot water, drink ginger tea, and take a rest.

Experienced people in your home suggest some of the following home remedies for minor ailments or injuries.

1. If you have a sore throat, gargle with warm water with turmeric and salt.
2. If you have a cold, inhale steam or take hot fomentations on the chest.
3. In case of vomiting, take lemon sherbet.
4. If you have a wound, it should be washed with clean water and dabbed dry. A tincture of iodine may be applied to it.
5. In case of fever, cloth strips dipped in salt water should be placed on the forehead. Hands and feet should be wiped with a wet cloth.

But home remedies have some limitations. If you do not feel better in two days, consult a doctor.

Health care : The service that takes care of the health of the community or treats the sick is called health care or medical service.




Big cities have advanced hospitals, doctors' clinics. There are also Primary Health Centres and Government Hospitals in rural areas. Patients can get treatment at concessional rates.

Let's Practice :

Q.1) What will you do in the following situation?

A) Sunday was a holiday. All clinics were closed. Baban's fever was not decreasing.

_____

_____

B) Sonam fell down while playing on the field. Her hand is injured.

_____

_____

Q.2) Briefly describe any illness you have experienced and the remedies taken for it.

_____

_____

Q.3) Write the names of any four materials in the first aid kit in your school.

_____ _____

_____ _____

Q.4) Why is it advisable to drink boiled water in the rainy season?

_____

_____

Q.5) What are the home remedies for headache, indigestion and vomiting?

A) Steam hot water

B) Gargling salt water

C) Drink cold lemon sherbet

D) Put cloth strips dipped in salt water on the forehead.

_____

Links to more study :

Home Remedies and Superstitions

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Healthcare

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924979560529921388 12

SCERT Maharashtra

Activity Sheet: 13

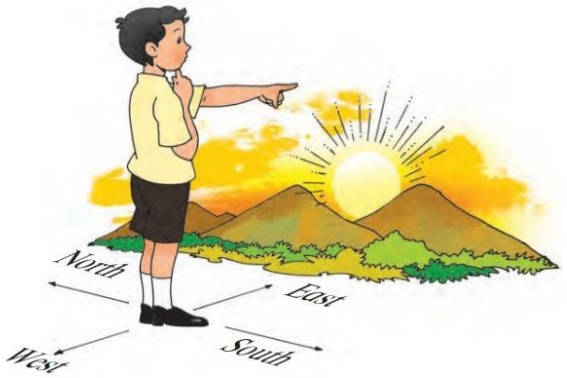
Let's Understand : Main directions, sub-directions, cycle of directions, proportionality

Reference : Std. IV, Chapter 13 Directions and Map

Learning Outcomes : Identify landmarks / locations of objects / places using maps and guides school / neighborhood directions from nearby landmarks.

Let's take a look :

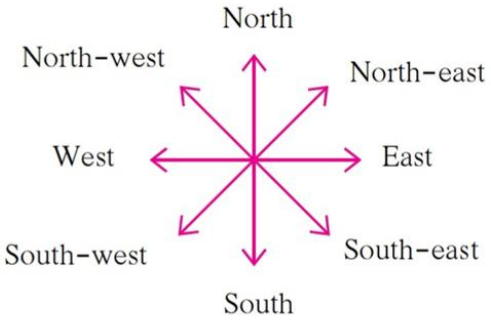
Main Directions – There are four main directions namely East, West, North and South. How to recognize them? The direction in which the sun rises is the east direction. The direction in which the sun sets is the west direction. If we stand facing east, the west direction is behind us. At that time we have north direction on our left side and south direction on our right side. Do this at sunrise in your area. And identify the main direction.



Sub directions – You know the main directions! There are four sub directions. The directions that come between these main directions. There are four directions. Northeast, southeast, southwest and northwest. How to recognize them?The sub direction North-east lies in between the main direction,North and East. The South-east lies in between East and South. The South-west lies in between South and West whereas the North-west lies in between North and West. There are many objects lying in between the two main directions. Subdirections are used to determine the direction of these objects

Circle of directions :

The circle of direction is formed by combining the main direction and the subdirections between them. This is easily noticed from the adjacent picture.



Proportionality - Through direction we can definitely show our village, house, school, various structures in the area. The map is used to show the distance between all these things! So there is a correlation between direction and map. Places in the area are at some distance, they are also large in size, but the size of the map is small, so when showing the distance in the map, it has to be reduced, it requires quantity !

SCERT Maharashtra

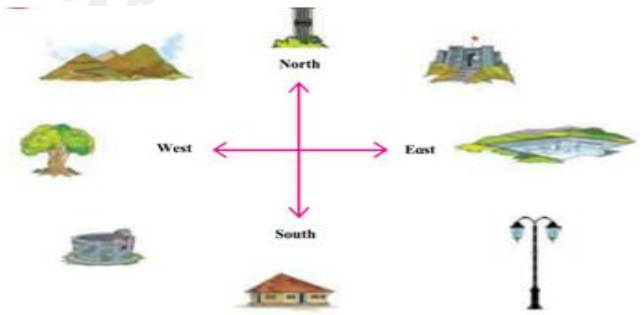


As we draw a picture by looking at the shape of the paper, the distance between the two places on the ground is taken into consideration, and it is decided how much to reduce it in the map. That is, the distance between the places on the map is proportional. E.g. If the distance between two places is 10 km, the distance on the map should be 1 km = 1 cm.

