AMBRISH SHARMA COLLEGE OF EDU. & TECH. MEERUT

Hapur Road, near G.D. Cold Storage, Ghosipur,

Meerut (6397911461)

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Course & Year- B.Ed (Second Year)

Subject: Education

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Submitted To:

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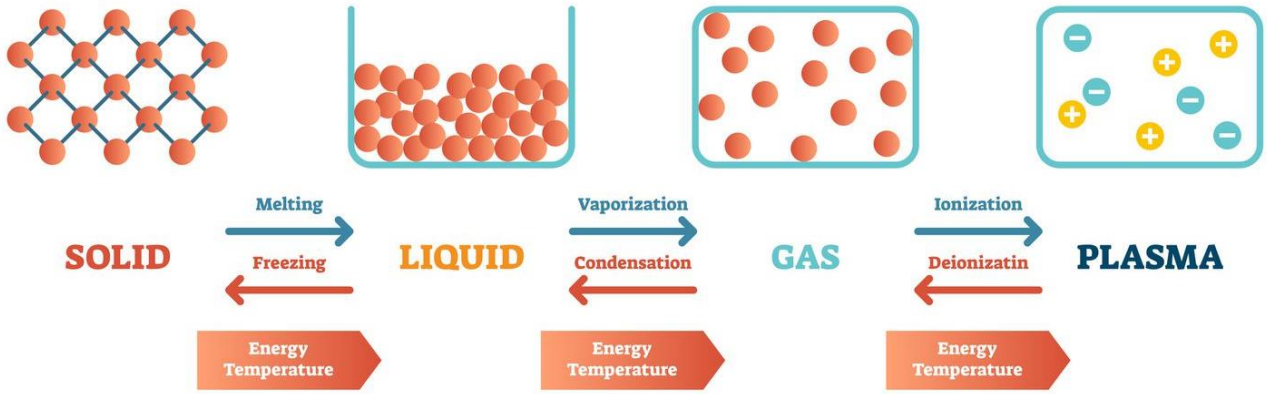
What is Matter

Matter is anything that has mass and volume (takes up space).Everything around us is made of matter, from the air we breathe to the water we drink—even our own bodies. Planet Earth is made of matter, and so are all the stars, planets, and moons in the universe. All matter is made up of tiny particles called atoms. Matter takes on different forms depending on how the atoms are arranged. We call these forms “states of matter”. On Earth, the most common states are solids, liquids, and gases.

STATES OF MATTER

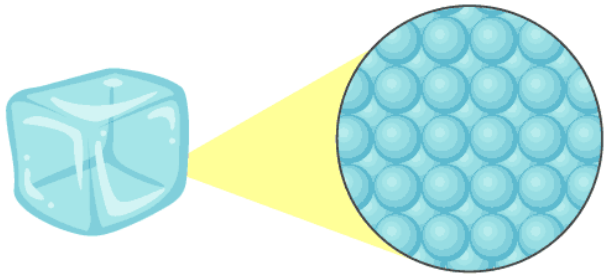
There are Four States of Matter

- Solid
- Liquid
- Gas
- Plasma



Solid

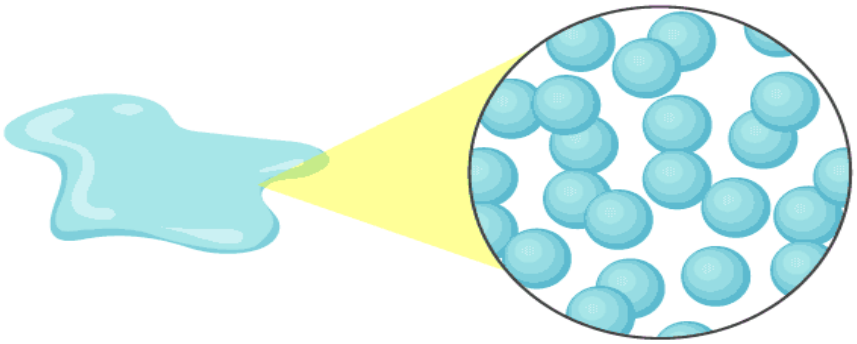
- In solids, particles are tightly or closely packed.
- The gaps between the particles are tiny and hence it is tough to compress them.
- Solid has a fixed shape and volume.
- Due to its rigid nature, particles in solid can only vibrate about their mean position and cannot move.
- Force of attraction between particles is adamant.
- The rate of diffusion in solids is very low.
- An example of solids: solid ice, sugar, rock, wood, etc.



