



States of Matter Review

Week 10 — Monday | Solids, Liquids, and Gases Together



Reading Time

We have learned about solids and liquids. Now let's review all three states of matter together. All matter exists as a **solid**, **liquid**, or **gas**. Each state behaves in its own special way, and understanding the differences helps us understand the world around us.

Solids have a fixed shape and volume. The particles in a solid are packed tightly together and do not move around much. This is why a rock stays a rock and ice keeps its shape. Solids are hard to squeeze because their particles are already as close as they can get.

Liquids have a fixed volume but no fixed shape. They take the shape of whatever container they are in. The particles in a liquid can slide past each other, which is why you can pour water from a cup into a bowl. Liquids flow from higher places to lower places because of gravity.

Gases have no fixed shape and no fixed volume. Gas particles move very fast and spread out to fill whatever space is available. Air is a gas. When you blow up a balloon, the air spreads to fill the whole balloon. Gases can be compressed, which means you can squeeze them into a smaller space.



Reading Questions

1. What are the three states of matter?

2. How do solid particles behave compared to gas particles?

3. Why do liquids take the shape of their container?

4. Explain why gases can be compressed but solids cannot. Use what you know about particles.



Vocabulary Grid

Write a definition or draw a picture for each word.

Matter

Particle

Volume

Compress

Solid

Gas

States of Matter Sort

Sort each item into the correct column — solid, liquid, or gas.

Solid	Liquid	Gas

Items to sort: Rock, Water, Helium, Apple, Juice, Steam, Wood, Milk, Air, Ice, Rain, Oxygen, Pencil, Sand

True or False — Circle Your Answer

- ☐ 1. All matter has weight and takes up space.
- ☐ 2. Solids can change their shape easily.
- ☐ 3. Gas particles move faster than solid particles.
- ☐ 4. You can compress a gas into a smaller space.
- ☐ 5. Air is the only gas in the world.
- ☐ 6. Particles in a solid are packed tightly together.

Big Comparison Table

Fill in what you remember about each state of matter.

Property	Solid	Liquid	Gas
Shape			
Particle movement			
Can you see it?			
Example			

Think About It

1. Water can be a solid, a liquid, or a gas. What makes water change between states?

2. Why do we need to understand the different states of matter?

Fill in the Blanks

Word Bank: solid liquid gas particles volume compress shape matter

1. All _____ takes up space and has weight.

2. A _____ has a fixed shape and fixed volume.

3. A _____ takes the shape of its container.

4. A _____ spreads out to fill all available space.

5. You can _____ a gas by squeezing it into a smaller space.

Draw the Three States

Draw solid particles
(packed tightly)

Draw liquid particles
(sliding around)

Draw gas particles
(moving fast)

Matter Hunt at Home

Find one example of each state of matter in your home. Write what you found and why it fits that state.

State of Matter	What I Found	Why It Is That State
Solid		
Solid		
Liquid		
Liquid		
Gas		
Gas		

Experiment Preview

Coming Wednesday: You will do hands-on experiments to see how matter changes between states!

Think about it: What happens to ice when it warms up? What happens to water when it gets cold? Write your predictions below.

Draw: Matter All Around You

Draw a picture of your room showing at least 3 solids, 2 liquids, and 2 gases. Label each item with S, L, or G.