

Journal Prompt: The Particle Model of Matter

Everything around you is made of tiny pieces called particles. Particles are the smallest bits of stuff. These particles are always moving. You can find them in solids like your desk. You can find them in liquids like water. You can find them in gases like the air you breathe.

Pick one solid, one liquid, and one gas from your everyday life. For example, you could pick an ice cube, a glass of juice, and the air in a balloon. For each one, describe how its particles are arranged. Tell how they move. Explain what role attractive forces play in holding the particles together ([Knowledge](#), [Skills](#)).

Where to start:

- In your solid, are the particles close together or far apart? Are they moving much, or just vibrating in place ([Knowledge](#))?
- In your liquid, can the particles slide past each other? What does that tell you about the spaces between them ([Knowledge](#))?
- In your gas, how far apart are the particles, and in what directions do they move ([Knowledge](#))?
- Which of your three examples has the strongest attractive forces between particles, and which has the weakest ([Knowledge](#), [Skills](#))?

Stretch:

Think about what happens when your solid melts or your liquid evaporates. Describe how the arrangement and movement of the particles would change during that transformation ([Understanding](#), [Resource](#)).