

Lesson-4

Vegetable Garden



Observe the vegetable garden in the picture. Which vegetables and fruits can you see in this picture? Apart from this garden, what vegetables do you see in your own kitchen garden or in your neighbourhood? Do you know the names of those vegetables and how they are eaten? Write down the names of those vegetables and the parts that are eaten in your copies as mentioned in the list below.



Vegetable garden

Name of the vegetables- (1)..... (2)..... (3)..... (4)..... (5).....
 (6)..... (7)..... (8)..... (9)..... (10).....

Which part is eaten				
Roots	Stem	Leaf	Fruit	Seed
Carrot	Turnip	Spinach	Papaya	

All of you know that we eat some green vegetables by cooking them and some are eaten raw. Some vegetables like papaya, carrot, tomato, cucumber etc. are eaten both cooked as well as raw.

➤ Write down the names of the vegetables which you eat by cooking at home and which of them are eaten raw.

- Green leafy vegetables that are cooked-
- Green leafy vegetables that are eaten raw-

Along with green leafy vegetables, there are many other food items that are eaten by us on our meal, like- rice, dal, roti, oil, sugar, spice etc. We live by eating these food items. Rice is our staple food. We get rice from paddy. Likewise, we get flour from wheat, sugar from sugarcane, mustard oil from mustard seeds. We get all these food items from the agricultural crops. We do farming in different seasons and climatic conditions to get these crops.



vegetable garden

According to the weather condition, we do farming of different vegetables. Some leafy vegetables are grown during the rainy season. Whereas some leafy vegetables are grown during dry season.

Let's write-

➤ Which of the following vegetables are grown in the rainy season and in the dry season?

Mustard, brinjal, carrot, gourd, radish, cucumber, pumpkin, white gourd, ridge gourd and papaya.

Name of vegetables grown in rainy season	Name of vegetables grown in dry season
.....
.....
.....
.....

Let us know-

Using specialised skills and high quality seeds, vegetables which grow in the rainy season can also be grown in the dry season. Likewise crops of dry season can also be grown in the rainy season.



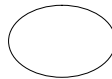
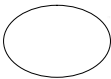
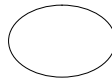
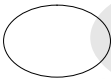
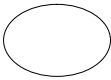
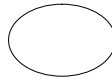
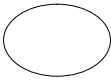
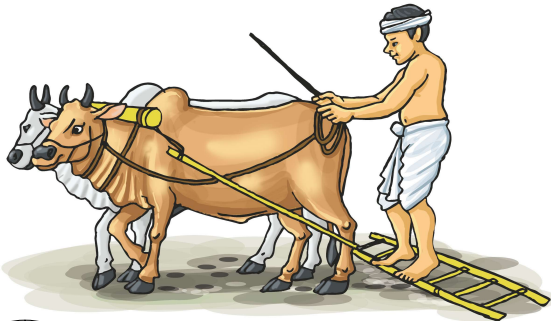
Paddy field

You may observe the paddy growing gently in the paddy field during the months of November-December (Aghoon). The paddy plants are full of bunches of ripe paddy. The field becomes golden in colour. This sight calms our eyes and mind. Similarly it is a delightful sight when the mustard flowers are in full bloom. All these are food crops paddy, pulse, oil, spice like crops, sugarcane, jute etc. are the main agricultural products grown in Assam. Moreover, potato, brinjal, tomato, chilly etc. are also grown in abundance in our state. Our farmers work very hard to cultivate these crops. We buy the crops produced by them from shops and market. We eat these crops and green vegetables by preparing them as food in the kitchen.



Observe the above pictures. Say what they are doing.

- Have you seen agricultural fields? What do the farmers do there? How do we get the crops produced by them? Look at the picture below and after discussing in groups. Put serial number and write the names of the activities, arranging them in a serial order from crop production to cooking and consumption in the kitchen.

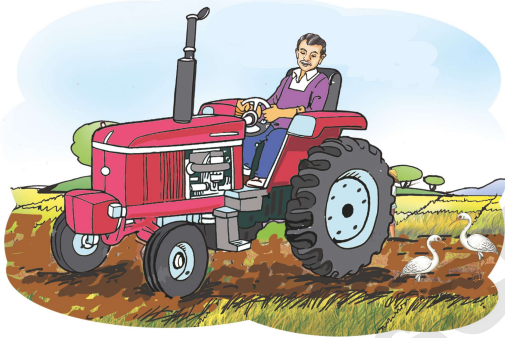


Let us know about farming-

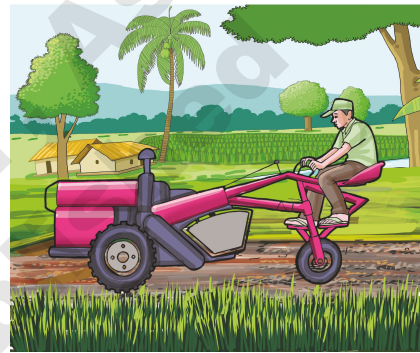
To do farming, first of all, we should till the soil properly. Soil is tilled in a number of ways such as ploughing, digging (by using a spade) and by using a tractor, using tractor. Tractors can till large areas of land in a short time. Adequate amount of fertilizer and water should be provided to the soil. Furthermore, to protect the crops from pests an appropriate amount of pesticides should be sprayed and high quality seeds should be used. Cow dung, compost fertilizer, artificial fertilizer are used to make the soil fertilized.

Know from your parents and write-

- Write the names of the advanced techniques necessary for agriculture and tools used in farming.



