

Nova's States of Matter Science Flashcards

Learning objective: To identify, describe, and compare the properties of solids, liquids, and gases, and understand the processes of changing state.

Use these flashcards to test your knowledge of how particles behave in different states of matter. Read the front side, try to explain the answer, then check the back to see if you were correct!

What are the three main states of matter?

Solid, liquid, and gas.

How do particles in a solid behave?

They are packed closely together in a fixed, regular pattern and only vibrate on the spot.

Describe the shape and volume of a liquid.

A liquid has a fixed volume but takes the shape of the container it is in.

True or False: Gases can be compressed into a smaller space.

True, because there are large gaps between the particles in a gas.

Nova is watching a puddle disappear on a sunny day. What is this process called?

Evaporation.

What happens to the particles in a substance when it is heated?

They gain energy and move faster.

What is the process of a gas turning back into a liquid called?

Condensation.

What is the term for a solid turning into a liquid?

Melting.

Does a gas have a fixed shape?

No, a gas expands to fill all available space in its container.

At what temperature does water typically turn from a liquid into a solid (ice)?

0°C (Freezing point).

Are the particles in a liquid free to move past one another?

Yes, they are close together but can flow and slide over each other.

What state of matter is steam?

A gas (water vapour).