Structure of solids

Liquid

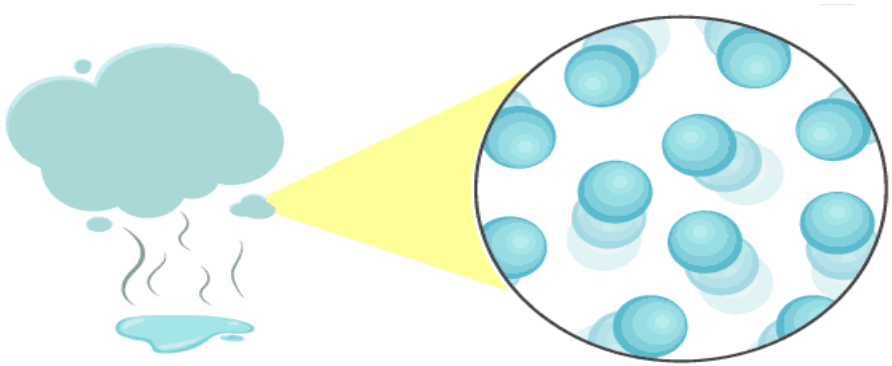
- In a liquid state of matter, particles are less tightly packed as compared to solids.
- Liquids take the shape of the container in which they are kept.
- Liquids are difficult to compress as particles have less space between them to move.
- Liquids have fixed volume but no fixed shape.
- The rate of diffusion in liquids is higher than that of solids.
- Force of attraction between the particles is weaker than solids.
- Example of a liquid state of matter: water, milk, blood, coffee, etc.



Structure of Liquids

Gas

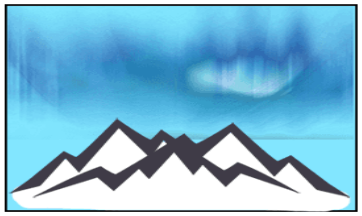
- In gases, particles are far apart from each other.
- Force of attraction between the particles is negligible, and they can move freely.
- Gases have neither a fixed volume nor a fixed shape.
- The gaseous state has the highest compressibility as compared to solids and liquids.
- The rate is diffusion is higher than solids and liquids.
- The kinetic energy of particles is higher than in solids and liquids.
- An example of gases: air, helium, nitrogen, oxygen, carbon dioxide, etc.

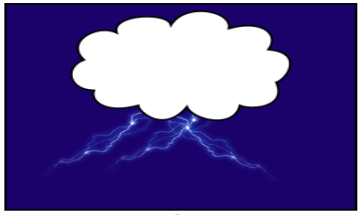


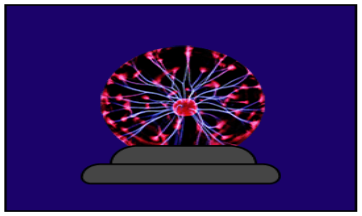
Structure of gas

Plasma

- Plasma is a not so generally seen form of matter. Plasma consists of particles with extremely high kinetic energy. Electricity is used to ionize noble gases and make glowing signs, which is essentially plasma.
- Superheated forms of plasma are what stars are.

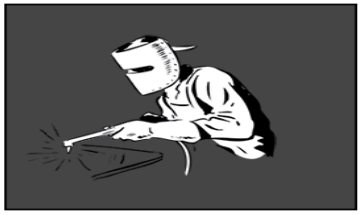

Auroraa


Lightning


Plasma Ball


Nuclear Fireball

Neon Sign


Welding

Thank You