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STANDARD FOUR

**TERM - II
VOLUME II**

**MATHEMATICS
SCIENCE
SOCIAL SCIENCE**

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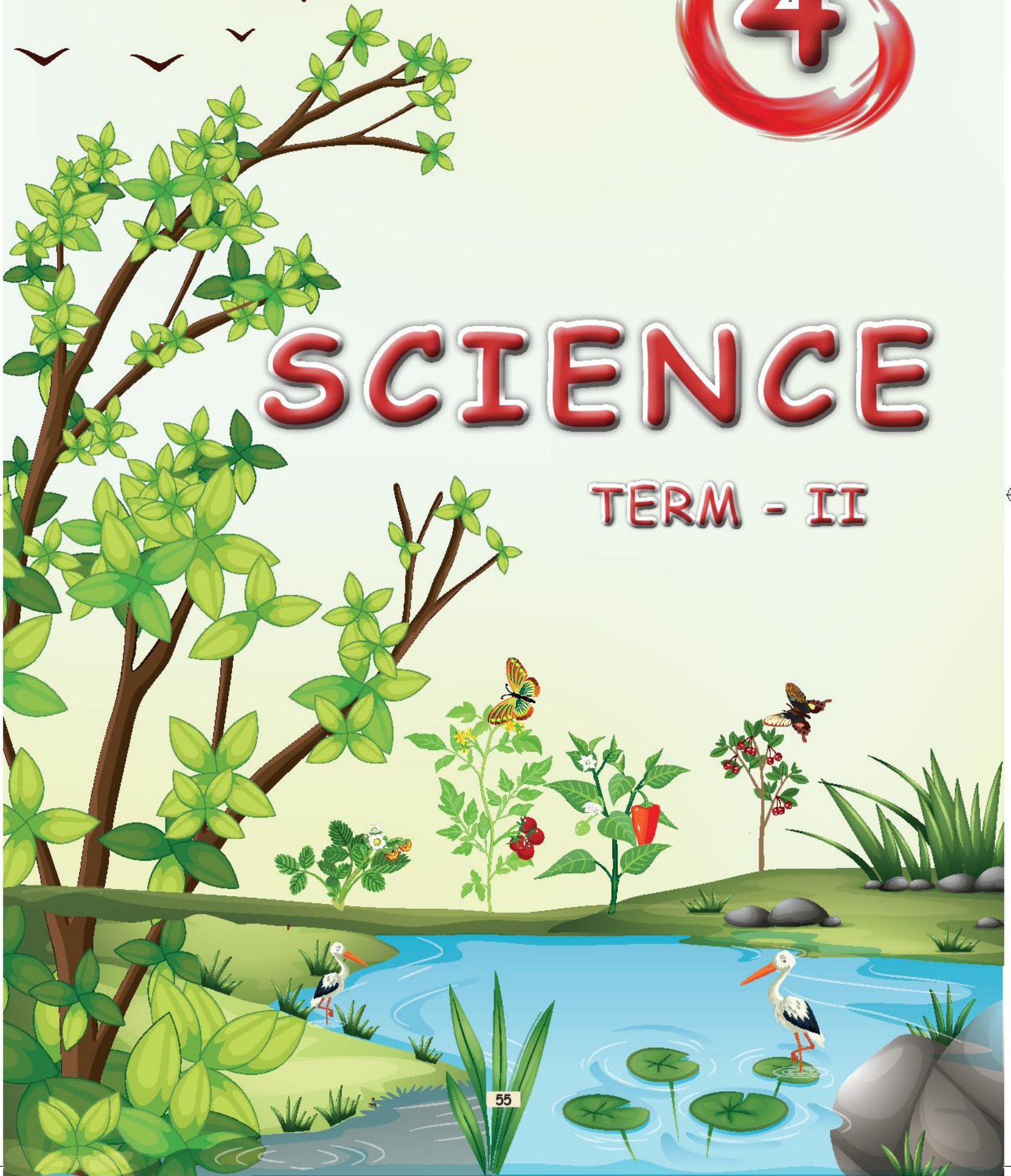
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SCIENCE

TERM - II



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E-Book



Evaluation

Food

Unit 1



Learning Objectives

After learning this lesson, students will be able to:

- ❖ differentiate between raw and cooked food items.
- ❖ understand different methods of cooking.
- ❖ describe different types of cooking utensils.
- ❖ identify hygienic food and food to be consumed during illness.
- ❖ insist the importance of not wasting food.



Introduction

Food is one of the basic needs of life. We get energy for all our activities from food. Food obtained from nature provides all the nutrients to our body. But seeing the advertisement, we are attracted towards junk food. In this lesson, we will study about food items that are good for our health, cooking methods and the importance of not wasting food.

I. Food



Let us Do

Classify the following food items.

(Carrot, Egg, Coconut oil, Milk, Raddish, Meat, Potato, Curd, Brinjal, Lady's finger, Fish, Drumstick, Butter, Onion, Buttermilk, Cucumber, Ghee)

Food items from plants	Food items from animals

In our daily life, we depend on plants and animals for our food. Some can be eaten raw but most of them need to be cooked. Let's see which food items can be eaten raw and which one needs cooking.

1. Raw Food (Uncooked Food)

Food that we can eat directly without cooking is called **raw food**.

We can eat fruits, some vegetables, tubers and nuts in the raw form. Some pulses and cereals are also eaten as **raw food**. All raw food must be washed with clean water before eating. Some of the raw food items are given below.



Fruits



Vegetables



Tubers



Nuts



Let us Do

Arrange some fruits, vegetables, nuts and tubers on the table and ask each student to pick one food item. Based on what food item they choose, ask them to join in the same kind of food item.



Let us Make

Shall we make some salad?

Collect some raw food items available in your locality. Clean them with fresh water, cut them into small pieces (keep the nuts whole), put them in a bowl then add salt and pepper and mix it well. Enjoy your tasty salad!



2. Cooked Food

We cannot eat all the food items in raw form. Food that needs to be processed using heat before it can be eaten is called **cooked food**.

Why should we cook food?

- Cooked food is easy to digest.
- Cooking softens the food materials.
- Cooking kills germs.
- Cooking adds taste and flavour to food.



Honey is the only food that does not spoil.



Try to Answer

Write any five raw and cooked food.

- a. Raw food: _____, _____, _____, _____ and _____.
- b. Cooked food: _____, _____, _____, _____ and _____.



II. Cooking Methods and Habits



Think and Answer

Children, look at the menu card given here. You can see food items on this menu. Do you think all these items are cooked in the same way?



Some of the cooking methods practiced commonly are given below.

Boiling: It is a method of cooking food by immersing in boiling water, so that the food becomes soft. **Example:** Rice, Egg.



