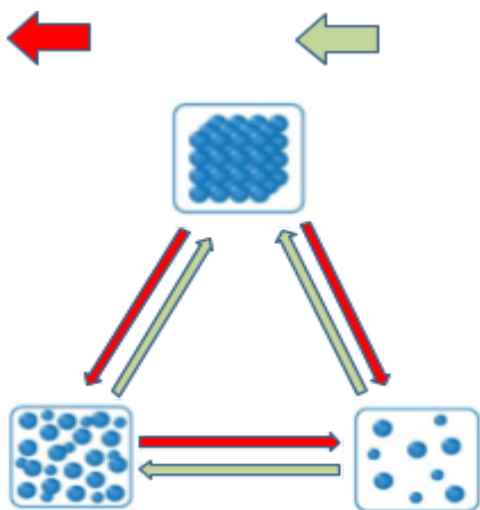


Chemistry

Matter and its composition

Synopsis

1. Any substance that has mass, occupies space and can be perceived by our senses can be termed as matter.
2. There are three states of matter - solid, liquid and gas. Liquid and gas are also called fluids. Water is an example of a substance that exists in all the three states.
3. Matter is made up of molecules.
4. Solids have definite shape, size, mass and volume, maximum intermolecular force of attraction, maximum density, least intermolecular space, molecules have least kinetic energy.
5. Liquids have definite mass and volume, no definite shape, less intermolecular force of attraction, less density, more intermolecular space, molecules have more kinetic energy.
6. Gas has no definite shape or volume, has only definite mass, least intermolecular force of attraction, least density, largest intermolecular space, molecules have maximum kinetic energy.
7. Inter-conversion of matter



Examples of sublimable compounds are : naphthalene, camphor

Matter and its composition-Assignment

1. Differentiate the three states of matter on the following basis:

	Property	Solid	Liquid	Gas
1	Kinetic energy			
2	Intermolecular space			
3	Intermolecular force of attraction			
4	Compressibility			

2. Fill in the blanks:

- i) Solids change to liquids on _____
- ii) Process of change from liquid to gaseous state is called _____ .
- iii) _____ have the highest kinetic energy.
- iv) Liquids and gases are also called _____ .
- v) Matter is made up of small particles called _____.
- vi) A natural substance existing in three states of matter is _____.

3. Why do naphthalene balls kept in cupboards disappear after some time ?

4. Identify the states of matter

- a) Have maximum density
- b) Fixed shape
- c) Expands least on heating
- d) No definite shape or volume

5. Draw the arrangement of molecules in solids, liquid and gases.