Let's Practice :

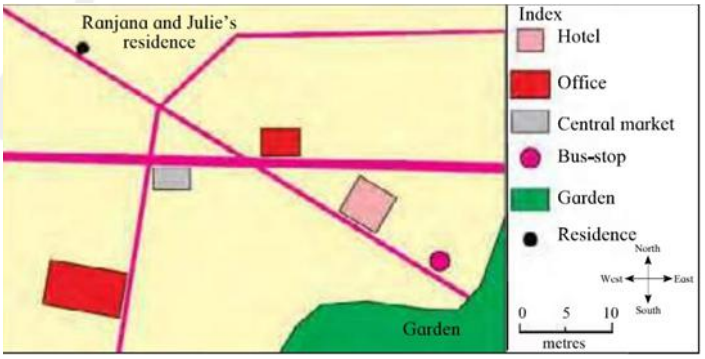
Q.1) In the picture, the mountains, the well, the lamp post, the fort are not in the main direction. Observe which objects lie in between two main directions and write the name of sub directions correctly in the column.

Picture	Sub directions
Mountain	
Well	
Lamp post	
Fort	



Q.2) What do we use to indicate the location or side?

_____



Q.3) Observe the map in the picture, find the answers to the questions.

A) In which direction is the park from the place of residence?

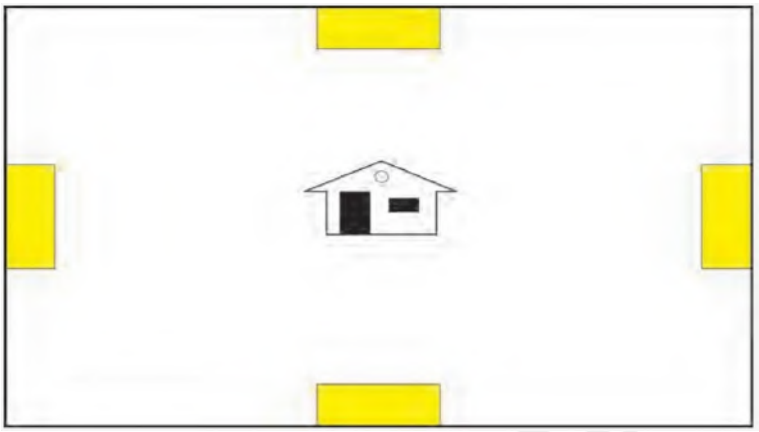
B) Which direction is the office located?

Q.4) The distance between Neha and Rashmi's house is 10 kilometers (km). If the distance to draw the map is 1 cm = 1 km, then tell the distance between the two houses in the map.

Draw a map on the notebook paper with the help of a footer.

Q.5) Your house is in the middle of the following box, now show the direction and other places next to your house in the yellow boxes on the side.

(Trees, roads, schools, houses)



Links to more study :

Direction and map

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Standardization

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SCERT Maharashtra

Activity Sheet: 14

Let's Understand: List and landmarks, use / read a map

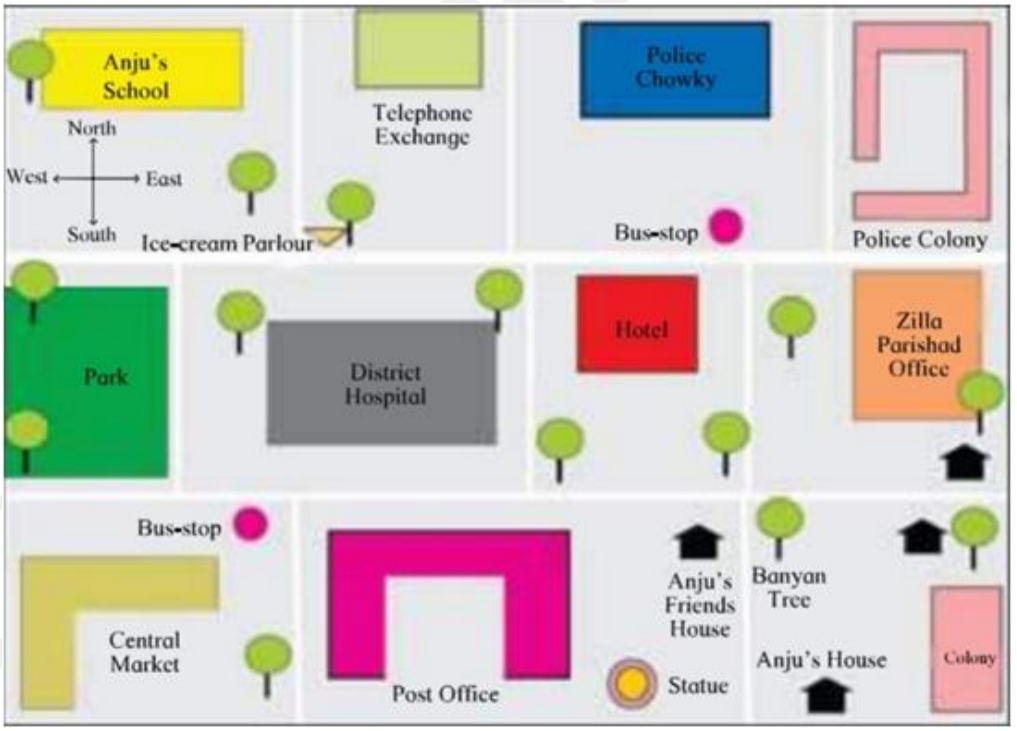
Reference : Std. IV, Chapter 14, Map and Signs

Learning outcomes :1) Identify the marks / locations of objects / places using the map and guide the direction of the school / neighborhood from the nearest mark.

2) Read the map using the symbols, marks and lists in the map.

Let's take a look.

Index and Signs : Children, you must have seen the map! The information given on the map is shown with the help of symbols, pictures, markings, shades of colour. The list is given on the map. This is called an **'Index'**. The list helps you understand the map. Indexes and landmarks can help you read the map. Children, if you observe the layout of the given map below, it shows the house, tree, office, hospital, market, etc. with specific marks. Observe it closely. See which symbol, signs are used and what it stands for.



Map usage and reading



Directions are given in the map. For this, the map has a compass rose. From that one understands the direction in the map. Before reading the map, connect the directions to the directions in your area. E.g. The east side of the map should be connected to the east side of the area. This will allow you to know exactly which direction the places on the map are. Use the same method when reading textbook maps. Also the map shows the title, subtitle and index. Index helps you understand the map. Index and directions make it easier for you to use and read the map.

