

Nova's States of Matter Flashcards

Learning objective: To identify, describe, and compare the properties of solids, liquids, and gases, and understand how they change state.

Read the front of the card to test your knowledge. Flip the card mentally (or imagine Nova the Owl is asking you!) to check if your answer matches the definition provided.

What are the three main states of matter?

Solid, liquid, and gas.

Describe the arrangement of particles in a solid.

They are packed tightly together in a fixed shape and can only vibrate.

True or False: Liquids have a fixed shape.

False. Liquids take the shape of the container they are in.

What happens to particles in a gas?

They are far apart and move quickly in all directions.

What is the process called when a solid turns into a liquid?

Melting.

What is the name for the process where a liquid turns into a gas?

Evaporation.

What happens to a liquid when it reaches its freezing point?

It turns into a solid.

What is condensation?

When a gas cools down and turns back into a liquid.

Give an example of a reversible change.

Melting ice into water and freezing it back into ice.

Which state of matter has the most energy in its particles?

Gas.

Can you compress a solid?

No, because the particles are already packed as tightly as possible.

If you leave a puddle in the sun, where does the water go?

It evaporates into water vapour (a gas) because of the heat.