

ASSIGNMENT CHAPTER -04
SORTING OF MATERIALS INTO GROUPS
SUBJECT: SCIENCE
CLASS-VI

Q.1. What is grouping?

A. Placing or sorting similar things together is called grouping.

Q.2. Why grouping of materials is necessary?

A. Grouping makes it easier for us to find things when we need them.

Q.3. Where we can use the lustrous property of metal?

A. This property of metal is widely used for making jewellery & other decorative articles

Q.4. Why metals lose their shine after some time?

A. Due to rusting.

Q.5. What are hard materials?

A. Materials which are difficult to compress are called hard materials. e.g. rocks, woods & iron

Q.6. Name the hardest material in the world

A. Diamond.

Q.7. What are soft materials?

A. Materials which are easy to compress are called soft materials e.g. Rubber, cotton, wool.

Q.8. Why shopkeepers generally prefer transparent jars to keep items such as toffee & cookies?

A. Because children can see them easily & can buy it.

Q.9. Why windows are usually made of glass?

A. Windows are usually made of glass so that light can pass through them & light our rooms.

Q.10. What is Flotation?

A. The property of material to float on water is called flotation.

Q.11. Why some material float & some sink?

A. The material which have density less than water will float and which are having density more than will sink.

Q.12. How aquatic organisms survive in water?

A. By taking dissolved oxygen from the water.

Q.13. Name the gas filled in soft drinks

A. Carbon dioxide.

Q.14. Name some gases which are not soluble in water.

A. Nitrogen, Hydrogen & helium.

Q.15. What are conductors of heat? Give examples.

A. Materials that allow heat to flow through them are called conductors of heat. e.g. metals.

Q.16. What are insulators of heat? Give examples.

A. Materials which do not allow heat to flow through them are called insulators of heat. e.g. Non metals such as wood, plastic, air, glass, & paper.

Q.17. Why handles of utensils are made of wood or plastic?

A. Because they are bad conductors of heat & allow us to hold hot utensils.

Q.18. What are conductors of electricity? Give examples.

A. Materials that conduct electricity are called conductors. E.g. metals, water

Q.19 What are insulators of electricity? Give examples.

A. Materials that do not conduct electricity are called insulators of electricity. E.g. Rubber, wood, paper, glass etc.

Q. Why switches, switch boards & bodies of electrical equipments are made of plastic?

A. Because they are insulators & prevent us from getting electric shock.

Assignment chapter 5 Separation of substances

Q.1 What is mixture ?

Ans. A substance that contains two or more different substances mixed together is called mixture.

Q.2. What is the need for separation of substances ?

Ans. Separation is necessary to remove unwanted substances.

Q.3. Define Evaporation and Condensation ?

Ans. The process in which a liquid changes into gas is called evaporation.

The process in which a gas changes into liquid is called condensation.

Q.4. What is Filtration ?

Ans. The process by which insoluble solid is separated from a liquid by passing a mixture through a filtering device is called filtration.

Q.5. Define residue and filtrate ?

Ans.

Q.6. Give some examples of filtration used at home ?

Ans. In the filtration of Tea, To remove pulp from fruit juice.

Q.7. What is sediment ?

Ans. The solid particle that settle down during sedimentation are called sediments.

Q.8. What are supernatant ?

Ans. The liquid above the sediments is called a supernatant.

Q.9. How can you separate mixture of sand and water ?

Ans. A mixture of sand and water can be separated by sedimentation and decantation. The mixture is left undisturbed for sometime. Sand being heavier, settles down and water is poured out into a separate container.

Q.10. What is chaff or husk ?

Ans. Seed covering is called chaff.

Q.11 Where we can use chaff ?

Ans. The chaff is used as fodder for cattle.

Q.12 Where do we use sieving ?

Ans. It is used to separate wheat bran from flour.

It is also used to separate pebbles and stone from sand at construction sites.

Q.13 Name the method by which soluble solids can be separated?

Ans. By evaporation.

Q.14 Name the method by which insoluble solids can be separated?

Ans. By filtration, sedimentation and decantation.

Q.15 What is solubility?

Ans. The ability of a substance to dissolve in water to form a solution is called solubility.

Q.16 What are soluble and insoluble substances?

Ans. Substances such as salt and sugar, dissolve in water are known as soluble substances. Insoluble substances such as chalk and sand do not dissolve in water.