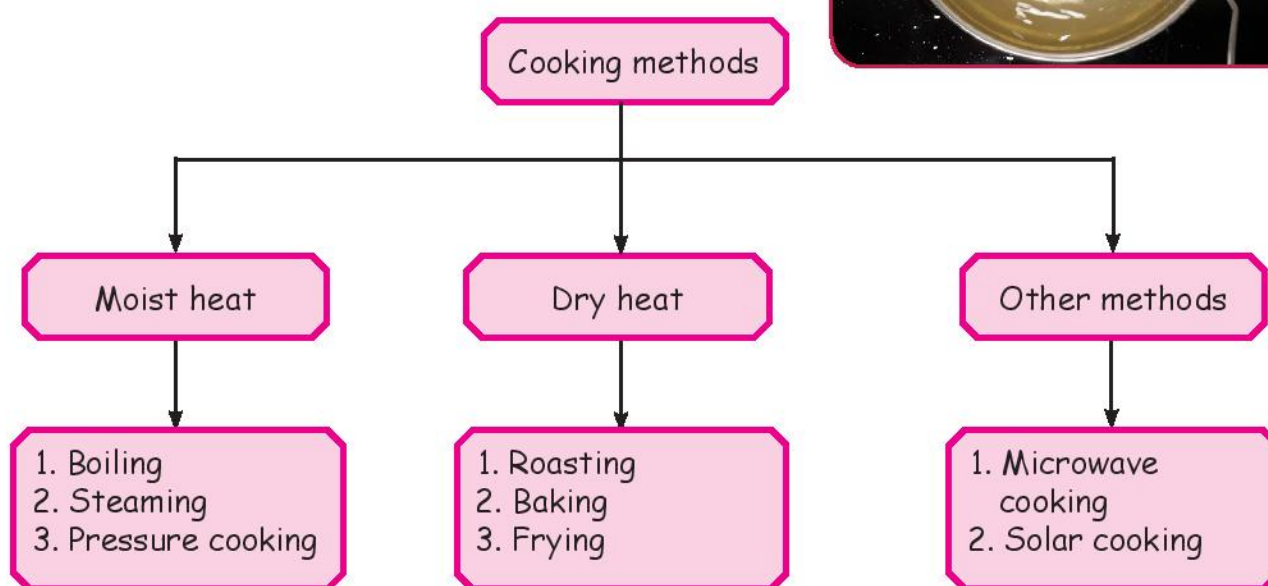
Steaming: It is a method of cooking food using steam generated from boiling water in a pan. **Example:** Idli, Idiyappam.

Pressure cooking: It is a method of cooking food in a pressure cooker. **Example:** Rice, Dhal.



Roasting: It is a method of cooking food by heating it on a tawa or frying pan without covering it. **Example:** Groundnuts, Cashewnut.

Frying: It is a method of cooking food in hot oil. **Example:** Chips, Poori.



Cooking Habits

- Wash your hands with soap before cooking.
- Wash vegetables and fruits before cutting.
- Wash cooking vessels and knives.
- Don't cook food for a long time because it destroys the nutrients present in the food.
- Don't use the same oil many time for cooking food.
- Using the food items after their expiry date is not good for health.



Let us Do

Tabulate the given food items according to the cooking methods.

(Rice, Poori, Murukku, Pop-corn, Idli, Milk, Fish, Puttu, Dhal, Idiyappam, Groundnut)

Boiling	Steaming	Roasting	Frying

Try to Answer

1. Write any two cooking methods that your mother follows.
-----, -----
2. Say True or False.
 - a. You should wash your hands before cooking. -----
 - b. Vegetables and fruits should be washed after cutting. -----

III. Cooking Utensils

Utensils are in different shapes and sizes. We use specific utensils for each cooking method. Clay pots were used earlier. Stainless steel and aluminum vessels are now generally used for cooking.



Cooking in Clay Pot

Clay pots are well-suited for all types of cooking. **Cooking in clay pots** improves the quality and taste of food and also **retains the nutrients**. The natural insulation properties of clay cause heat and moisture to balance and circulate throughout the pot and keep the nutrients unharmed and prevent the dish from burning.

Benefits of claypot cooking

- Easy to digest.
- Preserves the nutrients.
- Needs less oil for cooking.
- Adds flavour to the dish.
- Keeps the food warm for a long time.
- Keeps the food from becoming stale soon.
- Alkaline property in the pot neutralizes the acidic property in the food.



Solar Cooker

It is an appliance which is used to cook food using sunlight. It saves fuel and reduces air pollution.



Let us Do

Write the cooking utensils used for preparing given food items.

(Pan, Pot, Rice cooker, Tawa, Idli cooker)

S No.	Food items	Name of the cooking utensils
1.	Rice	
2.	Idiyappam, Puttu	
3.	Vada	
4.	Sambar	
5.	Dosa	

Try to Answer

Write True or False.

1. Earlier people cooked their food in pressure cooker. _____
2. Solar cooker reduces the use of fuel. _____
3. Pressure cooker is not a cooking utensil. _____

IV. Meal-time Hygiene



Think and Answer

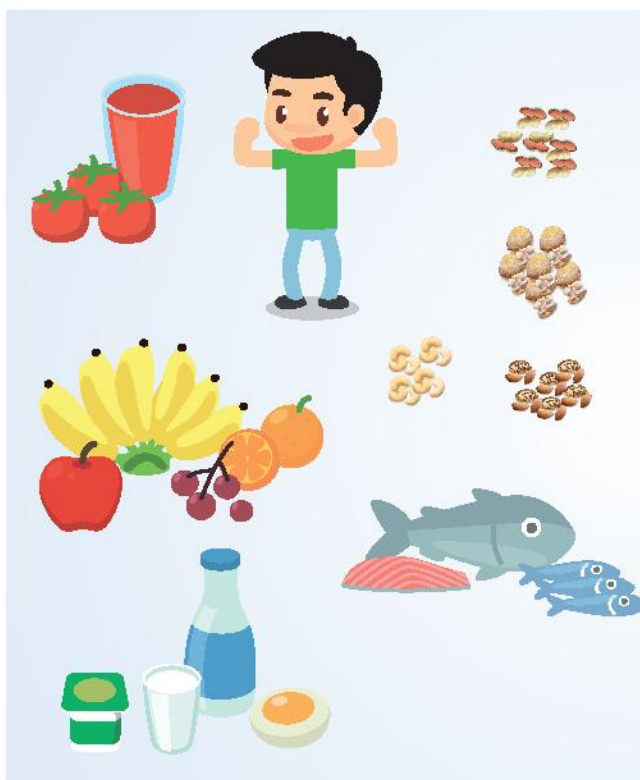
Look at the pictures given below. Which one is good for health? Why?



Meal-time hygiene includes ways to make sure that we do not get sick because of the way we eat or make food. Some of the **hygienic ways of taking food** are given below.

- Always cover food to protect them from dust and insects.
- Eat fresh food always.
- Avoid taking food that is too cold or too hot.
- Avoid fast food and fried food.
- Always wash your hands with soap before and after eating.

Healthy foods



Unhealthy foods





Let us Do

Tick (✓) the appropriate one.

Food	Hygienic food	Junk Food
Fresh fruits		
Samosa		
Nuts		
Panipoori		
Vegetable salad		

Try to Answer

Write Yes or No.

