

Subject:-science.

Class. - V

Chapter - 4

Matter and its forms

Q1 Answer these questions :

1. What do you understand by matter ? Write its different forms.

Ans. Anything that occupies space and has weight is called matter. The different forms of matter are given below:

1. Solid
2. Liquid
3. gas

2. What is an element ? Give any four examples of the most abundant elements in the earth's crust.

Ans Matter that is made up of only one kind of atoms is called an element. Copper , silver , gold helium are some examples of the most abundant elements in the earth's crust.

3. What is Compound ? Name a compound which is sweet.

Ans A compound is formed when two or more elements combine in fixed ratio. Sugar is a sweet compound

4. What is a physical change ? Write the characteristics of physical change.

Ans we can change ice (a solid) into water (a liquid) by heating .And by further heating we can change water into water vapour. Water vapour (gas) can be changed into liquid by cooling . Liquid matter can be changed back into ice (solid) by freezing. Such changes are called physical changes.

The characteristics of physical change are given below :

- 1 . Temporary and reversible change.
2. Change where no new substance is formed.
- 3.change where the properties and composition of the substance remain the same.. What is chemical change? Write the characteristics of chemical change.

Ans When paper is burnt , we get ash. Can we get the paper back from the ash ? This is not possible. Such a change is called a chemical change . The characteristics of chemical change are given below :

1. It is a permanent and irreversible change.
2. It is a change where a new substance is formed

B. Fill in the blanks

1. Molecules cannot be seen with the naked eye.
2. Each element is represented by a unique symbol.
3. On heating iron and sulphur make iron sulphide.
4. Burning of incense stick is an example of chemical change

C. Define the following

1. Matter - There are many things in the world. All the things , whatever they may be , are made of matter.

There are two very important things to remember about matter :

(a) Matter has weight

(b) Matter takes up space

2. Element - a substance that consist of atoms of only one kind.
3. Compound - a substance that contains atoms of only one kind.

D. Write whether each of the following is a chemical change or a physical change .

1. Boiling of water - physical change
2. Melting of ice cream - physical change
3. Lighting of matchstick - chemical change
4. Burning of gas in stove - chemical change
5. Rusting of a nail - chemical change
6. Tearing of clothes - physical change

E . Match the following

1. Copper - Element
2. Water - Compound

- 3. Soil - Mixture
- 4. Glass - Transparent
- 5. Wood - Opaque
- 6 chemical change - permanent

F. Differentiate between :

1. Elements and compound

Element - Matter that is made up of only kind of atoms is called an element. Copper , silver , gold , mercury are made up of one kind of atoms. So they all are elements .

Compound - A compound is formed when two or more elements combine in a fixed ratio. Water , carbon dioxide , sugar and common salt are all examples of compounds.

2. Mixture and compound

Mixture - when two or more substance are put together and they do not combine , then a mixture is formed . Mixtures are found everywhere . Air , sea , water , soil etc are mixtures.

Compound - a substance that contains atoms of two or more elements.

4. Chemical changes and physical changes

Chemical change - When a paper is burnt , we get ash. Can we get the paper back from the ash ? This is not possible such a change is called a chemical change. Chemical change is permanent and irreversible

Physical change - We can change ice into water by heating. And by further heating we can change water into water vapour. Water vapour can be changed into liquid by cooling . Liquid matter can be changed back into ice by freezing.

Such changes are called physical change.

G. Tick the correct answer :

1. The molecules in solids are

Ans very close

2. Copper is

Ans : element

3. Freezing water into ice is an example of

Ans physical change

4. Burning of sugar is an example

Ans chemical change