

Chapter 1 Food Where Does It Come From

III. LONG ANSWER TYPE QUESTIONS

Q.1. Explain in detail about herbivores, carnivores and omnivores. Give two examples.

Ans: **Herbivores:** Animals which eat only plants, plant products are called herbivores. eg. Cow, Deer and Elephant

Carnivores: Animals which eat other animals are called carnivores. eg. lion and Lizards

Omnivores: Animals which eat both plants and animals are called Omnivores. eg. Dog, human being, etc..

IV. HOTS:

1. Why do boiled seeds fail to sprout?

Ans: The boiled seeds failed to sprout because boiling denatures or damages certain enzymes or proteins that are required for germination. Thus, boiling kills the seeds.

2. Why is carrot orange and spinach green?

Ans: The carrot is bright orange colour because of presence of the pigment called β -carotene. Spinach is green due to chlorophyll pigment present in the chloroplast of the leaf tissue.

3. What makes sprouts more nutritious?

Ans: The simple process of sprouting brings out many enzymes in germinated seeds, legumes and grains, making them easier to digest. It also increases the amount of protein, vitamins and minerals.

June Month

Chapter 2 Components of Food

III. LONG ANSWER TYPE QUESTIONS

1. List various types of nutrients and write the functions of each.

Ans. The various types of nutrients are:

(i) Carbohydrates: They are mainly energy-providing nutrients.

(ii) Fats: They provide energy for the body. They give much more energy than carbohydrates if consumed in same amount.

(iii) Proteins: They are called body-building foods. Proteins help in the formation and repairing of body parts. Skin, hair, muscles, enzymes are made up of proteins.

(iv) Vitamins: Vitamins help in protecting our body against disease. They also protect eyes, bones, teeth and gums.

(v) Minerals: Minerals are essential for proper growth of body and to maintain good health.

Hots:

1. What will happen to a person who is not getting enough carbohydrates?

Ans: Person will lack in energy to do work.

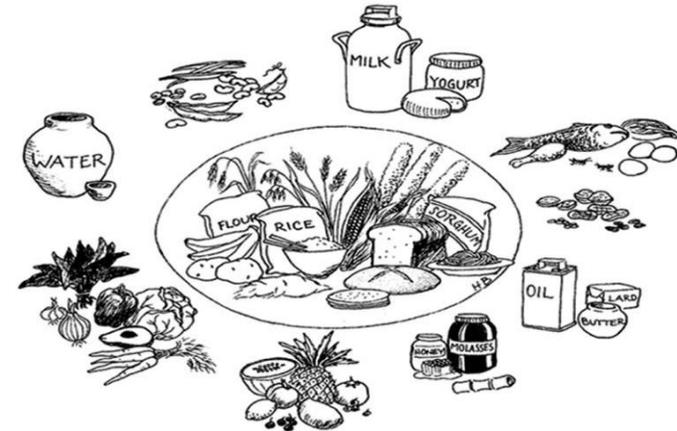
2. You are advised not to drink coco cola pepsu etc., find the reason

Ans: It is carbonated drink which contain carbon dioxide which becomes a gas when it warms to body temperature.

3. It is not good to wash vegetables and fruits after cutting, why?

Ans: Loss of nutrients occur due to washing.

Diagram: Different types of nutrients and their sources



June Month

Chapter 3 Fibre to Fabric

III. LONG ANSWER TYPE QUESTIONS

Q.1. Describe the process of spinning and weaving.

Ans. **Spinning:** The process of making yarn from fibres is called spinning. In this process fibres from a mass of cotton wool are drawn out and twisted. By this fibres come together to form a yarn. Spinning can be done by hand, by takli and charkha. On a large scale, spinning is done with the help of machines.

Weaving: The process of arranging two sets of yarns together to make a fabric is called weaving. The process of weaving can be done on looms. The looms are either-hand operated or power operated.

Hots:

1. Name the device that was popularized by Mahatma Gandhi?

Ans: Charkha

2. Why are the fabrics made from cotton are more comfortable in summer season?

Ans: Cotton absorbs sweat and allows air to circulate.

3. Jute mats are used as soil savers. Explain.

Ans: It covers barren land and prevent soil erosion

4. Which type of fabric is used to make bath towel?

Ans: Terry cloth

5. Which fibre is called as "Queen of Fabrics"? Why?

Ans: Silk fibre, due to its beauty and texture it is called the Queen of Fabrics.

6. Name any one cotton fabric woven on a hand loom.

Ans: Khadi.