1. Junk food is good for health. _____
2. You should wash your hands before and after eating. _____



Let us Discuss

Here is Nandini's lunch box.

- a. Are all the items in the box healthy?
- b. Suggest her to remove one food which is not healthy and add one food which is healthy. Give reasons for change.



V. Food during Illness



Think and Answer

When you are sick, what kind of food your mother serves you?

When we are sick, we should avoid food items that are fried in oil. We should take energy-giving, easily digestible food. Some of them are given below.

- Porridge of rice or cereals.
- Fruit juice, tender coconut.
- Steamed foods like idly.



Let us Do

Note to the teacher

Make small paper rolls, each having a food item's name written on it. Put all of them on a table. Make two big circles on the floor. Name one circle '**MUST AVOID DURING ILLNESS**' and another circle '**MUST TAKE DURING ILLNESS**'. Ask children to take one roll each and stand in the appropriate circle after reading the name on the roll.

Try to Answer

Fill in the blanks.

- _____ is an easily digestible food. (Idly / Biryani)
- We should avoid eating _____ food. (junk/ fresh)

VI. Food Wastage



Think and Answer

- ◆ Do you usually eat your lunch without wasting anything? If you say no, why do you waste?
- ◆ Can you suggest a few ways to reduce wasting food in your school and house?

We should not waste food. Food that is not eaten is called leftover food. This food is discarded as waste. Following are the simple ways to avoid food wastage.

- Take what you can eat and eat what you take.
- Share the excess food.
- Give the excess food to the needy.





One third of the food produced in the world is wasted. It is a total of 1.2 lakh crore tonnes per year.
(1 ton = 1000kg)

Food Preservation

We can preserve the food for long time by using the following methods.

Pickling - Mixing fruits and vegetables with oil and salt.

Example- Pickle



Refrigerating - Keeping food in the refrigerators (fridge) to preserve them for a short time.

Example-Fruits, Vegetables

Drying - Removing the water content of the food.

Example- Fish, Red chillies



Canning - Storing food in airtight containers.

Example-Jam



World Hunger Day - May 28

Try to Answer

Fill in the blanks.

1. World Hunger Day is observed on _____.
2. We can preserve pickle by _____.



Let us Do

Make students list out all the food items wasted in their home for one week. Make them discuss what they saw and what they can do to reduce waste.

Evaluation



I. Choose the best answer.

1. Which one can be eaten as raw food?
a) Meat b) Carrot c) Fish d) Potato
2. Uncooked food is called _____.
a) junk food b) hygienic food c) raw food d) cooked food
3. Solar cooker reduces _____.
a) air pollution b) water pollution c) land pollution d) noise pollution
4. Which one of the following cannot be preserved by drying method?
a) Rice b) Cereals c) Fish d) Fruits
5. We can avoid food wastage by
a) giving them to the needy b) eating more than we need
c) buying extra food d) throwing them in a dust bin

II. Fill in the blanks.

1. _____ gives us energy to work and play. (Raw food / Junk food)
2. Cooked food is easily _____. (digested / undigested)
3. Pressure cooker is one of the _____ utensils. (modern / ancient)
4. We need pure air, protected water and _____ food for our healthy life. (junk / hygienic)
5. We make Idiyappam by _____ method. (boiling / steaming)

III. Match the following.

- | | | |
|--------------------------|---|---------------------|
| 1. Grapes | - | Modern utensils |
| 2. Mixture of vegetables | - | Food during illness |
| 3. Electric rice cooker | - | ancient utensils |
| 4. Earthen pot | - | Raw food |
| 5. Less fatty food | - | Salad |

IV. Write Yes or No.

1. Biryani is a raw food.
2. Frying is a method of cooking.
3. We can cook rice on a tawa.
4. Cooking in a solar oven needs sunlight.
5. Consuming too much oily food is bad for our health.

V. Answer briefly.

1. Name any three cooking methods.
2. Write any two food items you should eat when you are sick.
3. Draw the picture of one of your favourite raw foods and colour it.
4. Write about any two food preservation methods.
5. How can you reduce wastage of food in your home?

VI. Answer in detail.

1. Explain any four food preservation methods.
2. Explain any four cooking methods.
3. What are the hygienic ways of cooking food?

VII. Project.

Make a cardboard plate. Make your favourite fruits and vegetables from clay and fix them on the plate.

Water

Unit
2



Learning Objectives

After learning this lesson, students will be able to:

- ❖ understand the change of states in water.
- ❖ describe water cycle.
- ❖ explain the importance of water cycle.
- ❖ summarise rainwater harvesting and its uses.



Introduction

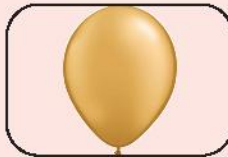
Water is the most abundant and precious resource on the Earth. It is found in oceans, seas, rivers, streams, lakes, ponds and under the ground. All living things need water to live and to do many other activities. We have already learnt about this in your previous class. Let us learn more about water in this lesson.

I. Change of States in Water



Let us Do

See the given pictures and write down the state of each objects. (Solid, Liquid, Gas)



Water occurs naturally in three forms: ice, water and water vapour.

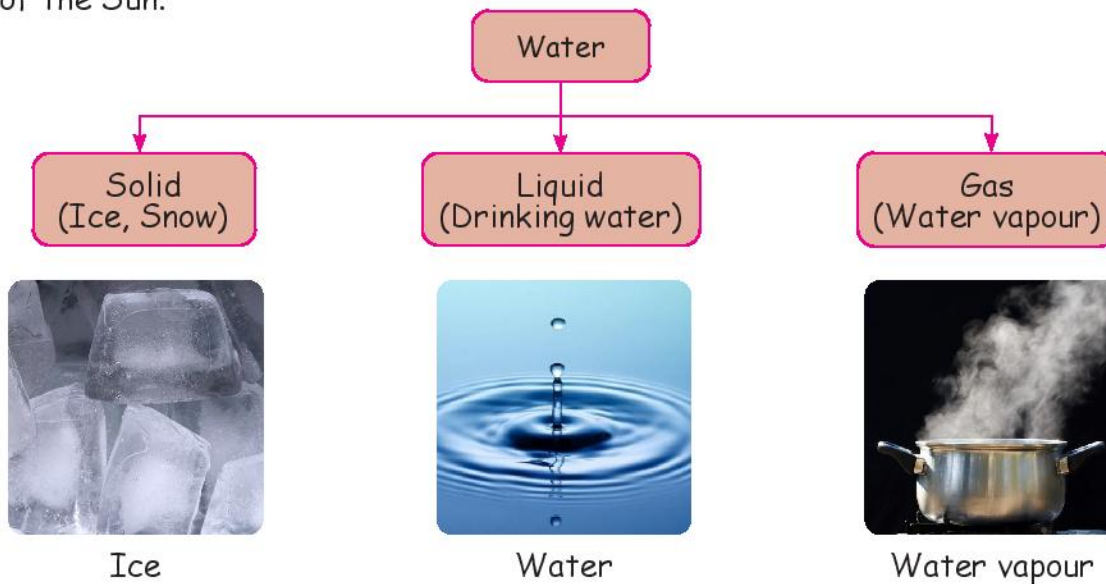
These forms are also called states of water. Ice is in solid form, water is in liquid form and water vapour is in gaseous form.

