

States of Matter



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Gases do not have **definite shapes or volumes**.

- **Solids** have **definite shape and volume**.
- **Cannot be compressed**, except porous solids.
- **Particles** do not flow.
- **Diffuse slowly**.
- **High force of attraction** between particles.
- **Very less inter-molecular space**.
- **Liquids** take the **shape of the container** and have **definite volume**.
- **Cannot be compressed**
- **Particles flow**
- **Diffuse fast**
- **Less force of attraction** between particles.
- **More inter-molecular space**.
- **Gases** have **no definite shape and volume**.
- **Can be compressed easily**.
- **Particles flow easily**.
- **Diffuse very fast**.
- **Very less force of attraction** between particles.
- **Large inter-molecular forces**.

Matter is any substance that has **mass** and **occupies space**

Matter is made up of **small particles**.

Properties of Particles

- Always in a state of **random motion**

Possess kinetic energy