

The Particle Model of Matter

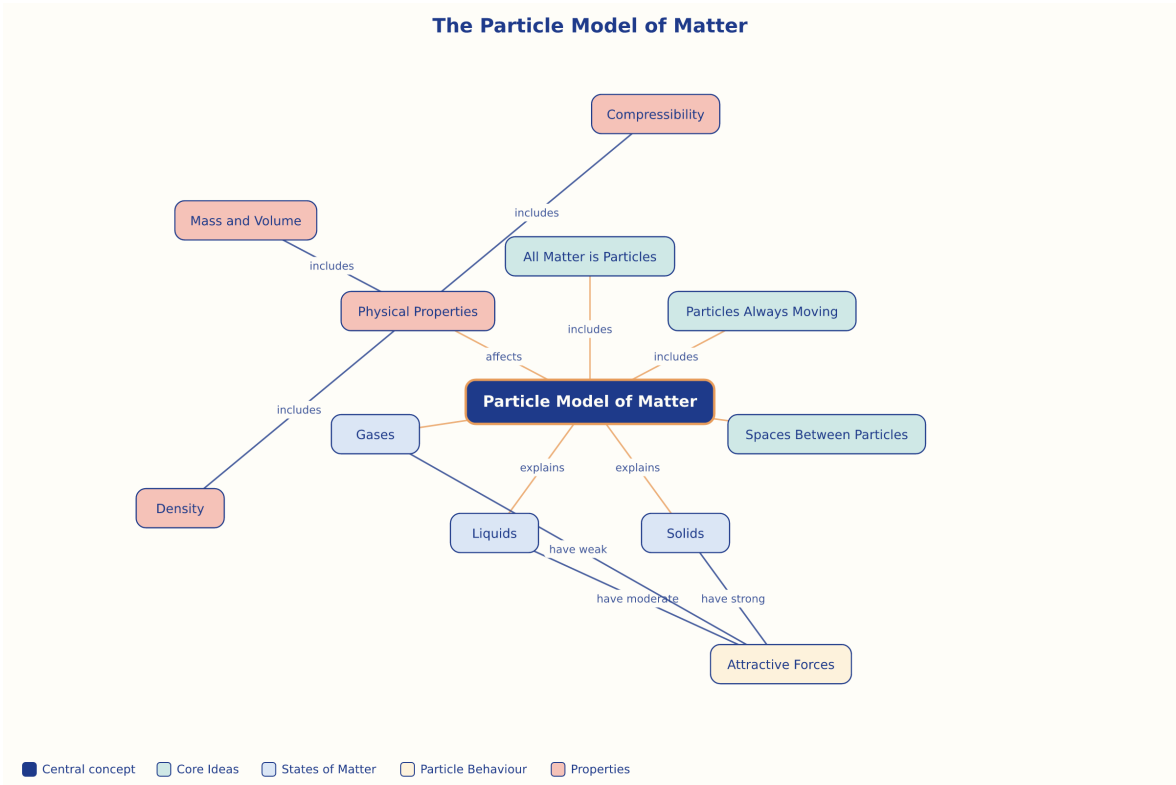
Central concept: **Particle Model of Matter**

Connections

- Particle Model of Matter (includes) -> All Matter is Particles
- Particle Model of Matter (includes) -> Particles Always Moving
- Particle Model of Matter (includes) -> Spaces Between Particles
- Particle Model of Matter (explains) -> Solids
- Particle Model of Matter (explains) -> Liquids
- Particle Model of Matter (explains) -> Gases
- Particle Model of Matter (affects) -> Physical Properties
- Solids (have strong) -> Attractive Forces
- Liquids (have moderate) -> Attractive Forces
- Gases (have weak) -> Attractive Forces
- Physical Properties (includes) -> Density
- Physical Properties (includes) -> Mass and Volume
- Physical Properties (includes) -> Compressibility

Notes

- **Particle Model of Matter:** Framework explaining behaviour of particles and states of matter [PDF p.1](#), [Understanding](#)
- **All Matter is Particles:** Fundamental idea that everything is made of small particles [Knowledge](#), [PDF p.1](#)
- **Particles Always Moving:** Particles in all matter are in constant motion [Knowledge](#), [PDF p.1](#)
- **Spaces Between Particles:** Matter contains gaps between its particles [Knowledge](#), [PDF p.1](#)
- **Solids:** Particles close together, vibrating in place with strong attractive forces [Knowledge](#)
- **Liquids:** Particles separated by spaces, sliding past each other with moderate forces [Knowledge](#)
- **Gases:** Particles separated by large spaces, moving in all directions with weak forces [Knowledge](#)
- **Attractive Forces:** Forces between particles strongest in solids, weakest in gases [Knowledge](#)
- **Physical Properties:** State, mass, volume, density, and compressibility of matter [Knowledge](#)
- **Density:** Comparison of mass to volume; denser objects sink, less dense float [Knowledge](#)
- **Mass and Volume:** Mass measured in grams or kilograms; volume in millilitres or litres [Knowledge](#)
- **Compressibility:** Ability of liquids and gases to reduce in volume under pressure [Knowledge](#)



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