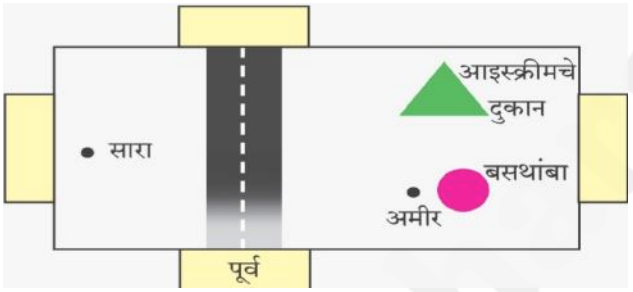
Let's Practice :

Q. 1) Draw a sketch of your locality on a piece of paper using symbols.

Q. 2) John wants to make a map of his area. He saw the following things in the area, which of them should he show on the map? Help him out.

House, Flying Crow, Police Station, Cow, Post Office, Buffalo, School, Car, Square, Road, Tower, Railway, Railway Station & Farm

Q.3) Write the answers to the following questions by observing the adjacent plan.



A)Which way does Amir have to go to go to the ice cream shop?

_____

B) What is the direction of the road?

_____

Q. 4) Observe / read the map on page.no. 90 from Environmental studies (Part-1) textbook. Write the answers.

A) Write the names of the districts with forts.

_____

B) Draw a sign or symbol.

Monkey - ☐ Railroad - ☐

Links to more study :

Maps and landmarks 1

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Map and landmarks 2

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SCERT Maharashtra

State Council of Educational Research and Training, Maharashtra, Pune 30

Preparatory Bridge Course Test: 02

Class: V **Subject: Environmental Studies 01** **Marks: 10**

Activity Sheets : 09 to 14 **Time : 30 Mins**

Q.1) A. Correct and rewrite the following sentences . **2 Marks**

1) Our lungs control all our physical activities.

_____

2) Oxygen is used to manufacture fertilizers for crops.

_____

B. Write two sources of natural fibres . **1 Mark**

_____

C.Name the following. **2 Marks**

1) Intermediate direction between West and South _____

2) Artificial fibres _____

Q.2)Why do mountaineers carry oxygen cylinders with them? **1 Mark**

_____

_____

Q.3) Write the function of the following organs. **2 Marks**

A.Brain:_____

_____

B.Heart:_____

_____

Q.4) What will be the home remedy, if vomiting is caused due to indigestion?

1 Mark

_____

Q.5) The length of your school building is shown as 40 cm in a map. If the scale is taken as 1 cm=1m to draw a map then what is the actual length of the school ?

1 Mark

_____

***

SCERT Maharashtra

Activity Sheet : 15

Let's Understand : Maharashtra diversity in natural structure, crops and language
Reference : Std. IV, Chapter 15, My District My State
Learning Outcome :
1) This research compares the natural and man-made factors of our district and state.
2) The map shows the major food crops and famous foods by district and state.
Let's take a look :

Maharashtra is our state. According to the physical features of Maharashtra, there are three major divisions. Coastal region, mountainous region and plateau region. Mumbai is the capital of Maharashtra and Nagpur is the sub-capital. Godavari is the longest river in Maharashtra and the Arabian Sea to the west of the state. Satpuda mountain range is located in the northern part of Maharashtra. Astambha is the highest peak in Sahyadri mountain. Sahyadri mountains are also known as Western Ghats. Kalsubai is the highest peak in Maharashtra. (Study this natural structure which is the Maharashtra State Natural Map on page number-94 of Environmental studies (Part-1) textbook)

Diversity of crops and languages -

Just as there is diversity in the physical features of Maharashtra, there is also diversity in crops and language. The state of Maharashtra is known as a region of high, medium and low rainfall. Accordingly, various crops are grown here. The production of field crops depends on the weather, soil and water availability. Agriculture is the major occupation of Maharashtra. Here the following crops are grown according to the rainfall region. (Study the Page No. 95 Maharashtra State Annual Rainfall Map from Environmental studies (Part-1) textbook.)

Rainfed regions and main crops:

High	Medium	Low
Rice	Jowar	Jowar
	Toor	Millet
	Soybeans	Matki

Language Diversity:

People speak to each other with the help of language, and conveys their thoughts to the other. The same language is spoken differently in different regions. The pronunciation of words in that language varies from region to region. It is influenced by other languages. Words from other languages come into our language. And that is why the states in India were formed on the basis of languages.

SCERT Maharashtra

Marathi is the state language of Maharashtra. In terms of language, our state has similarities as well as diversity. There is a change in the pronunciation of Marathi in different regions, however there is variety in the dialects that are spoken. Some dialects of different regions and Marathi are given below. Study it. Find out what dialects are spoken in your area.

Various regions	Some dialects of Marathi
Konkan	Konkani, Malvani
Vidarbha	Varhadi
Khandesh	Ahirani (Khandeshi)

Although Marathi is the state language of Maharashtra, different dialects are spoken in different parts of the state. At the same time, tribal people live in different parts of Maharashtra, but their dialects are diverse.

Gormati, Kolami, Korku etc. are the traditional dialects of the tribal tribes of Maharashtra.

Let's Practice:

Q. 1) Write the answers to the following questions.

A) Observe the map and write which districts are located in the coastal region.

_____

_____

B) Write some words / sentences in the dialect of your area.

_____

_____

Q. 2) Correct the following statements.

A) Nagpur is the capital of Maharashtra.

_____

B) To the north of the state is the Arabian Sea.

_____

Q3) Write the Marathi-dialect in front of the given district.

A) Sindhudurg _____

B) Nagpur _____

C) Pune _____

SCERT Maharashtra

Q.4) Observe the map given on page no.97 of Environmental studies (Part-1) textbook of std.4th and Write down the names of the districts where following crops are grown in large numbers.