These states occur naturally because of temperature changes. Water becomes ice in cold regions, remains as water in oceans/ rivers and becomes water vapour due to the heat of the Sun.



More to know

Human body consists of 75% of water by mass.

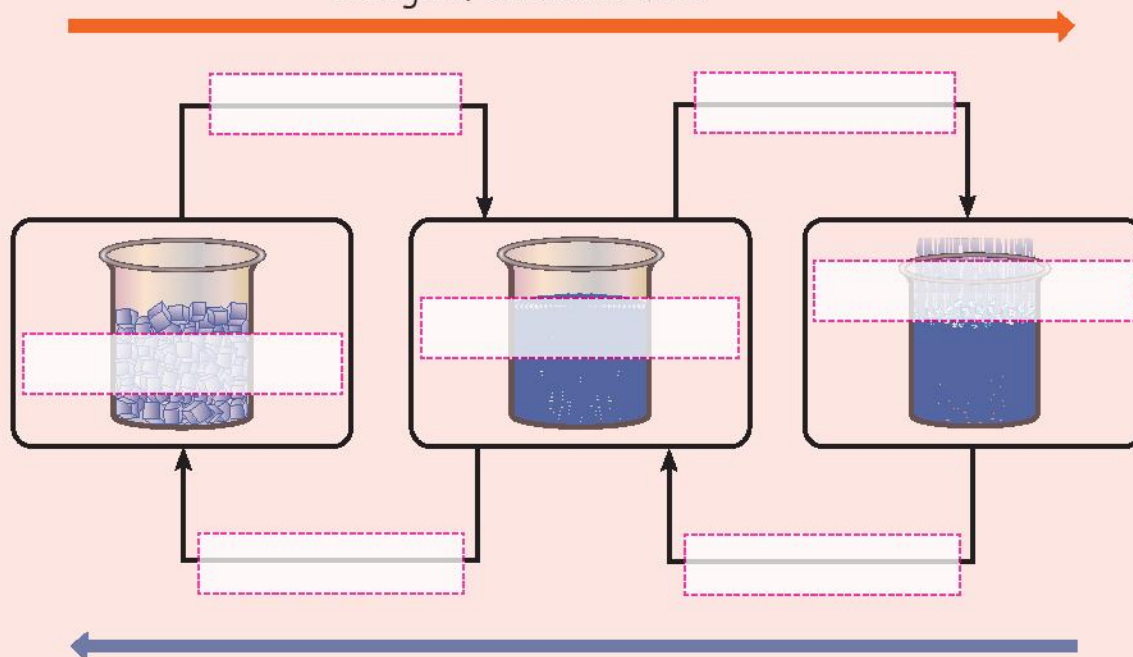


Let us Do

Fill in the boxes given below with correct answers.

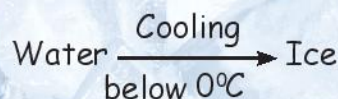
(Liquid, Solid, Melting, Freezing, Cooling, Heating, Gas)

Change of States in water



SOLID STATE (Ice)

Ice is a solid form of water. At temperature below 0°C water becomes ice. This process is called **freezing**.



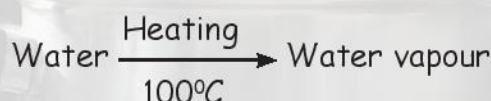
LIQUID STATE (Water)

Water in liquid state is available in water bodies such as oceans, river, waterfalls etc.

Write any two water bodies in your area. _____, _____.

GASEOUS STATE (Water vapour)

Water becomes water vapour as the temperature increases due to heat. Heating forms a white mist of extremely small water droplets in the air known as water vapour.



Try to Answer

1. Why water is a good example for all states of matter?
2. Which of the following is in liquid state? Rain/Ice/Snow



Let us Do

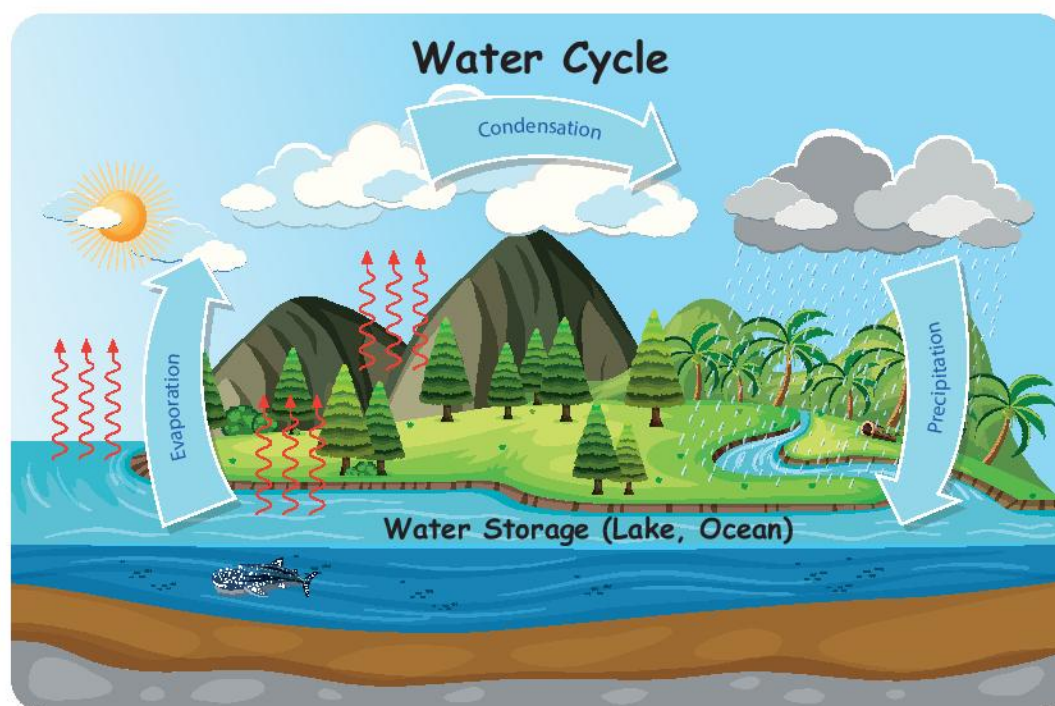
- ❖ Fill water in an ice tray and keep it in the freezer. After few hours, take it out. What has happened to the water?
_____.
- ❖ Now keep this ice tray on a table for some time. What happens to the ice?
_____.
- ❖ Pour water from the ice tray into a kettle. Ask an elder in your home to heat the kettle and observe the mouth of the kettle when the water starts boiling. What do you see?
_____.