Chapter 4 Sorting Materials into Groups

LONG ANSWER TYPE QUESTIONS:

1. How can you show that some solids like sugar, salt are soluble in water whereas solids like chalk powder and sand are not soluble in water?

Ans: Collect samples of sugar, salt, chalk powder and sand. Take four beakers. Fill each one of them about two-third with water. Add a teaspoonful of sugar to the first beaker, salt to the second, chalk powder to the third and sand to the fourth. Stir the contents of each beaker with a spoon/stirrer.

Undissolved substance
is visible in the beaker

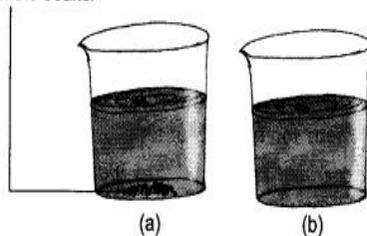


Fig. 4.5 (a) The solid substance is visible in water and hence insoluble (chalk powder and sand). (b) The solid is not visible in water and hence soluble (sugar and salt).

Wait for a few minutes and observe what happens to the substances added to the water.

Note down the observations in the following table.

Table: Mixing different solid materials in water

S. No.	Substance	Disappears in water/does not disappear
1.	Sugar	Disappears completely in water
2.	Salt	Disappears completely in water
3.	Chalk powder	Does not disappear in water
4.	Sand	Does not disappear in water

Inference:

(i) Sugar and salt are soluble in water.

(ii) Chalk powder and sand are insoluble in water.

Hots:

1. Name the stone that floats

Ans: Pumice

2. What happen when an incense stick is burnt?

Ans: Its fragrance spreads in form of smoke. Smoke is a gas that spread in the available space.

3. I am a universal solvent? Who am I

Ans: Water

4. _____ is the lightest state of matter.

Ans: Gas

5. Name a liquid which does not dissolve in water

Ans: Oil

July Month

Chapter 5 Separation of Substances

LONG ANSWER TYPE QUESTIONS:

Explain in detail about methods of separation of solid substances.

Hand Picking:

The process used to separate slightly larger particles from a mixture by hand is called handpicking. For example: Stone pieces can be separated from wheat or rice by handpicking.

Threshing:

. Threshing is a process that is used to separate grain from stalks. In this process the stalks are beaten to free the grain seeds. Sometimes threshing is done with the help of bullocks. Machines are also used to thresh large quantities of grain.

Winnowing:

The process is used to separate components from a mixture in which one component is heavier or lighter than other is called winnowing. Winnowing is done with the help of wind or by blowing air.

Sieving:

Sieving allows the fine flour particles to pass through the holes of the sieve while the bigger particles or impurities remain on the sieve. For example, in a flour mill, impurities like husk and stones are removed from wheat before grinding it.

Hots:

1. You are given a mixture of sand, Shells, chaff. How will you separate?

Ans: By sieving, Hand Picking and winnowing.

2. How ducks filter water and Separate food particles.

Ans: With the help of their beaks.

3. Rain cleans the air Explain.

Ans: Rain drops load fine dust particles suspended in the air and bring them to the ground.

4. Name the method that recover the salt that was dissolved in the water?

Ans: Evaporation

Chapter 6 Changes Around Us

1. Explain expansion and contraction with examples.

Ans: Expansion is the increase in the dimensions of the body when subjected to an increase in temperature and pressure, contraction is the opposite of expansion.

Changes can be brought by heating or cooling of certain substances. Metals like Iron, Gold and Silver soften on heating and can be moulded into different shapes and size. Thus, on heating metal expand and on cooling they go back to their original sizes.

This concept is utilized to fix wooden handles into Iron blades to form tools which are used to dig the soil and for various other purposes. The Iron Blade of these tools has a ring, into which the wooden handle is fixed. While fixing the handle, the ring is heated. It becomes slightly larger in size then contraction takes place.

Hots:

1. A substance dissolves faster on stirring and on heating.

2. I occur only under suitable conditions who am I? Chemical changes

3. What is a substance which does not dissolve in water called?

Insoluble substances.

4. How will you Separate two glasses that get fixed tightly into each other?

Ans: By Heating in a hot water.

5. Small gaps are deliberately left between the rail ends. Why?

Ans: Because it will expand in hot weather.

August Month**Chapter 7 Getting to Know Plants****LONG ANSWER TYPE QUESTIONS**

1. What do you mean by leaf venation? Explain various types of leaf venation with example.

Ans: Leaf venation: The design made by veins in a leaf is called leaf venation. There are the following two types of leaf venation:

(i) Reticulate venation: If the design of veins makes a net-like structure on both the sides of midrib then it is called reticulate venation. For example, mango leaf, gram leaf.