Tilling of soil by a tractor



Power tiller

Instead of ploughing with the help of bullocks, farmers nowadays plough the land with tractors. Along with ploughing the soil, advanced equipments like power tiller are used for sowing seeds, carrying the crops, etc. As a result with less effort, large areas of land can be farmed.

Write down the names of the farming tools as shown in the picture below-



Various programmes on advanced agricultural techniques are telecast and promoted through television and other mediums. Through these programmes farmers can learn more about how to grow different types of crops and how to get benefit from advance farming. Nowadays with the help of mobile phones skills on different farming methods can be acquired.

Adequate amount of water is required for paddy cultivation. Most of the farmers in Assam depend on rainfall for their cultivation. Crop production is affected if there is shortage of rainfall. In Assam, paddy is cultivated during both dry and rainy seasons.

Some other crops are also cultivated depending on the natural rainfall received during monsoon. On the other hand some crops, grown in the dry season also need water. In such crop fields, artificial water is supplied. With the help of electric or diesel powered pumps, water from rivers, ponds and canals are supplied to the crop fields.



Supply of water in the crop fields through artificial method

Many people make a living by farming. Nowadays more crops can be produced by applying improved agricultural techniques. Different kinds of industries have grown up depending upon the agricultural products. In our state mainly paddy, pulses, mustard, sugarcane, tea, jute, pineapple, orange, bamboo-cane etc. are produced in large quantities. Based on these products tea industry, sugar mill, jute mills, paper mills, bamboo-cane industry, mustard oil industry etc. have sprung up. These industries have helped in improving the economic condition of our state.

Let's try and do- (Take the help of parents or teachers)

- Take 3 empty tin containers or plastic glasses and fill it with 3 different kinds of soil. Soak few grams in water, When it becomes soft, sow one seed in each of the container and place it in sunlight. Water the container every day and observe.

Now, write down the result according to the list given below–

Soil type	Growth of the sapling (in centimetre)	
	After 5 days	After 12 days
Sandy Soil		
Muddy Soil		
Loamy Soil		

Observe in which kind of soil the growth of the sapling is good and in which kind of soil the growth is poor. Think and answer why did this happen?

The sapling grows faster in the loamy soil because it has organic substance required for the growth of plants. **For the growth of plants, apart from the fertility of the soil, heat of the sun, light, and water are essential.**

Let's us know–

- ✧ The loamy soil is suitable for cultivation.
- ✧ Now-a-days scientific methods are used in farming. This increases crop production, reduces disease and cultivation of crops can be done in a short period of time. Scientific method also eases the labour of the farmer.
- ✧ Fertilizers are applied to the field to get more production.
- ✧ By burning the residues of plants, vegetables and fruits in the soil for a few days we can prepare compost.
- In a particular piece of land, instead of growing the same crop every year, the fertility of the soil can be increased by changing into pulse like crops production.
- Dung, animal excreta, bone meal, vermicompost etc. are organic manure.

Let us know the names of the crops-



Rice crops- Different types of paddy cultivation is done like- Aahu, Shali and Bao.



Pulses- Urad Bean, White lentil, Arhar, lentil, peas etc.



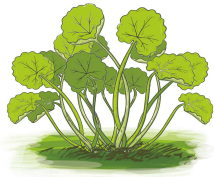
Oilseeds- Sesame, mustard, linseed, sunflower etc.



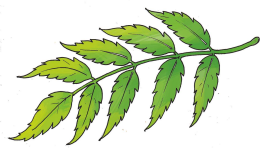
Spice- Ginger, garlic, black pepper, cumin, coriander etc.

Medicinal plants-

Let us get acquainted with the herbs having medicinal value which are used for first-aid treatment—



pennywort



neem



tulsi



periwinkle

- Write down the name of few more medicinal plants by knowing from the elders of the house.

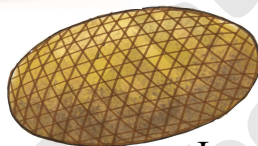
Rice is stored in storage, The storage should be in a raised/higher place so that the rice grains do not get spoiled by the accumulated water.



storage



Duli



Jaum

Large 'Dulis' made of bamboo are used to store oilseeds like mustard, sesame seed and pulses like urad bean, moong bean etc. for the whole year. The crop seeds are kept in a container made of bamboo. The seed storage container is called a **barrel**.

An appliance called **refrigerator** is used to keep vegetable, fish, honey, fruits etc. fresh for a few days.



refrigerator



Vegetables and fruits are kept in a definite temperature so that they do not get spoiled. Similarly the storage for keeping things cool is called **cold storage**. Agricultural crop such as rice, lentils tea etc. are kept in a specially built **warehouse**. In these warehouses, the crops are kept at a certain temperature so that the crops remain fresh for a long time.

Exercise

1. Answer in short-

- (a) Write the names of two vegetables that can be eaten raw.
- (b) Write the names of two vegetables that are grown in the rainy season.
- (c) Write the names of two vegetables that are grown in the dry season.
- (d) Write the names of two pulse crops.
- (e) Write the names of two oil seeds.
- (f) Write the names of two rice grains.
- (g) Write the names of two spices.
- (h) Write the names of two farming tools.

2. Write True or False-

- (a) To do farming, we need to plough the soil first.
- (b) Wheat is the staple food of Assam.
- (c) Mustard is a kind of pulse crop.
- (d) Now-a-days tractors are used to till the soil.
- (e) Agriculture is the means of livelihood for many people.

3. What are the steps to be taken for paddy cultivation.

4. What are the ways through which water is supplied to the agricultural land.

5. What is cold storage? What are the food items that are stored in the cold storage?