Q.17. How common salt is obtained from sea ?

Ans. To obtain common salt from sea water, the water from the sea is collected in open shallow pit during high tides. Water slowly turns into water vapours by absorbing the heat of the sun. Slowly the whole of water evaporates leaving behind the solid salts, then it is gone for the process of purification.

Q.18. How solubility of solute can be increased?

Ans. 1. By heating the mixture.

2. By stirring.

3. By convert solute into powdered form.

Q.19. Why water is called universal solvent ?

Ans. Water is called universal solvent as, it can dissolve a large number of substances in it.

Q.20. What is sieving ?

Ans. The process of separation of bigger particles from finer particles by passing through a sieve is called sieving.

Assignment questions
Chapter – 6
Changes around Us

Q1) Distinguish between Reversible and Irreversible changes. Give some examples.

Ans **Reversible Change** - A change in which we can get back the original substance

Irreversible change – A change in which we cannot back the original substance

Q2) What are slow and fast Change?

Ans **Slow Change**- The changes that take a long time to occur are called slow change. Ex- Rusting of Iron

Fast Change- The change that takes place in a short time is called Fast change.

Q3) Distinguish between physical and chemical change

Ans **Physical Change**- The changes in which no new substances are formed are called physical change.

Chemical Change – The changes in which new substances are formed are called chemical change.

Q4) What is Expansion.

Ans- The increase in size of a substance on heating is called expansion.

Q5) What is Contraction?

Ans- The decrease in the size of a substance on cooling is called contraction.

Q6) Explain how an iron blade is fixed on to a wooden handle to be used on a tool for digging the soil

Ans Normally the ring is slightly smaller in size than the wooden handle, To fix the handle the ring is heated and it becomes slightly longer in size (expands). Now the handle easily fits in to the ring. When rings cools down it contracts and fits tightly on to the handle.

Q7) How do black smith makes tools?

Ans Black smith makes iron tools by heating them , as iron becomes soft on heating and can be beaten into desirable shapes.

Q8) Identify the following change:-

- (I) Growing of a child – Slow change
- (II) Ripening of food – Chemical Change
- (III) Changing of water to ice – Physical change
- (IV) Melting of chocolate – Physical change
- (V) Formation of curd- Chemical change

Q9) Give one example of physical change that cannot be reversed.

Ans Breaking of Glass

Q10) What kind of change is observed when copper utensils appear to be greenish in colour?

Ans Chemical change

Q11) Why gaps are left between railway tracks?

Ans Railway tracks are laid with gaps in between them, If the railway tracks are fixed without any gap then during summer due to expansion, they will expand and bend which may cause accidents.

Q12) How can you open the lid of tightly jam bottle?

Ans Tightly jammed metal lids of food jars can be opened easily by pouring hot water over the lid ore by dipping only the lid portion of the jar in to hot water. As a result the metal lid expands and opens easily.

Q13) Explain how metal rim is fixed on wooden Cart wheel?

Ans On heating the metal, rim expands and fit on to the wheel. Cold water is then poured over the rim which contracts and fits tightly on the wheel.

Q14) Why do water pipes burst when water running from them freezes?

Ans The cracks observed on the water pipes usually in winter is due to expansion of water.

Q15) What type of change occur during

- (I) The preparation of food material by plants through photosynthesis- Chemical Change

(II) The digestion of food in our body- Chemical change

Q16) Why do changes occur?

Ans Changes occur when things interact with each other

Q17) Give some example of natural changes?

Ans- Change of weather, Change of seed into plant or child into adult are natural changes.

Q18) Give some examples of Manmade changes?

Ans Cooking of food, burning of fuel

Q19) What are the different ways by which we can bring change?

Ans different ways by which we can bring change are :-

- (I) By heating
- (II) By applying force
- (III) By mixing

Q20) Why a crack develops when a hot liquid is poured into a thick glass container?

Ans This is because outer surface and the inner surface of the glass expand unequally on absorbing heat from the hot liquid

Q21) Why sometimes a cycle tyre bursts on its own when the cycle is left in sun for a long time?

Ans the reason for this is the air inside the tube expands by absorbing heat from the sun, this expansion causes the tube to burst.

Q22) Why naphthalene or Camphor changes directly into gaseous form?

Ans Due to its sublimation

Q23) What is sublimation?

Ans the process in which a solid directly changes into vapors without changing into liquid.