II. Water Cycle

In nature, water keeps changing its state. Let us see how this happens. Due to the Sun's heat, water in oceans and rivers changes into water vapour and rises up.

Water changing into water vapour on heating is called **evaporation**. The water vapour, when comes into contact with cool air, becomes water droplets. This is called **condensation**. The water droplets combine to form clouds. The water droplets continue to combine, and they become big and heavy. These water droplets then fall down as rain. This is called **precipitation**. In colder places, combined water droplets come down as snow, sleet or hail. This continuous change of water from one state to another in nature is called water cycle.

The continuous cycle through which water is circulated by different processes like evaporation, condensation and precipitation is called **water cycle**.



More to Know

Each day, we lose a little more than a cup of water when we exhale.



Think and Answer

What happens to the water in a wet cloth, when we dry it?

Try to Answer

Choose the correct answer.

In the water cycle _____

- a. only evaporation is involved
- b. only condensation is involved
- c. evaporation, condensation and precipitation are involved

Importance of Water Cycle

- To improve the availability of ground water.
- To control the Earth's temperature.
- To provide water to plants and animals especially humans.
- To recycle the Earth's supply of water constantly.

Try to Answer

1. Unscramble the words and fill in the blanks.

ondencsaonti, vaeionorpat, ecippitrino

_____, _____, _____.

2. Is water cycle important for farming? _____
3. Why is water cycle important to human? _____
4. Name the process which is responsible for the formation of droplets on the surface of a glass having cold water _____



73% of our brain's mass consists of water.

The Antarctic region has about 70% of the world's fresh water.



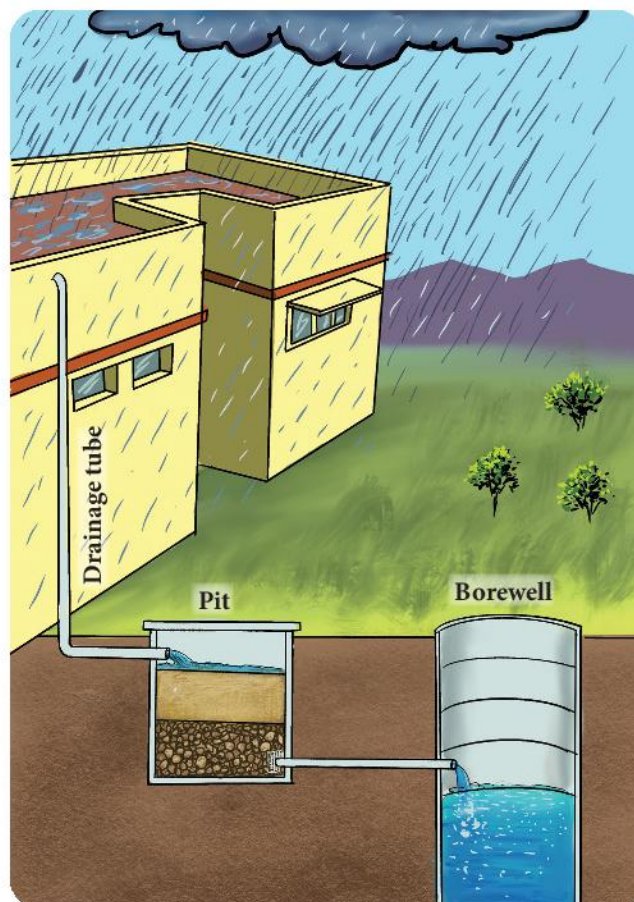
III. Rainwater Harvesting

'Rainwater harvesting' is the process of collecting and storing rainwater for future use. Rainwater can be collected in natural reservoirs or artificial tanks. **Roof top harvesting** is also a type of rainwater harvesting. The rainwater on the top of the building is collected and passed into the ground through pipes. Water passing through the pipes enters the pit which consists of gravels and coarse sand. As it passes impurities are filtered and it is stored as ground water.



More to Know

H_2O is the chemical formula of water.





One inch of rainfall on a 2,000 sq.ft. roof is equal to 4,800 litres of water.

Benefits of Rainwater Harvesting

- It increases the ground water level.
- It can be used for agriculture.
- It increases the availability of water for living things.

Rain water harvesting is the only way to conserve rain water.



More to Know

- Rainwater harvesting was launched in the year 2001 by the Tamil Nadu government.
- Tamil Nadu is the first Indian state which made rainwater harvesting mandatory.

Try to Answer

1. List out some other benefits of rainwater harvesting.
2. Suggest some ideas to save rainwater in your school.

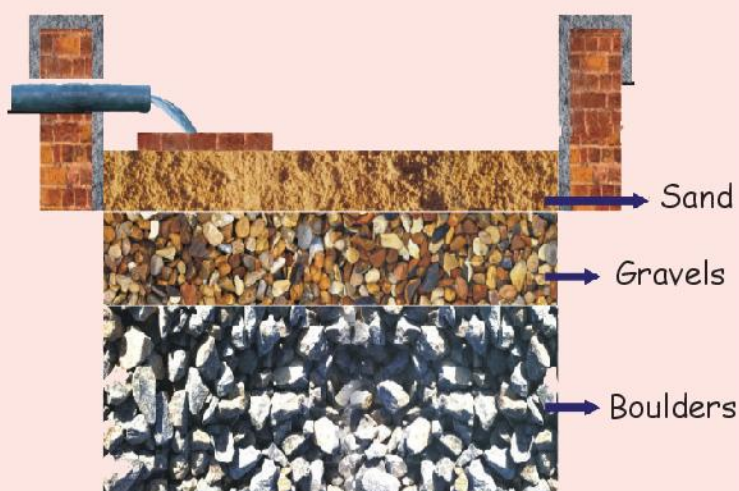


Let us Do

Tips to construct a rainwater harvesting pit at school/home.

Construct a pit of any shape or size. It may be generally constructed, 1-2 metre wide and 2-3 metre depth. The pits can be filled with boulders, gravels and coarse sand.

Put the boulders in the bottom, sand in the top and gravels in the middle.



Let us Do

Discuss with your friends.

Rainwater harvesting has an important role to protect our environment.

Evaluation



I. Choose the correct answer.

1. Water is the most _____ resource on the Earth.
(a) precious (b) solid (c) gas
2. Water exists in _____ states.
(a) two (b) three (c) four
3. At temperature below _____ water freezes to form ice.
(a) 10°C (b) 100°C (c) 0°C
4. _____ is the process by which water becomes water vapour.
(a) Condensation (b) Evaporation (c) Freezing
5. Which of the following controls the ecological functions of life?
(a) Bicycle (b) Water cycle (c) Recycle water

II. Fill in the blanks with suitable answer.

1. Water is converted into _____ when it is heated (ice cube / water vapour).
2. Water becomes ice on _____ (heating / freezing).
3. Water droplets combines to form _____ (rain / clouds).
4. Water cycle increases the availability of _____ (water tank / ground water).
5. _____ is a type of rainwater harvesting (Roof top harvesting / Watercycle).

