

Nova's Guide to the States of Matter

Get ready to explore the hidden particles of our world with Nova the Owl!

- Solids have particles that are packed tightly together, giving them a fixed shape and volume that does not change easily.
- Liquids have particles that are close together but can flow and slide over each other, allowing the liquid to take the shape of its container.
- Gases have particles that are spread far apart and move quickly in all directions, meaning they will fill any available space completely.
- When a solid is heated, it may reach its melting point and transform into a liquid, such as ice turning into water.
- Cooling a liquid removes energy from its particles, causing them to slow down and bond together to form a solid in a process called freezing.

Did you know? Did you know that water is a shape-shifter? It is one of the few substances on Earth that we can easily find in all three states of matter—solid ice, liquid water, and gaseous water vapour—just by changing its temperature!

Key vocabulary: Solid · Liquid · Gas · Particle · Melting · Freezing · Evaporation · Condensation