

States of Matter

Week 6 — Monday | Solids, Liquids, and Gases

Reading Time

Everything around you is made of **matter**. Matter is anything that takes up space and has weight. Your shoe, the air you breathe, and the water you drink are all matter!

Matter comes in three forms called **states**: solids, liquids, and gases. A **solid** keeps its shape. A wooden block is a solid — it stays the same shape whether you hold it or put it on a table.

A **liquid** flows and takes the shape of its container. Pour water into a cup and it fills the cup. Liquids always settle at the bottom of their container.

A **gas** spreads out to fill all the space available. Air is a gas — you cannot see it, but it takes up space. Blow up a balloon and you can feel the air pushing against the rubber inside!

Reading Questions

1. What is matter?

2. How does a solid differ from a liquid?

3. Give an example of a gas from the reading.

4. Why can't you see most gases? Explain in your own words.

Vocabulary Grid

Write a definition or draw a picture for each word.

Matter

Solid

Liquid

Gas

Shape

Container

States of Matter Sort

Write S (solid), L (liquid), or G (gas) for each item.

Item	Solid	Liquid	Gas
Rock			
Milk			
Air in a balloon			
Ice cube			
Orange juice			
Steam from a pot			

True or False

- ☐ 1. All matter takes up space.
- ☐ 2. Solids change their shape easily.
- ☐ 3. Gases are invisible.
- ☐ 4. Liquids float to the top of their container.

Draw It!

Draw an example of each state of matter.

Solid	Liquid	Gas

Compare the Three States

State	Keeps own shape?	Flows?	Can you see it?
Solid			
Liquid			
Gas			

Think About It

1. Why do you think gases are harder to see than solids and liquids?

2. Can something be more than one state of matter? Think about water and explain.

Fill in the Blanks

Word Bank:

matter

solid

liquid

gas

container

space

1. Everything around us is made of _____.
2. A _____ keeps its shape no matter where you put it.
3. A _____ takes the shape of its _____.
4. A _____ spreads out to fill all available _____.

Around the House Matter Hunt

Find **3 examples** of each state of matter in your house!

State	Example 1	Example 2	Example 3
Solid			
Liquid			
Gas			

Experiment: Can You See a Gas?

Materials: a balloon, a pin (ask a grown-up for help!)

Step 1: Blow up a balloon. The air inside is a gas!

Step 2: Feel the balloon. Can you feel the gas pushing against the rubber?

Step 3: With a grown-up, pop the balloon. Listen to the gas escaping!

What did you feel when you touched the balloon?

How do you know the gas was inside the balloon?

States of Matter Review

Write S, L, or G for each description.

Description	State
Flows and takes the shape of its container	
Keeps its own shape	
Fills all the space available	
You can usually see it	
You usually can't see it	