LIVING SCIENCE CLASS6 SOLUTION CHAPTER 4. SORTING MATERIALS INTO GROUPS

P. 36 Oral Questions For Formative Assessment

1. occupying space and having mass

2. air, water; feelings of love, TV signals

3. a. atom   b. molecule

4. similar properties

5. yes

P. 40 Oral Questions For Formative Assessment

1. sugar, milk, oxygen

2. float

3. transparent

4. as their arrangement of molecules are different from one another

P. 41 For Formative and Summative Assessment

A. 1. a   2. C   3. d   4. b   5. c   6. d   7. b   8. c

B. 1. wood   2. volume   3. atom   4. molecule   5. feelings   6. classification   7. false

8. shine   9. gases   10. no   11. oxygen   12. density, density   13. translucent

C. 1. Five materials are

(i) steel - utensils   (ii) plastic - bottles   (iii) wood - furniture   (iv) cotton – clothes   (v) leather - shoes

2. Anything that occupies space and has mass is called matter. For example, water, air and so on. The two

things which are not matter are feelings of love or sadness.

3. All matter occupies space and has mass.

4. The smallest particle of an element is an atom whereas the smallest particle of a compound is a

molecule

5. The feeling of a surface or substance, i.e the smoothness, roughness, softness and so on is known as

texture.

6. Because some metals lose their lustre when exposed to air and moisture

7. Paper can be made translucent with a coating of oil.

8. Atoms join together to make molecules. Millions of different kinds of molecules can be made from these 117 different kinds of atoms. That is why we see millions of compounds all around us.

D. 1. Grouping together things with similar properties is called classification. It is useful because it makes studying the properties of things much easier.

2. Although living things share some common properties, they differ from each other in several ways. Living things are further classified into subgroups such as plants and animals. Each of these can be further classified based on certain properties. Animals can be classified into groups like insects, fish, amphibians, reptiles, birds and mammals. For example, all insects have six legs. But each group differs from other groups in some ways.

3. The three states of matter are

(i) solids - definite shape and volume

(ii) liquids - definite volume, but no definite shape

(iii) gases - no definite shape or volume

4. Water causes all molecules in a solid piece of sugar to break apart. The individual molecules, when separated, are so small that we cannot see them. In this way sugar dissolves in water.

5. The mass per unit volume of a substance is known as density. A substance which is less dense than water will float on water. Substance which is denser than water will sink in water.

6. Liquids which mix with each other are called miscible liquids, for example, milk and water. Liquids that do not mix with each other are called immiscible liquids, for example, oil and water.

7. Almost all light can pass through transparent objects, for example, air and clear water. Whereas light cannot pass through opaque objects, for example, book and a stone.

Crossword: 1. MOLECULE   2. OXYGEN   3. ELEMENT   4. GAS   5. ATOM

6. GOLD   7. SOLID   8. DALTON   9. CLASSIFICATION

HOTS Questions

1. Thermocol, paper   2. No. That is why chalk does not dissolve in water.

3. Water, because ice floats over its surface.

4. The force between the molecules will be the same as long as the distance between them is the same.