Crops	Name of the district
Mango	
Onion	
Cotton	

Q.5) Identify the signs and symbols and write their names.







Links to more study :

My district is my state

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Friendship with the map

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SCERT Maharashtra

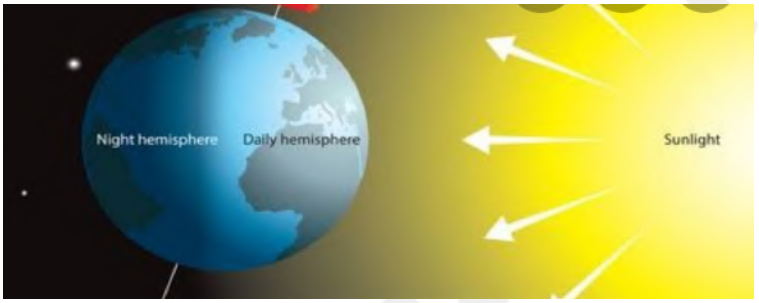
Activity Sheet : 16

Let's Understand : Sunrise and Sunset, Shorter and longer Day

Reference : Std. IV, Chapter 16 Day and Night

Learning outcomes : Record different types of observations/experiences/information and establish the relationship between cause and effect to predict the morphology of various events in the area. (e.g. day and night)

Let's take a look :



After observing the picture we can say that it is a day in the half part that gets light, while in the other part where sunlight does not reach, it is night. The sun rises in the east in the morning and moves towards the west. In the evening, the sun sets in the west. So we feel that the sun goes around the earth. But that is only an impression. Actually, the earth turns around itself. That is why we have day and night on the earth.



Look at the picture. After observing the picture you must have come to know that this is the picture of the calendar of the month July 2021. In this picture along with the

date, day you can see below each date you can see a small picture and in light blue colour some numbers are shown. In this you can see a small picture of the sun and in front of that the number which you can see is the clock time of the sunrise. In front of that there is another picture of the sun which is different from the previous one because that is the clock time of the sunset. Look at the sunrise and sunset time written at the bottom of each date. Every day the time of sunrise and sunset will change. Thus we are sure that day and night are not 12 hours each year round.

On **March 21**, day and night are both 12 hours long. Then in our part of earth, day time increases slowly and night time decreases. When the days are longer and the nights are shorter, it is summer. This goes on till June 21. On **June 21**, our day is the longest and the night is the shortest. From June 21, in our part of the earth , daytime becomes shorter and the nights become longer. This goes on till September 22. On **September 22,** our day is 12 hours and the night too is of 12 hours. After that, the days continue to become shorter. The nights become longer. This goes on till December 22. On **December 22**, our night is the longest and the day is the shortest. From December 22 the day grows longer and the night shorter. This goes on till March 21. From March 21, this cycle repeats itself.

Note that the above dates may vary a little.

Let's Practice :

Q.1) Observe the calendar of the year 2021 and complete the following table:

Date	4	8	12	24
Sunrise in the month of May				
Sunset in the month of May				
Sunrise in the month of November				
Sunset in the month of November				

Q. 2) Write in your own words.

a) What causes day and night?

_____

_____

_____

SCERT Maharashtra

Q. 3) Use your brain power.

a) On a new moon day, we cannot see the moon even though it is there in the sky. Why is that so?

_____

_____

_____

b) Why do birds return to their nest earlier in winter than in summer?

_____

_____

_____

Q.4) Determine the magnitude between day and night. Use the symbol >, <, = for this.

Sr. No.	Date and Month	Day	Sign	Night
1	21st March			
2	21st June			
3	22nd September			
4	22nd December			

Links for more study :

Day and Night

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Longer and shorter day

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Activity Sheet : 17

Let's Understand : Upbringing

Reference : Std. IV, Chapter 16, My Upbringing

Learning outcomes : Express their opinion on issues observed / experienced in the family / school / neighbourhood. (e.g. mold / discrimination/child right)

Let's take a look :

We learn many different things while we are growing up. They lead to the development of certain habits, likes and dislikes. They shape our views and thoughts. This is what is known as our upbringing.



Observe the above pictures.

These events happen in everyone's home as well as around you when you are out. From this we learn good manners; for this we learn good habits and a lot of new things by imitating the environment of the home and the people around us. The above picture shows many people like family members, relatives, neighbours and we can learn a lot from them.

We learn a lot by looking around. How do your friends speak? What clothes do they wear? What games do they play? How do they study? We often learn them unknowingly. Many of our neighbours know us from our childhood. They, to, feel affectionate towards us. We learn some good habits from our neighbours, too. Our neighbours also influence our upbringing.







Let's Practice :

Q.1) Write four lines of any prayer which you know.

_____

_____

_____

_____

Q. 2) Write names of the games played by the group.

_____

_____

Q. 3) Write down what you will do.

a) On the way to the school, your friend slipped and fell into the mud.

_____

_____

b) Two children are arguing in the garden.

_____

_____

c) The cat's foot is stuck in the gutter net.

_____

_____

Q.4) Get the following information from one of your neighbours you know and write it in a notebook.

a) What is the surname of the neighbour?

_____

b) Which language do they speak?

_____

c) How many people are there in his family?

_____

d) What is your favourite dish made by them?

_____

e) Write the names of trees and plants which are planted by your neighbour.

_____

SCERT Maharashtra

Q.5) Make your family tree as shown in the picture below and paste small photos of family members in it and write their relationship with you below it.



Links for more study :

My Upbringing
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_312572922653999104216 93
Our neighbourhood
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_313292498737709056138835

Activity Sheet : 18

Let's Understand : Migration

Reference : Std. IV, Chapter 18, Changes in the Family and Neighbourhood

Learning outcomes : 1) Recognize the relationship that extended family members have with each other.

