

23/4/19

C.W

Chapter 4

Sorting Materials into Groups

Notes:-

1) OBJECT:-

Anything all around present that we can see or touch are called object. ~~Object are~~ ^{are} Materials ~~are~~ three types - Transparent object, Opaque object and Translucent object. Materials

a) Transparent object ^{Material}

Object that allow light to pass through them are called transparent object. like - glass. ^{Materials}

b) Opaque object ^{Material}

Object that do not allow light to pass through them are called opaque object. like - cardboard. ^{material}

c) Translucent object ^{Material}

Object that are partially transparent and partially opaque are called translucent object. like - They allow light to pass through them in a scattered form or ~~diffused~~ manner like - frosted glass.



2) PROPERTIES OF MATERIAL-

Material have certain properties which decide for which product they can be used often one object can be made with different materials. Example- chair should be made of wood

a) Appearance-

Materials have shine on them called lustre. Example- gold, silver, copper etc. shines on exposing light.

Materials like glass, wood, stone etc does not shine on exposing light. such materials are called non-lustres mater or dull.

b) Texture-

Some materials are called rough have bump and ridges on their surface that can be felt. Example- wood, rocks, bark of tree etc.

Some materials are smooth have no bumps and ridge and have a plain surface, so they feel smooth. Example- foam, sponge, flower petals etc.



c) Hardness -

Materials that can be compressed are called soft materials. Example - Foam, sponge.

Materials that cannot be compressed easily are called hard materials. Example - iron, copper, aluminium, etc.

d) Soluble or Insoluble -

Any of substance who check which substances are soluble or not insoluble. Add sand in water with the help of spoon and shake now observe it is insoluble in water. Similarly, add sugar in water with the help of spoon and shake it now observe it is soluble in water.



Chapter-4Sorting materials into groupsShort answer questions:-

Que-1 (a) What is material?

Ans- A substance or a thing that is used in making different objects is called a material.

(b) What are the different types of materials? Give one example of each.

Ans- The two different types of materials are- natural and human-made. Natural- wood, Human-made- plastic.

Que-2- Classify the following into lustrous and non-lustrous materials- gold chain, plastic bottle, cotton shirt and aluminium rod.

Ans- lustrous

non-lustrous

gold chain

Plastic bottle

Aluminium rod.

cotton shirt

Que-3- We put some sugar in a glass of water and stir. It disappears.

Ans- Sugar is soluble in water because its particles have become so small and have spread uniformly in water.

(b) What do we learn from this property of sugar which gets mixed in water?

Ans- We should change and adjust ourselves according to needs of surroundings, so that we can easily mix up with people.

Que-4- Give two differences between solid, liquid and gas.

Ans- Solid- It has definite shape, fixed volume and particles are closely packed.

Liquid- It has no definite shape, fixed volume and particles are less closely packed in comparison of solid.

Gas- It has no definite shape, not fixed volume and particles are very loosely packed.

Ques- Classify the following into hard and soft materials: diamond, wax, brick, tomato.

Ans- Hard materials

Soft materials

Diamond

Wax

Brick

Tomato



Long answer question:-

Que-1- What are the advantages of classification of objects.

Ans- The advantages of classification of objects:

- 1) It helps in systematic study of objects.
- 2) It helps in classifying and locating things.
- 3) It helps to study the properties of objects of one category and also observe any pattern in these properties.
- 4) It helps us to know how the members of a group differ from those of other groups.

Que-2-(a) Differentiate between transparent and translucent objects with examples.

Ans- In notes.

(b) What is meant by opaqueness? Give two examples of opaque substances.

Ans- In notes.

Que-3-(a) What are miscible and immiscible substances?



Ans- miscible- when a liquid is completely mixed in another liquid, it is said to be miscible.

Immiscible- when a liquid does not mix completely in another liquid, it is said to be immiscible.

(b) you are given a few object. Find out, if they will float or sink: foam, sponge, logs of wood, a toy, candle, oil, dried tea leaves, cotton ball soaked in water

Ans- Float

Sink

Foam

Sponge

oil

Dried tea leaves

Logs of wood

A Toy

candle

cotton ball soaked in water

AD
25/04/19

