HW
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# Ch-1
# Matter

classmate
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(1.)

Gases can be liquefied by the process of condensation. If we boil water it turns into gas if we condense that gas we will find small water droplets. Ex - Any hot food item when covered by any lid when we take out that lid, there are tiny droplets thus we can say that gas can be liquefied through condensation.

$$\text{Gas} \xrightarrow[\text{Condensed}]{\text{reduced heat}} \text{Liquid}$$

(2.)

When a solid changes directly into gas without going through the liquid state is called as sublimation.
Ex- Camphor, Dry Ice etc.

(3.) a.)

Liquids and ~~solids~~ gases have intermolecular space but solid does not.

b.) When we blow air into a bottle through side opening it creates a high pressure inside the bottle and thus the egg comes out.

c.)

The particles of air move in constant random motion most intermolecular space is present so it moves more rapidly than solid or liquid.

d.)

Air has large gaps so we can walk through it very easily.

e.)

They have definite amount of volume but not shape. If we take same amount of water and pour it in different containers. Will its shape be same? No, So according to the shape and size of container waters shape changes.

f.)

The teaspoon of sugar will never add any changes into it. Sugar molecules will mix with water and water will become ~~sw~~ sweet. Thus, proves that water has intermolecular space in it.

g.) The gas spreads in other jar because, gas will fill ~~till~~ all the space avaible because of its gaps. It doesn't have free surfaces nor volume nor shape.

h.) Ink and water can be mixed together because they both are miscible liquids (liquid which can mix with each other). Thus when we add a drop of red ink it mixes with water turning it red in some time.