(ii) Parallel venation: If the veins are parallel to each other or to midrib then such type of venation is called parallel venation. For example, wheat leaf, barley leaf.

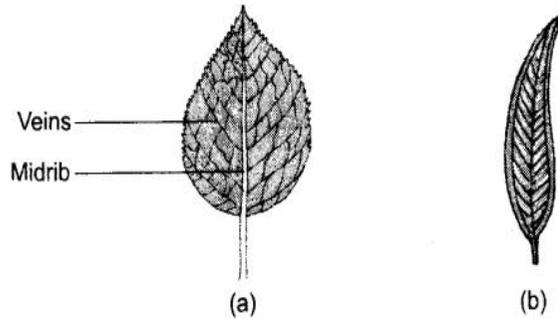


Fig. 7.14 Leaf venation—(a) Reticulate and (b) Parallel

2. Explain the structure of a typical flower with the help of a diagram.

Ans: A typical flower contains the following parts:

(i) Stalk: The part by which a flower is attached to the branch is called stalk.

(ii) Sepals: The small green leaf-like structures of the flower are called sepals,

(iii) Petals: The big coloured leaf-like structures are called petals. Different flowers have petals of different colours.

(iv) Stamen: It is the male part of the flower. It has two parts: (a) Filament and (b) Anther.

(v) Pistil: The innermost part of a flower is called pistil. It has three parts: (a) Stigma, (b) Style and (c) Ovary. It is the female part of the flower.

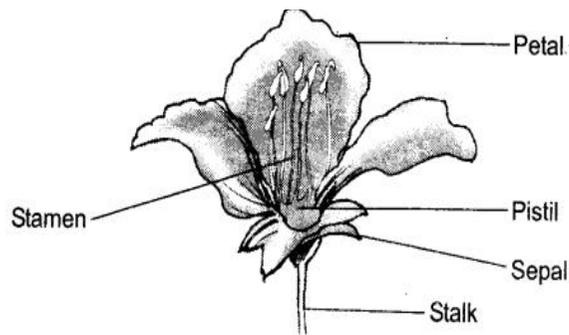


Fig. 7.15 Parts of a flower

Hots:

1. Why the banana tree is an herb?

Ans: It has a soft stem.

2. A small plant has no leaves. It has fibrous roots. What type of venation would it show?

Ans: Parallel venation

3. Name a plant without leaves.

Ans: Dodder

4. Fill in the missing reaction during photosynthesis?

Ans: $\text{CO}_2 + \text{Water} \xrightarrow[\text{Chlorophyll}]{\text{Sunlight}} \text{Glucose} + \text{oxygen.}$

5. Unscramble the following term

- i. EPLEOIT - Petiole
- ii. AOMTATS - Stomata

Chapter 8 Body Movements

LONG ANSWER TYPE QUESTIONS:

1. What are joints? Explain various kinds of joints found in our body and give example of each.

Ans: Joints are the places where two bones joined are together in our body.

There are five types of joints in our body:

(i) Fixed joints: Those joints which do not allow movement are called fixed joint.

Example: Joints between the bones of the skull and joints between the upper Jaw and the rest of the head.

(ii) Ball and socket joint: This joint allows movement in all directions. The rounded end of one bone fits into the hollow space of other bone.

For example, joint in the hip and shoulder

(iii) Pivotal joint: This type of joint allow movement in all planes, i.e. up and down, side and other planes. For example, Joint between the neck and the head.

(iv) Hinge joint: The joint which allows movement only in one plane is called hinge joint. For example, Elbow, Knee has hinge joint.

(v) Gliding joint: These joints allow only a limited amount of movement of sliding nature of cartilage. For example, the joints of backbone, wrist, ankle.

Hots:

1. What would have happened if the back bone had only one long bone instead of many vertebrae?

2. Imagine our body has only muscles without bones. Explain

Ans: We will be like jelly, No shape

3. How the human limbs are modified?

Ans: Humans have four limbs in which two limbs are modified into legs and remaining two are modified into hands.

4. Is the movement of a snail slow or fast as compared to an Earthworm?

Ans: Movement of a snail is slow because it moves with the help of strong muscular foot but Earthworm has hair-like tiny bristles to move.

5. Did you ever notice that under water divers wear fin like flippers on their feet? Why?

Ans: Flippers help them to move easily in water.