

## Matter in our Surrounding

### Particle Nature of matter

1. Anything that occupies space and has mass and is felt by senses is called matter.
2. matter is the form of five basic elements the Panch tatva - air, earth, fire, sky and water.

### Characteristics of Particles of matter

- made of tiny particles.
- vacant spaces exist in particles.
- Particles are in continuous motion.
- Particles are held together by forces of attraction.

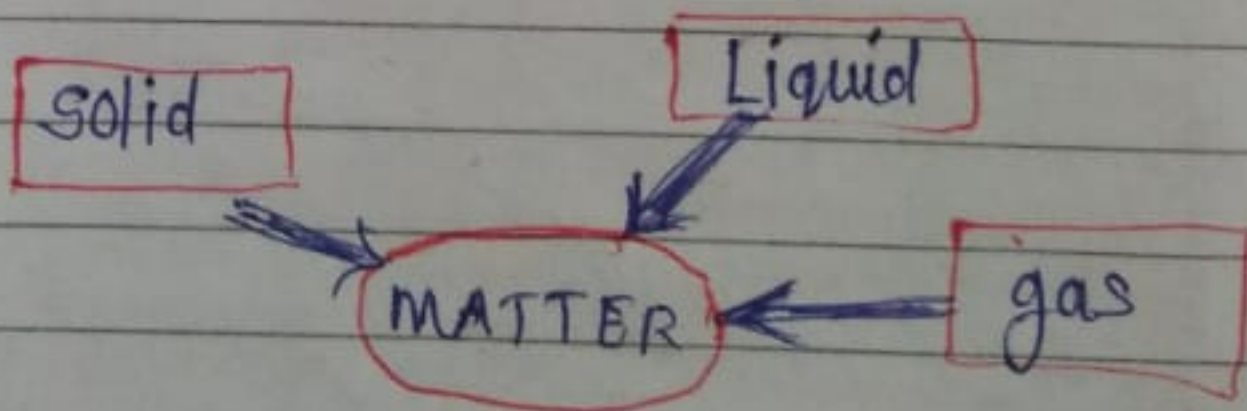
Q1. Define matter.

Q2. What happens if you put copper sulphate crystals in water?

### States of matter

#### Basis of classification of types

- Based upon particle arrangement
- Based upon energy of particles
- Based upon distance between particles



SOLID	LIGUID	GAS
<ul style="list-style-type: none"> <li>Fixed shape and definite volume</li> </ul>	<ul style="list-style-type: none"> <li>Not fixed shape but fixed volume</li> </ul>	<ul style="list-style-type: none"> <li>Neither fixed shape nor fixed volume</li> </ul>
<ul style="list-style-type: none"> <li>Inter Particle distances are smallest</li> </ul>	<ul style="list-style-type: none"> <li>Inter particle distances are larger</li> </ul>	<ul style="list-style-type: none"> <li>Inter particle distances are largest</li> </ul>
<ul style="list-style-type: none"> <li>Incompressible</li> </ul>	<ul style="list-style-type: none"> <li>Almost incompressible</li> </ul>	<ul style="list-style-type: none"> <li>Highly incompressible</li> </ul>
<ul style="list-style-type: none"> <li>High density and do not diffuse</li> </ul>	<ul style="list-style-type: none"> <li>Density is lower than solids and diffuse</li> </ul>	<ul style="list-style-type: none"> <li>Density is least and diffuse</li> </ul>
<ul style="list-style-type: none"> <li>Inter particle forces of attraction are strongest</li> </ul>	<ul style="list-style-type: none"> <li>Inter particle forces of attraction are weaker than solids</li> </ul>	<ul style="list-style-type: none"> <li>Inter particle forces of attraction are weakest</li> </ul>
<ul style="list-style-type: none"> <li>Constituent particles are very closely packed.</li> </ul>	<ul style="list-style-type: none"> <li>Constituent particles are less closely packed.</li> </ul>	<ul style="list-style-type: none"> <li>Constituent particles are free to move about.</li> </ul>

Q1. Difference between solid, liquid, gas,