

How Do Particles Explain What Matter Does?

Imagine you could shrink down very small. According to the particle model, tiny particles that make up everything around you are too small to see with the naked eye.

Think about a solid, a liquid, and a gas. Describe how their particles are arranged and how they move. Explain why each state of matter acts the way it does based on how particles move and sit. ([Outcome](#), [Details](#))

Where to start

- How are particles packed together differently in a solid compared to a liquid?
- What are particles doing in a gas that they are not doing in a liquid?
- Why can you squeeze a gas but not a solid?
- If particles are always moving, why do solids keep their shape?

Stretch

Think of a real material that changes from one state to another. Ice melting into water is a good example. Use what you know about particles to explain what happens to them during that change.