2) Explain the change in the family (e.g. changes due to birth, marriage , transfer etc.)

Let's take a look :

Each family may have a different number of people. This number does not remain the same. As time passes, it may increase or decrease. Marriage is one reason for such a loss or gain. You may have seen an aunt or a cousin's wife joining your family after getting married, or another aunt or cousin getting married and joining another family. Look at the following pictures.





Sometimes, children in the family go to other places for their education. Also, some members take up jobs or occupations in other places. Moving from one place to another in order to live there is called 'migration'.

As the family grew, it became impossible to feed everyone through farming alone. Trade and other new occupations developed. Cities began to grow. People began to migrate to places where they could find work. Big families were scattered into many small families.

In recent years, the number of people going to other states and countries for work and education has increased greatly. Many families have one of their members living abroad or in another city in our own country. Therefore, the family system is also changing.





Birds also migrate. Many birds migrate in the search of food and shelter. Have you seen a flock of swans flying in a 'V' formation in the sky? Some birds migrate every year from

one place to another at a fixed time. Some birds fly far away, while others do not go very far.

Let's Practice :

Q.1) Find out the information about the migrating family in your neighbourhood according to the following points.

a) Which is their hometown/native place?

_____

b) Why did the family move from their hometown to this place?

_____

e) What is the occupation of the head of the family?

_____

d) What was the year when the family migrated?

_____

Q.2) Collect and write the information about migratory birds.

_____

_____

_____

Q.3) Answer the following questions.

a) What is migration?

_____

_____

_____

b) Why do you think birds are migrating?

_____

_____

c) Why did families get smaller? Write in your own words?

_____

_____

Links for more study :

Changes in family

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Changes in Neighbourhood

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SCERT Maharashtra

Activity Sheet : 19

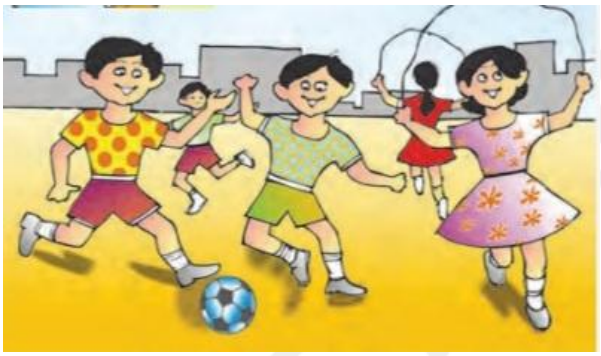
Let's Understand : Equal right to learn

Reference : Std. IV, Chapter 19 My Delightful school

Learning outcomes : Working together in a group, they take initiative and actively participate in each other's beliefs, empathy and leadership qualities. E.g. understand indoor / outdoor / local / contemporary activities and games, project / roles for surrounding objects / elder / cripples.

Let's take a look :

You all go to school; we come to school to learn. We make friends, study with each other, play games, eat tiffins, celebrate cultural events and go on trips. There are so many things we can do together. Every child in the class should be able to enjoy learning.





In school, we meet different kinds of students. There are few people who cannot see and few cannot hear. A few cannot walk easily. The needs of students such as these are different and special. We can understand them only by getting to know them well.

All the children with special needs have the right to education. The government has many schemes for them. We should encourage such children to go to school. If you observe the following picture then you will understand that education is equal for everyone.



On the other hand, girl's education is another problem. The government has provided many facilities for the education of girls. Girls are expected to carry out household chores such as taking care of their siblings, drawing water from the well etc. all by themselves. As a result, they lag behind in school or even leave it. Girls, too, have a right to the joy of learning.

SCERT Maharashtra

Let's Practice :

Q. 1) Put cross (×) on the wrong option in the following sentence.

a) Anything can be done successfully by **helping / arguing** with each other.

b) At school, we meet **different / same** kinds of students.

Q. 2) What would you do if you meet children with special needs?

_____

_____

_____

_____

Q.3) What schemes / facilities does the government provide to the children with special needs? Discuss with the teacher and write.

_____

_____

_____

_____

Q. 4) What are the reasons for delay in girl's education?

_____

_____

_____

_____

Q. 5) Make a slogan on 'Right to equal education'. Stick this slogan on the wall of the classroom.

_____

_____

Q. 6) A child from another village has just joined your class. Ask him/her about his/her previous school. Write and show it to the teacher.

_____

_____

_____

_____

Link for more study :

My Delightful School
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329249898840064013 8842

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Activity Sheet : 20

Let's Understand : Individuals with special needs, sensitivity

Reference : Std. IV, Chapter 20, I'll be responsible and sensitive

Learning outcomes: Working together in a group, they take initiative and actively participate in each other's belief, empathy and leadership qualities. Eg. Indoor / Outdoor / local / contemporary activities and games are played in collaboration with each other, doing projects / roles for surrounding objects / elders / disabled.

Let's take a look :

Some people are physically handicap because of illnesses, accidents or maybe they were born with them. They suffer many inconveniences and much discomfort at public places. That is why they are in need of special services and assistance.

Children, there are many types of special needs. People with physical disabilities are called paralyzed. You must have seen such people in your school, in your vicinity. In this, deaf, dumb, blind, lame, etc. That's right !





As you can see in the picture, a person walking in the street with a white cane in his hand can walk freely with the help of that white cane. In some places it is written in Braille, which is also used by these people for their convenience (e.g. Voting machine, floor numbers of the elevator). A ramp is built in the school, college, stations, etc. for lame or physically handicapped people. People who cannot hear use sign language. People with special needs are the same as ordinary people, they should not be discriminated against. People with special needs in our society have overcome their disability and moved on. (E.g. Dancer- Sudha Chandran, Music Director – Ravindra Jain, Swimmer- Sharad Gaikwad)







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Sensitivity





Sensitivity means understanding the difficulties of the people in your family and surrounding area, helping them in different situations. We must help the elderly or sick grandparents in your family. They need help. Listen to them politely. We must help people with special needs e.g. If someone who is blind walking on the road helps them to cross the road, read the story which they like, and communicate slowly and clearly with deaf. That is how we should treat all these people with love and respect, that shows our sensitivity.