Q24) Name the substances which can show sublimation.

Ans Camphor and Naphthalene balls

Assignment

Chapter 7- Getting to know Plants

Q1) Define Herbs, Shrubs and trees.

Ans **Herbs**- Small plants with soft stems.

Shrubs- Plants smaller than trees and have woody stems.

Trees- Tall and strong plants with a thick stem called trees.

Q2) Define Climbers and Creepers.

Ans Climbers: Plants with weak stem that need support to grow and straight.

Creepers: Plants with weak stem that trail on the ground.

Q3) What is Root system and shoot system.

Ans Root System: The part of the plant that remains under the ground forms Root System

Shoot system: The part of the plant that remains above the ground forms shoot system.

Q4) Differentiate between Tap root and fibrous root

Ans **Tap root**: when a thick primary root grows vertically downward and gives off small lateral roots, it is known as tap root; for ex: Neem, mango, pine etc.

Fibrous root: when many roots arise as a tuft from the base of the stem, they are known as Fibrous root. Ex- Grass, wheat, Rice, Maize

Q5) What are modified roots?

Ans Roots of some plants are modified to perform additional functions and are called modified roots. For ex- carrot, radish, bamboo, banyan tree.

Q6) What are storage roots and prop roots?

Ans Storage Root: Modified roots which store food, ex: carrot, turnip etc.

Prop root: Modified roots which give support to the stem of plant called prop root. Ex- sugarcane, bamboo

Q7) What are parasitic roots?

Ans Modified roots which help them to absorb water and nutrients from the host. Ex- dodder.

Q8) Name the tallest herb.

Ans Banana plant

Q9) Define nodes and internodes.

Ans Node: Nodes from which leaves or new buds arise.

Internodes: The space between the two nodes is called internodes.

Q10) can you tell what kind of root a plant has without digging it up?

Ans It is possible to tell this by looking at the venation.

Q11) How venation of leaves help us in recognizing the roots?

Ans plants whose leaves have parallel venation have fibrous roots whereas those which reticulate venation have tap roots.

Q12) Define parallel venation and Reticulate venation.

Ans Parallel venation: If the veins run parallel to one another from the base to the tip of the leaf is called Parallel venation.

Ex- banana, onions.

Reticulate venation: If the veins are arranged in a net like pattern on both the sides of the leaf is called reticulate venation.

Ex- peepal, mango.

Q13) Why are leaves modified in to spine in the cactus plants?

Ans (i) To reduce water loss by transpiration

(II) to protect plant from grazing

Q14) what is reproductive part of plant?

Ans Flower is the reproductive part of plant.

Q15) what are male and female reproductive part of flower?

Ans male reproductive part- Stamen

female reproductive part- Carpel

Q16) What are tendrils?

Ans some stems and leaves modified to provide additional support called tendrils. (green spring like structure on stem or leaf) Ex- Grape wine and pea plant

Q17) Define photosynthesis with reaction

Ans The process of making food by the plants using carbon dioxide, water, chlorophyll and light is called photosynthesis

Carbon dioxide + water -----Sunlight + Chlorophyll----- > Food + oxygen

Q18) what are stomata? Write its two function.

Ans Leaves of most plants have tiny opening called stomata.

Functions: (I) Exchange of gases takes place through stomata

(II) Leaves also lose water through stomata

Q19) Name the plant whose green colour is masked by other pigment.

Ans In plants like coleus, the green colour is masked by other pigment.

Q20) why it is important to protect and conserve our green areas?

Ans because beside providing us with food and several useful products, plants help to maintain the balances of gases in nature.

Q21) A potato grows under the ground then why is it considered a stem and not a root?

Ans because it has buds, nodes from which leaves arise

Q22) Why are most flowers brightly colored with sweet smell.

Ans in order to attract insects

Q23) Why do most leaves have a flat and broad surface?

Ans leaves have a flat and broad surface so that the maximum area of the leaf is exposed to sun light.

Q24) Describe the structure of bean seed with the help of the diagram.

Ans Bean seed have the following parts:-

(I) Seed coat:- To protect the embryo

(II) Hole:- Allow water to enter the seed

(III) Embryo: Contain young root and shoot which develop into baby plant

(IV) Cotyledons: contain food for the baby plants

Q25) what kind of root modification does a dodder baby plant have.

Ans parasitic roots