

Liquids Deep Dive

Week 8 — Monday | Properties of Liquid Matter

Reading Time

Last week we studied solids. Today we are learning about liquids. A liquid is a state of matter that takes the shape of its container. If you pour water into a cup, the water looks like a cup. If you pour the same water into a bowl, it looks like a bowl. Liquids always flow to fill the bottom of whatever holds them.

Not all liquids are the same! Some liquids are clear like water, and some are colorful like juice or milk. Some are thin and pour quickly, like water. Others are thick and pour slowly, like honey or syrup. Scientists call the speed at which a liquid flows its **viscosity** — a very thick liquid has high viscosity.

Liquids can also mix together or stay separate. Oil and water do not mix — the oil always floats on top of the water. This is because oil is less dense than water.

Reading Questions

1. What state of matter takes the shape of its container?

2. What word describes how fast or slow a liquid flows?

3. Why does oil float on top of water?

4. Name two liquids that pour slowly and two that pour quickly. Explain why.

Vocabulary Grid

Write a definition or draw a picture for each word.

Liquid

Viscosity

Flow Rate

Container

Mixture

Density

Liquid Property Sort

Sort each liquid into the correct column — thin and fast flowing, or thick and slow flowing.

Thin — Flows Fast	Thick — Flows Slow

Liquids to sort: Water, Honey, Milk, Motor Oil, Juice, Syrup, Dish Soap, Vinegar

True or False — Circle Your Answer

- ☐ 1. Liquids keep their own shape like solids.
- ☐ 2. A liquid takes the shape of its container.
- ☐ 3. Honey flows faster than water.
- ☐ 4. Viscosity means how thick or thin a liquid is.
- ☐ 5. Oil and water mix together easily.
- ☐ 6. Milk is a liquid.

Draw a liquid flowing fast

Draw a liquid flowing slow

Draw oil on water

Compare Liquid Properties

Liquid	Color	Thin or Thick?	Fast or Slow Flow?
Water			
Milk			
Honey			
Juice			
Dish Soap			

Think About It

1. Why do you think liquids flow at different speeds?

2. Can you think of a liquid that changes from thin to thick? Explain.

Fill in the Blanks

Word Bank: liquid viscosity flow container mix dense

1. A _____ takes the shape of whatever holds it.
2. Honey has a high _____, so it moves very slowly.
3. Water will _____ quickly out of a pitcher.
4. A cup or a bowl is a _____ for a liquid.
5. Oil and water do not _____ together.
6. Water is more _____ than oil, so it sinks below oil.

Liquid Hunt Around the House

Find 3 liquids for each category. Ask a grown-up for help!

Category	Example 1	Example 2	Example 3
Thin liquids (fast flow)			
Thick liquids (slow flow)			
Clear liquids			
Colored liquids			
Fragrant liquids (smelly)			

Experiment Preview

Coming Wednesday: You will test the flow rates of different liquids in a race down a ramp!

Think about it: Which liquid do you predict will win the race? Which will come in last?

Write your prediction below:

Liquid Density Review

Draw the layers from bottom (most dense) to top (least dense) in a jar.

Liquids: Honey, Water, Vegetable Oil

Bottom (heaviest) → Top (lightest)