Let's Practice :

Q.1) Friends, if you find sick, elderly or people with special needs in your house or neighbourhood, which of the following things will you do? Mark ✔ in front of what you think is right. Mark ✖ where it seems inappropriate.

1)	Feed Vadapav to a sick person.	
2)	Helping grandfather to get the object from the loft.	
3)	Harassing blind people.	
4)	Chatting with grandparents.	
5)	Watching T.V. with a loud sound in the sick person's room.	

Q.2) Write correlation.

a) Blind : Braille :: Deaf : _____

b) Lift : Elevator :: Road for ascent/ descent: _____

Q.3) Strike off the wrong word.

a) **White cane / Wheelchair** allow blind people to cross the road.

b) Sudha Chandran is a **singer / dancer.**

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Q. 4) Grandma is feeling thirsty, she cannot walk. So what would you do then?

_____

Q. 5) Get the information about the people in your community who have succeeded in overcoming their special needs. Make a note in the notebook.

_____
_____

Links for more study :

My responsibility and sensitivity-1

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_3125769228912 7219216367

My responsibility and sensitivity-2

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_3132924992302039041388 49

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Activity Sheet : 21

Let's Understand : Importance and need of management

Reference : Std. IV, Chapter 21 Management of community life

Learning outcomes : While working in a group, show affection, empathy about each other and take active part.eg. Take part in indoor, outdoor, local, contemporary activities and sports. Take care of plants. Feed birds and animals. Prepare reports or play a role with respect to surrounding things/ seniors/ divyang.

Let's take a look :

What is meant by management? When to do management? Where is the need of management? What is its importance? Teachers will discuss these issues with students with the help of pictures, incidences.

Students observe the following picture and read the paragraph based on the given picture. Inform your observation about these incidents to the teacher.



Shraddha , Ayesha and Emily's parents decided to take a trip during the summer vacation. They booked a special minibus for the trip. They waited for the bus for a long time but it did not arrive. When they made an inquiry on the phone, they realized that the driver of the bus did not know where exactly they were all waiting. What caused the confusion in the trip? It's because of the absence of management.

Management is necessary for any work to be done properly. Management means the way to prepare an outline of how and when the work is to be done .

Importance and need of management - Whatever happened in above incidence is due to the lack of management. If there was proper management then that confusion would have been avoided. To do any kind of work smoothly, some

management is needed. If we are going to be working in a group, the outline must be clearer and more detailed. One has to decide what task each person will carry out. Each person must know clearly how to carry it out. Proper coordination has to be maintained among the people involved. We must make sure that each person is doing his or her work properly. An estimate of the amount of money needed for the work needs to be made in advance. If all these things are done properly, the work gets completed smoothly. Even if one person makes a mistake or slacks off on the job, the work does not get completed properly.

Some management is required even when guests are invited home for lunch. What dishes will be made for lunch? What ingredients are needed to make them? Do we have all those ingredients at home or will they have to be bought from the market? How will we receive the guest?

If management is necessary even for small functions such as these, how important it must be in running a school, a town, a district, a state and the country. So where can you follow such a type of management? If you follow management in your study, classroom, school then you can complete your work on time without any confusion.

Let's Practice :

Q.1) Guests have been invited home for lunch. What management is required for that? Make a plan.

1) What dishes will be made for lunch?

_____

_____

Q.2) Which programs are celebrated at your home or in your neighborhood with proper management ?

_____

_____

Q.3) Write the list of work to be done by the monitor in your school .

For example- Check the cleanliness of the classroom.

_____

_____

_____

_____

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Q.4) Put a tick in front of a program which requires proper management.

Serial number	Title of the function	Space to put tick
1.	Wedding	
2.	Eating	
3.	Religious program in villages	
4.	Study and sports	

Q.5) How did you manage your study and sports last year when your school was closed? Discuss this with your parents and teachers and make a chart of it.

Links for more study :

Management of community life
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_312225306020724 73622918

Family or personal management
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31 3292499502555136138856

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Activity Sheet : 22

Let's Understand : Old and modern means of transport and communication and their benefits

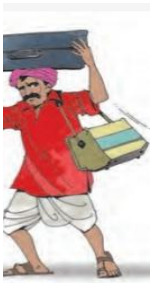
Reference : Std. IV, Chapter 22 Transport and communication

Learning outcomes : State the difference between past and present things and activities. For example transport ,currency, houses, things, objects, skills etc .

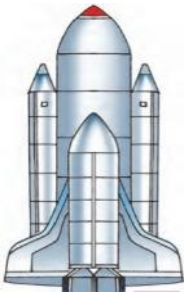
Let's take a look :

Means of transport (old and modern)

What is meant by transport? Transport means to move from one place to another or travel. This can be of objects or ours. Students, now observe the objects shown in the following pictures. What type of objects are they? Do we use them ? What is the period of these objects? Teacher will discuss these things with students .







From the above activity we can see that we used different means and modes of transport at different times in history. It includes old and modern means of transport. Bullock Cart, horsecart, palanquin for dilis, even human beings and animals were used for transport. These are old or traditional means of transport. Now modern means of transport are available in the modern period.for e.g. train,aeroplane, ship, rocket, metro.

Means of communication (old and modern)

What is meant by communication? How do you send a message? Now observe the instruments shown in the following pictures and for what are they used? Which objects out of the following are used at your home ?







