



States of Matter

What is Matter?

Matter is anything we can see or touch.
It is all around us every day.
Matter can be big or small.
Everything takes space and has weight.

Examples of Matter:

- A book you read
- Water you drink
- Air you breathe
- Your desk and chair





Three States of Matter

All matter exists in three different forms called **states**. These three states are solid, liquid, and gas. Each state has special properties that make it different from the others!



Solid

Hard and keeps its shape



Liquid

Flows and changes shape



Gas

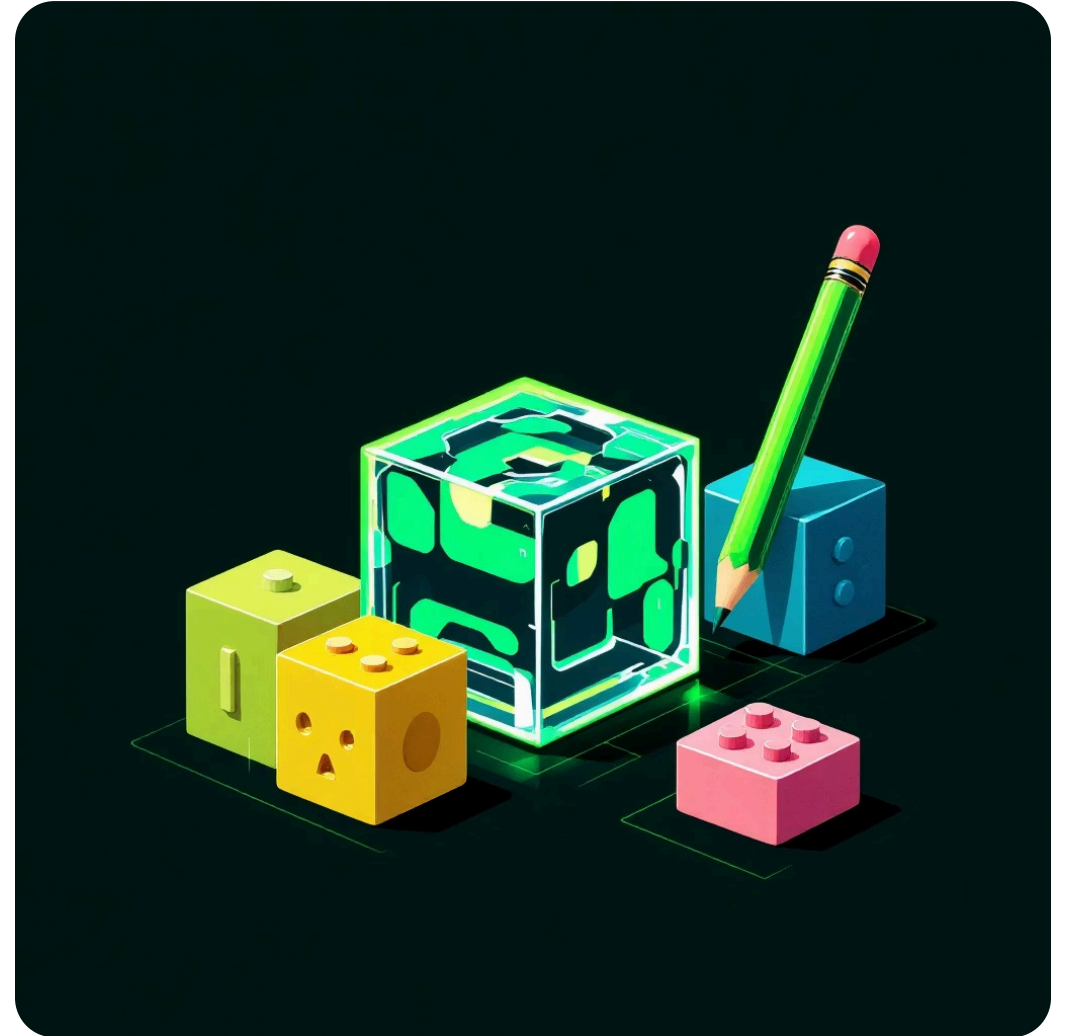
Spreads out everywhere

Solid

A solid is hard and has a fixed shape.
It keeps the same shape wherever you put it.
You can hold a solid in your hand.

Examples of Solids:

- Ice cubes in your drink
- A wooden table
- Your pencil
- A rock or stone
- Your shoes



Liquid



A liquid can flow.

It is not hard.

It changes its shape to fit the cup or bowl.

You can pour a liquid.

Examples of Liquids:

- Water you drink
- Milk in your cereal
- Orange juice
- Honey from a jar
- Paint for art class

Gas

A gas **moves everywhere** and spreads out to fill all the space it can. We usually cannot see gases, but they are all around us! Gases don't have a shape of their own, and they don't stay in one place unless they're trapped in a container.



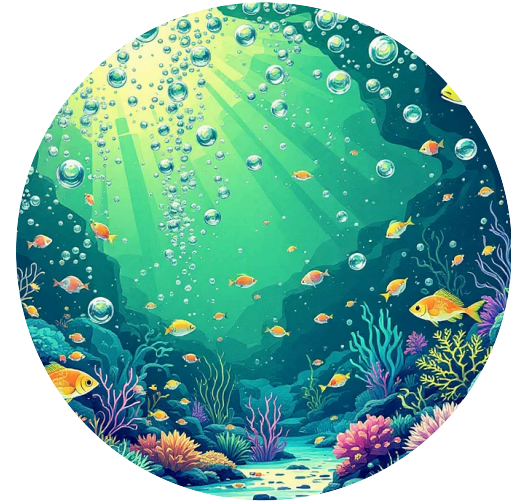
Air

The air we breathe is a gas. It's all around us even though we can't see it!



Helium

The gas inside balloons that makes them float up in the air.



Oxygen

A special gas in the air that we need to breathe and stay alive.

Water Can Change!

Here's something amazing: the same matter can change from one state to another! Water is the perfect example because we can see it in all three states in our everyday lives.



Ice is a Solid

When water gets very cold, it freezes and becomes hard ice. Ice keeps its shape and you can hold it in your hand.



Water is a Liquid

At normal temperature, water flows and pours. It takes the shape of any cup or container you put it in.



Steam is a Gas

When water gets very hot, it turns into steam. Steam rises up into the air and spreads out everywhere.



Let's Remember!

Now you know all about the three states of matter! Remember, everything around you is made of matter, and matter comes in three different states.

1

Solid

Keeps its shape and is hard.
Examples: ice, table, pencil, rocks.

2

Liquid

Flows and changes shape.
Examples: water, milk, juice, honey.

3

Gas

Spreads out everywhere. Examples: air, oxygen, steam.

The next time you see ice melting in your drink or steam rising from hot soup, you'll know you're watching matter change from one state to another. How cool is that?