III. Write True or False.

1. Water is a good example for all states of matter.
2. Water cycle controls Earth's temperature.
3. Water becoming water vapour on heating is called evaporation.
4. 37% of our brain's mass consists of water.
5. Roof top harvesting method is used in agriculture field.

IV. Answer briefly.

1. Write the states of water.
2. What is freezing?
3. Name the processes involved in water cycle.
4. Which state government made rain water harvesting mandatory in the year 2001?
5. What is needed to construct a rain water harvesting pit?

V. Answer in detail.

1. What is water cycle? Write any three importances of water cycle.
2. What is rain water harvesting? List out the advantages of rain water harvesting.

VI. Colour the given picture and write the correct name in the given blanks.

(Precipitation, Evaporation, Condensation, Water storage)



VII. Project.

Make a model of house with roof top rainwater harvesting system.

Plants

Unit 3



Learning Objectives

After learning this lesson, students will be able to:

- ❖ list out the parts of leaf and their functions.
- ❖ explain the process of photosynthesis.
- ❖ describe the role of plants as a primary producer.
- ❖ know about green and non green plants.
- ❖ describe the features of flower.
- ❖ list out the exotic plants and their role.
- ❖ identify the edible part of different plants.



Introduction

All living things need food. Food helps them grow and perform daily activities. We have seen animals eating their food. But, have you ever wondered how plants get their food? Plants produce their own food with the help of chlorophyll, a pigment present in leaves. Humans and animals depend on plants for their food either directly or indirectly. Let us learn more about plants in this lesson.

I. Parts of Leaf

Leaves are of different shapes and sizes and have different parts. However, there are some basic parts that are common in most of the leaves.

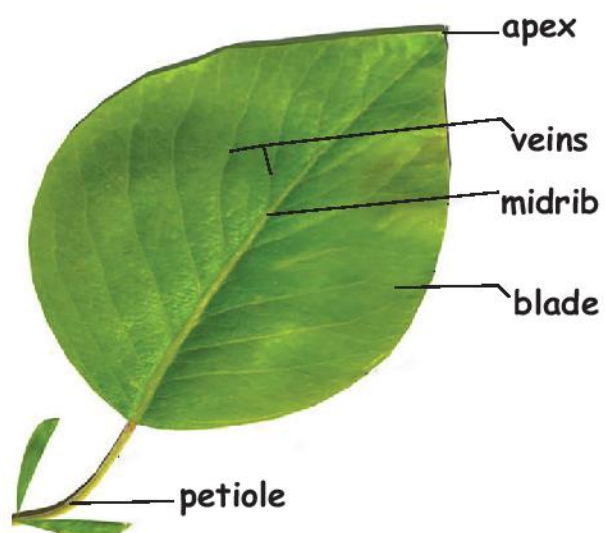
Blade : The broad flat part of the leaf (Lamina).

Apex : The tip of the leaf.

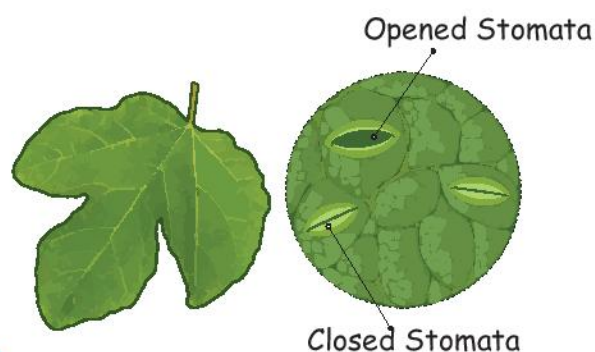
Midrib : The midrib runs along the centre of the leaf.

Veins : Veins branch out from the midrib. They are the framework of hollow tubes that carry water and minerals.

Petiole : This part joins the leaf to the main stem.



Stomata : Stomata are tiny openings or pores mostly found at the base of the leaves. Air enters and leaves the plant through these openings. Stomata helps the plants to breathe. Stomata are used to **exchange gases**.



1. Leaf as food factory

Plants need food but they never depend on people or animals to get their food. Most of the plants are able to make their own food through a process called **photosynthesis**.

Photosynthesis = Photo (light) + synthesis (make)

Photosynthesis is a process by which plants make their food using chlorophyll, water and carbon dioxide in the presence of sunlight. Let us see how this process is organized within the plants.



Think and Answer

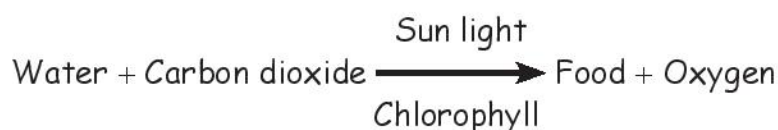
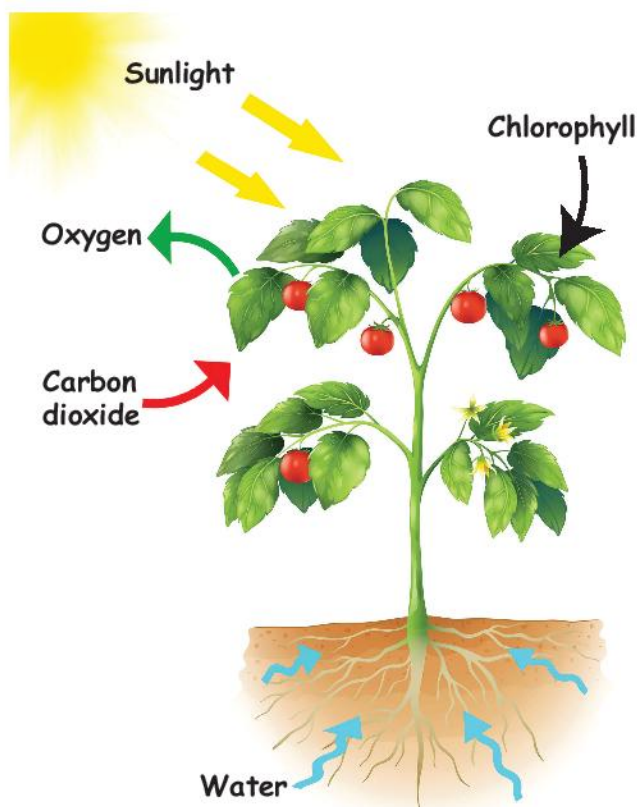
- ◆ Through which part of the leaf carbon dioxide enters into it?
- ◆ Which part of the leaf transports water?

Water: Water is absorbed by the roots and is transported to the leaves through the tubes.

Carbon dioxide: Carbon dioxide in the air passes through **stomata** in the leaves.

Sunlight: A green pigment in the leaves help them to trap sunlight. This pigment is called **chlorophyll**. Most leaves are green in colour because of this green pigment.

Through photosynthesis plants produce the food and release oxygen into the air.



As plants prepare food for themselves and also for other living things, they are called **primary producers**.

Without primary producers, living things are not capable of producing their own food and will not be able to live.