If you observe pictures then you come to know that these are the means of communication. Obtaining or sending various types of information is called communication. A few centuries ago, messages were sent by tying a letter to the foot of the pigeons. Messages were also sent through runners. In later times, telegrams and the postal service came into use. All these methods were very slow as compared to modern methods. Nowadays we have new techniques for very quick communication. Communication is now used in every field. With the help of media such as radio,

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television, internet, mobile phones etc. we can easily communicate with several people at the same time. Newspapers, periodicals, books ,radio, television, internet are all means of mass communication .

Importance of means of transport and communication

Modern means of communication are faster and safer as compared to old one. It saves time and effort.

Though the old means of communication were important, they are slow. It's because of the modern means of communication where communication is quick and fast. We can send messages anywhere in the world with the help of modern technology. Means of transport and communication have been changed according to the period. Their importance in our daily life has increased and now they are the need of our life. Excess use of these means is harmful for us, for all living beings as well as for the environment.

Let's Practice:

Q.1) Identify the odd one.

i) television, internet, radio, books _____

ii) human, animal, bullock cart, rocket _____

Q. 2) Complete the correlation

Remote area : yak :: desert : _____

Q.3) Write what to do.

i) Madhu wants to send an urgent message to another village. Which method should she use for it?

_____

_____

ii) Draw a picture of a rocket and colour it. State two uses of rocket.

_____

_____

_____

_____

_____

_____

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iii) Refer to the textbook of environmental studies of standard 4th and read the passage given on page number 135 and 136 and answer the following questions.
From the passage, find and classify the modes of communication and transport.

Modes of transport	Modes of communication

Q. 4) Arrange the following means of transport from fast to slow speed.
Bullock cart, human, metro, aeroplane, donkey

_____

Q.5) Are the means of communication important? Write your opinions.

_____

_____

_____

_____

Links for more study :

Transport and communication
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31 329249971100057613886 1

Means of communication
https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31 329249983724748813886 5

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Activity Sheet : 23

Let's Understand : Natural disaster - Untimely rains, flood, earthquake, tsunami

Reference : Std. IV Chapter 23 Natural Disaster

Learning outcomes : Keep the records of observation, experiences and different types of information and establish the relation between cause and effect to give the pattern of different events happening in the surrounding. Eg. Earthquake ,flood

Let's take a look :

Natural disaster :

Many times we hear of serious mishaps. An earthquake occurs here, a flood occurs somewhere else. A storm occurs in one place, another place is struck by lightning. There can be a landslide or a hailstorm. In these incidents, several people are injured. Some even lose their lives. Houses collapse. Animals die. Standing crops get destroyed. There is great damage to property. Day to day life is disturbed. It takes several days for life to get back to normal. We must not get frightened by such disasters.

Instead it is more useful to find out how to face such a disaster if it happens.

Untimely rain :

When it rains at other times besides the monsoon or pre-monsoon period, such rain is said to be untimely rain. Occasionally light showers are good for the winter crops but if it rains too much, fields get waterlogged. If mango trees are in blossom at that time, the blossom may rot or fall off. This leads to the fall in mango production.

Flood:



Sometime during the monsoon, it rains heavily and continuously for three to four days. This causes the level of water in a river to rise. That is, the river gets flooded . If the rain does not stop, settlements on its bank can also get flooded. Mud houses on the riverside collapse during a flood. People and animals may die due to drowning. The current of flood water is very strong. It is dangerous to swim in flood waters.

Earthquake :





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Sometimes the rock in the bowels of the earth moves. As a result the waves are produced in the layers of rock. For a few seconds, the ground shakes. That is the earthquake. Then everything quietens down again. When the earthquake occurs, buildings are shaken. Things inside the house all fall from their places. Houses that are not strong enough, simply collapse into heaps. People get trapped under the heaps and get injured or even lose their life. The most damage occurs near the centre of the earthquake.

An earthquake also causes injuries or death of animals we keep. When an earthquake occurs, we should not panic. It lasts only a few seconds. During this time, heavy things around us can fall on us. This can cause harm. So as soon as we feel the earthquake, we should go under a strong bed or table or stand under the door frame. If an earthquake occurs while you are at school, sit under your desk or bench. Once an earthquake stops, come out in single file and gather together on the open school ground .

Tsunami :

If the origin of an earthquake is in the sea, it produces gigantic waves. These waves come with tremendous force towards the coast and crash into the land. These waves are called tsunamis. If there are people living on the coast where a tsunami occurs, it causes much devastation. People, animals who come in the way of these waves are completely helpless. They drown and die.



Let's Practice:

Q. 1) What to do?

i) A flood is about to approach your village.

_____

_____

ii) You experience earthquakes when you are in school .

_____

_____

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Q.2) Answer the following questions.

i) Write in your words the damages caused to crops due to untimely rain.

_____

_____

ii) What is the effect of a tsunami on the coastal area?

_____

_____

Q.3) Collect the information from the newspaper regarding any natural disaster and write it here.

_____

_____

_____

_____

_____

_____

_____

_____

Q. 4) Classify following disasters into natural disasters and man made disasters.

1) cyclone 2) collapse of an old ramshackle house 3) death due to lightning 4) collision of two railway trains 5) children on a playground getting injured when a termite ridden tree falls 6) normal life getting disturb due to heavy snowfall 7) a fire caused by explosion of cooking gas cylinder 7) an air crash due to mechanical fault.

Serial no	Natural disaster	Serial no	Man-made disaster
1		1	
2		2	
3		3	
4		4	

Links for more study :

Natural disaster
https://diksha.gov.in/play/collection/do_3125265818122485762404 84?referrer=utm_source%3Dmobile%26utm_campaign%3Dshare_content&contentId=do_3122195917189038081251

Flood
https://diksha.gov.in/play/collection/do_3125265818122485762404 84?contentId=do_3132925000261795841388 71

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Activity Sheet : 24

Let's Understand : Population growth, ground water level

Reference : Std. IV, Chapter 24 Are we endangering our environment?

