

Changes in Particles

READ ALOUD PASSAGE

Now that we know all matter is made of tiny particles, we can use that idea to explain why solids, liquids, and gases behave so differently. In a solid, the particles are packed very close together and held tightly in place. They vibrate a little, but they do not move past each other. This is why a solid keeps its shape.

In a liquid, the particles stay close together, but they can slide past each other and move around. This is why a liquid flows and takes the shape of its container. In a gas, the particles move quickly and are spread far apart, with lots of empty space between them. This is why gases spread out to fill any container they are in.

Activity 1: Sentence or Not?

Read each one out loud. Write S if it is a complete sentence. Write F if it is only part of a sentence. Then fix each F so it is a complete sentence.

☐

1. Solids keep their shape.

☐

2. Packed close together.

☐

3. Gas particles spread out.

☐

4. To fill the container.

First fragment, rewritten:

Second fragment, rewritten:

Activity 2: Statement or Question?

Read each sentence. Write S if it is a statement or Q if it is a question. Then add the correct end mark on the line.

☐ 1. Do particles in a solid move past each other ____

☐ 2. A liquid takes the shape of its container ____

☐ 3. Gas particles are spread far apart ____

☐ 4. Why does a solid keep its shape ____

Activity 3: Because, But, So

Finish the sentence two ways. After because, tell why. After but, tell something different or surprising.

A solid keeps its shape **because**

A solid keeps its shape, **but**

Science Mad Lib

Fold the page on the dashed line so the story is hidden. Write a word for each blank. Then unfold the page, copy your words into the story, and read it aloud.

1 _____
A name

2 _____
A plural noun

3 _____
An activity

4 _____
A noun

FOLD HERE

THE STORY

Professor ₁ _____ shrank down to particle size and landed inside an ice cube. The particles were packed together like ₂ _____ in an elevator, wiggling in place. When the ice melted, the particles started sliding past each other, doing the ₃ _____. Then the water boiled, and they zoomed far apart, moving faster than ₄ _____. "Same particles," said the professor, "just moving differently!"