Think and Answer

Why would living things not be able to live without plants?

Try to Answer

Fill in the blanks by rearranging the letters in the bracket.

1. During photosynthesis plants release _____ (egxyno).
2. _____ is a primary producer (tanpl).
3. Stomata are seen in the _____ (owler) surface of the leaf.
4. Pigment involved in the food synthesis is _____ (phllylochor).



More to Know

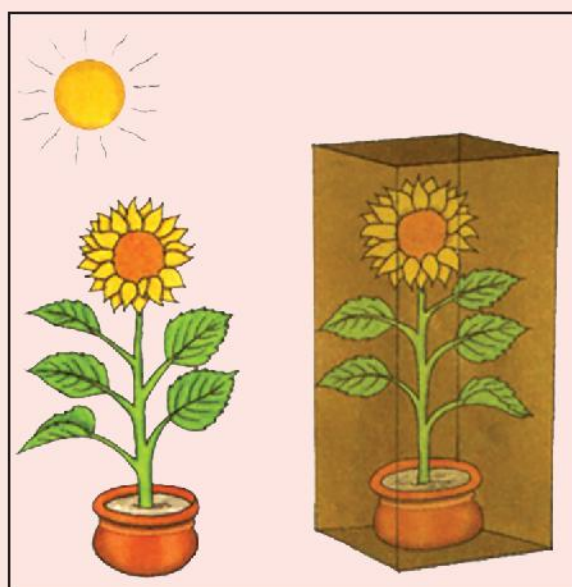
In plants like cactus, leaves are modified into thorns. Their food is produced in the green stems.



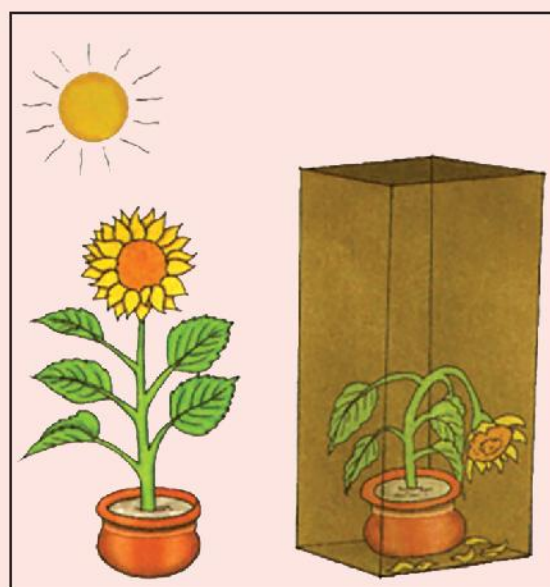
Let us Do

Take two potted plants. Keep one in sunlight and other in a fully covered box. Water them regularly. After a week observe the plants.

Before a week



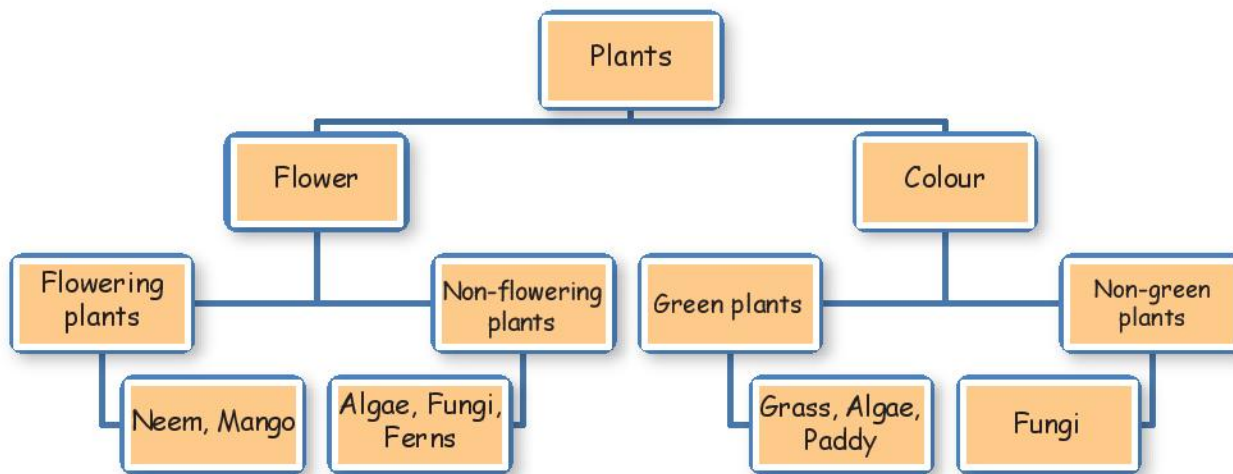
After a week



What did you observe?	Plant in sunlight	Plant in box

II. Classification of Plants

Plants are classified in many ways based on stems, life span, seeds, flower and colour. In this section we will study about the classification of plants based on flower and colour (pigment).



1. Flowering and Non-flowering plants

Flower is the most important part of many plants, because it is involved in reproduction. But some of the plants are not having flower. These plants reproduce in different modes. Based on this, plants can be classified into two types.

- ❖ Flowering plants
- ❖ Non-flowering plants.

Flowering plants

Plants **bearing flowers** are called **flowering plants**. Some of them reproduce by sex cells or gametes and produce seeds. Seeds produce new plants. Eg - **Mango, Neem, Groundnut, Paddy etc.**



Neem



Paddy



Mango

Non-flowering plants

Plants that can reproduce **without flower** are called **non-flowering plants**. These plants do not produce seeds. They reproduce by a special structure called spores. E.g. **Algae, Fungi, Fern**.



Algae



Fungi



Fern



Let us Do

List out the flowering and non-flowering plants in your surrounding.

Flowering plants	Non-flowering plants

2. Green and Non-green plants

The most important **pigment** present in plants are called **chlorophyll**. Based on the colour present in the plant, they are divided into two groups. They are green and non-green plants.

Green plants

Plants containing green pigments are called green plants. It looks green in colour. They prepare their own food with the help of them. It depends on atmosphere, light and pigment for food preparation. Green plants are commonly called **autotrophs**.

E.g. **Grass, Paddy, Algae etc.**



Grass



Paddy



Algae

Non-green plants

Plants that **do not contain chlorophyll** pigment and do not look green are called **non-green plants**. They cannot prepare their food. These plants depend on other organism for their food and living place. These are commonly called **heterotrophs**.



Mushroom



Bread moulds



Bracket Fungi



Let us Do

List out the places where you see the non-green plants

Try to Answer

Fill in the blanks.

1. _____ is an example for non flowering plants.
2. Plants are classified based on pigment and _____ of the plant.
3. _____ depend on other organisms to live and get their food.
4. Autotrophs use _____ , _____ and chlorophyll to prepare their own food.

III. Parts of Flower

Have you seen flowers? Try to answer the questions given below

- a) Which is your favourite flower? _____
- b) What is the colour of that flower? _____
- c) How does that flower smell? _____

The four visible parts of a flower are explained below.