Learning outcomes : Keep records with the help of observation, experiences and collected information and predict the pattern of incidents happening in the surrounding, by studying the cause and effect. (Population growth ,it's reasons and effects)

Let's take a look :

Population growth

Following pictures show that the growth in population is more in the present period as compared to the past.





According to the census of 1951, the population of our country was 36 crore and now according to the census of 2011, the population of our country is 125 crore.

In the last 60 years, the population of our country has tripled. It is still growing. The demand for all those things that we need to take from the environment has increased many times over. This affects the following ways.

1. People could not get employment in villages so they began to leave and to go to the cities in search of work .

2. Cities became crowded. There were not enough houses for everybody so people could not find a place to stay. There used to be open spaces and fields around the cities. New colonies came up there and to build these new houses and colonies, the trees had to be cut down.

3. In cities, one has to travel long distances to get to work. So people in cities begin to buy vehicles that run on fuels. In all big cities, these vehicles spew smoke as they are driven around . As a result people begin to have breathing problems.

4. Because of the increasing population the drainage system in the cities fails sometimes. Then water collects in the midst of living areas. Mosquitoes grow in it. They spread diseases like malaria, dengue, filaria, chikungunya. The increase in the population spoils the life leading cities .

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Observe the adjoining picture and write the answers of the following questions in your notebook.

1. Does the picture show a rural or city area?
2. What type of work people are doing in the river?



Observe the adjoining picture and answer the following question.

1. Identify the picture and write it.
2. What can you conclude from the given picture ?

Water is an important need of all living things. The population keeps growing. The rainfall however remains the same so there is shortage of water. Much of the rainwater flows away unused. So we began to build dams to store rainwater and use it later. Some people begin to use bore wells rather than draw wells and to use hand pumps to lift water. Then, pumps that worked mechanically on diesel or electricity were invented. These mechanical pumps can lift many times more water than the traditional mots ever could. As a result, the water stored underground is getting used up rapidly.

Let's Practice :

Q.1. Collect the following information and answer the question.

Population of India in 1951		Is there any difference in population collected by you? What's the reason behind it? _____ _____ _____ _____ _____ _____ _____
Pollution of India in 2001		
Population of India in 2011		

Q.2. What to do?

Your brother stays in Mumbai and has a car which emits lots of smoke when he starts it . According to you ,what has to be done by him?

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_____

_____

_____

Q.3. Water is more important in our life. Human beings use water for various purposes. Draw pictures of uses of water in the following table and colour them.

Q.4. Prepare the slogans related to growth in population and save water and write them down.

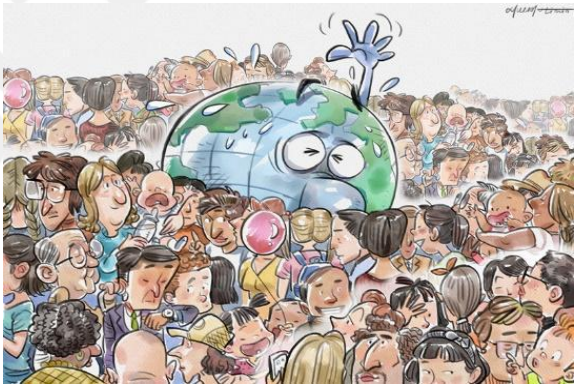
_____

_____

_____

_____

Q.5. Observe the following picture and write what it represents. Write your opinion about this picture.



_____

_____

_____

_____

_____

_____

_____

_____

Links for more study :

Growth in population

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329250020961484813887 6

Groundwater level

https://diksha.gov.in/play/collection/do_31252658181224857624048 4?contentId=do_31329250025217228813887 7

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State Council of Educational Research and Training, Maharashtra, Pune 30

Preparatory Bridge Course Test : 03

Class: V **Subject: Environmental Studies 01** **Marks: 20**

Activity Sheet : 01 to 24 **Time : 30 Minutes**

Q.1 A) Circle the district which is known for its cotton crop. **1 Mark**

1) Satara 2) Kolhapur 3) Jalgaon 4) Pune

B) Cancel the unwanted word from the following sentences. **2 Marks**

1) On 22nd September, the duration of day and night is the **same / different.**

2) Increasing population causes **profit/loss** to the nation.

C) Complete the correlation. **1 Mark**

Truck : road transport : : ship : _____

Q.2 A) Write the activity which you can perform to prove the presence of water in air. **2 Marks**

_____

_____

_____

_____

B) Write the disaster shown in the picture and write its effect. **2 Marks**



_____

_____

Q. 3 A) Write the list of natural and manmade disasters. **2 Marks**

_____

_____

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B) Write why? **2 Marks**

1) In the rainy season, one should drink boiled water.

_____

_____

_____

2) Leafy vegetables should be washed before chopping.

_____

_____

_____

Q.4 A) Correct the following sentences and rewrite. **2 Marks**

1) Heart is present in the abdominal cavity .

_____

2) The harvested ears are trampled by the bullock, this is known as threshing.

_____

B) Arrange the following objects in decreasing order of their speed. **2 Marks**





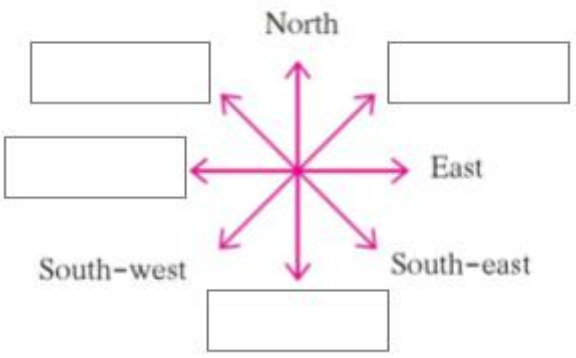

_____

C) Name the following. **2 Marks**

1) Illness which can be cured rapidly. _____

2) Sending or obtaining various types of information is called _____.

Q. 5) Fill in the blanks with a proper direction in the circle of direction given below. **2 Marks**



* * *

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