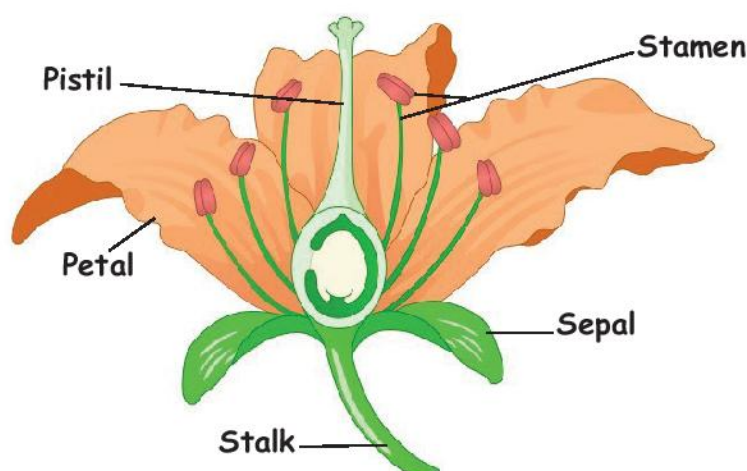
Sepal: Sepals are leaves that protect the flower while it is still a bud. Sepals are usually green or brown.



Petal: Petals are often bright coloured. Their main job is to attract insects such as bees or butterflies, to the flower. The insects help the flowers in the transfer of pollen grains.

Stamen: Stamen can be seen at the centre of a flower. They contain pollen grains that help the plants to multiply. It is the male part of a flower.

Pistil: Pistil is also seen at the centre of the flower. The pistil uses the pollen to help the flower to become fruit. It is the female part of a flower.



More to Know

The largest flower in the world is Rafflesia. This rare flower is found in the rainforests of Indonesia.



Try to Answer

Fill in the blanks.

1. Sepals _____ the flower while it is still a bud.
2. Stamen contains _____ grains.
3. Pistil is _____ part of a flower.



Let us Do

Bring few hibiscus flowers to the classroom. Distribute the flowers to the children. Introduce the parts of a flower to them. Then, ask them to observe and feel the different parts of the flower and tell them to record their observation.

Parts of flower	What is its colour?
Petal	
Sepal	
Pistil	
Stamen	

Seasonal Flowers



Think and Answer

Can you name the four seasons?

The change in climate that occurs periodically is called **seasons**.

There are four general seasons - **Spring, Summer, Autumn** and **Winter**.

Most flowers bloom in a specific season. Hence, they are called **seasonal flowers**.

Flowers that bloom in winter



December



Flame Lily



Tuberose

Flowers that bloom in summer



Jasmine



Sunflower



Rose

Flowers that bloom in autumn and spring



Dahlia



Saffron



Tulip



More to Know

Firecracker flowers bloom in all seasons



Kurinji flower blooms once in 12 years



IV. Exotic Plants

The plants that **grow outside their native** area either purposefully or accidentally are called **exotic plants**.

Most of these plants are brought to new areas for decoration purposes. Some of them are given below.



Sago palm (Cycas)



Fern



Crotons



Travelers palm



Boat lily



Aloe vera



More to Know

Parthenium plant accidentally grow in a new native. This plant expands its range and disturbs the cultivation areas. The pollen of this plant is allergic in nature. So, **do not touch this plant** wherever you see.



Try to Answer

1. Find the odd one.

- i. December, Tuberose, Tulip.
- ii. Saffron, Tulip, Rose.
- iii. Crotons, Boat lily, Rose.



Let us Do

Collect various ornamental plants and plant them in your school garden or at home.

V. Plants as Food

Humans and other animals often use plants as food. Plants which we eat are edible. Edible parts of some plants include leaves, stems and roots. We also eat fruits produced by plants.

Edible parts of plants

All the parts of different plants are edible, that is, we can eat them as food.

Roots as food

Many plants store excess food in their roots. They have thick and swollen roots. These roots are used as food. Some of them are given below.



Carrot



Beetroot



Tapioca

Stems as food

In some plants the stem stores the excess food in it. Potato, onion and ginger are the **underground stems** that we eat. Some of them are given below.



Onion



Turmeric



Sugarcane

Leaves as food

Leaves of some plants are used as food. In some plants **extra food is stored in leaves**. We eat the leaves of some plants like **cabbage**. Some of the leaves used as food are given below.



Coriander



Cabbage



Moringa

Flowers as food

Flowers are the part of a plant. Many flowers are used as food. Some of them are given below.



Banana flower



Cauliflower



Clove

Fruits as food

Many fruits are used as food. Fruits are **rich in vitamins and minerals**. They keep us healthy. All fruits can be eaten raw.



Banana



Mango



Jack fruit

Grains as food

Grains of pulses, cereals and pods are the commonly eaten seeds. They are the rich **sources of carbohydrates and proteins**.



Rice



Pulses



Fenugreek

Try to Answer

Fill in the blanks.

1. _____ flower is used as food.
2. _____ part of the potato plant is used as food.
3. Stem of the _____ stores food in it.
4. Seeds are rich in _____ and _____.



More to Know

Trees are the longest living organism on earth. Bamboo plants can grow upto 90 cm in a day.





Let us Do

Complete the table to show the parts of the plant we eat.

Food items	Parts of the plant eaten
Carrot	
Banana	
Mango	
Cauliflower	
Rice	
Dhal	
Moringa	
Turmeric	
Onion	
Cabbage	
Jackfruit	
Beetroot	

Evaluation



I. Choose the correct answer.

- The tip of the leaf is
a. blade b. apex c. midrib d. veins
- Which one of the following is the primary producer?
a. Plant b. Animal c. Human d. None of the above
- Which flower blooms during winter?
a. Jasmine b. Tulip c. December d. Fire cracker
- Choose the ornamental plant from the list.
a. Parthenium b. Mango c. Travellers palm d. Groundnut
- Which plant flower is edible?
a. Cauliflower b. Potato c. Mint d. Cabbage

II. Fill in the blanks.

- During photosynthesis _____ is produced and stored in the leaf.
- Green plants have _____ pigment.

3. Onion is a _____ part of a plant.
4. The male part of a flower is _____.
5. An example for edible seed is _____.

III. Answer the following in one or two words.

1. Which is the female part of a plant?
2. Write the name of any one of the leaf that is used as food.
3. Which flower bud is used as spices in food?
4. What are the nutrients present in the seeds?
5. Write any one of the flower that blooms in summer.

IV. Answer briefly.

1. Write the parts of a leaf.
2. Define - Photosynthesis.
3. Name any five exotic plants.
4. Write the names of any two underground stem plant.
5. Why should we not touch parthenium plant?

V. Answer in detail.

1. Mark any four parts of the leaf in the picture and describe them.



2. Draw the diagram of a flower and explain the parts of a flower .

VI. Project.

1. Collect the edible parts of different plants used in your home and display them in your class room.
2. Collect some flowers and discuss about the parts of flower with your friends.