

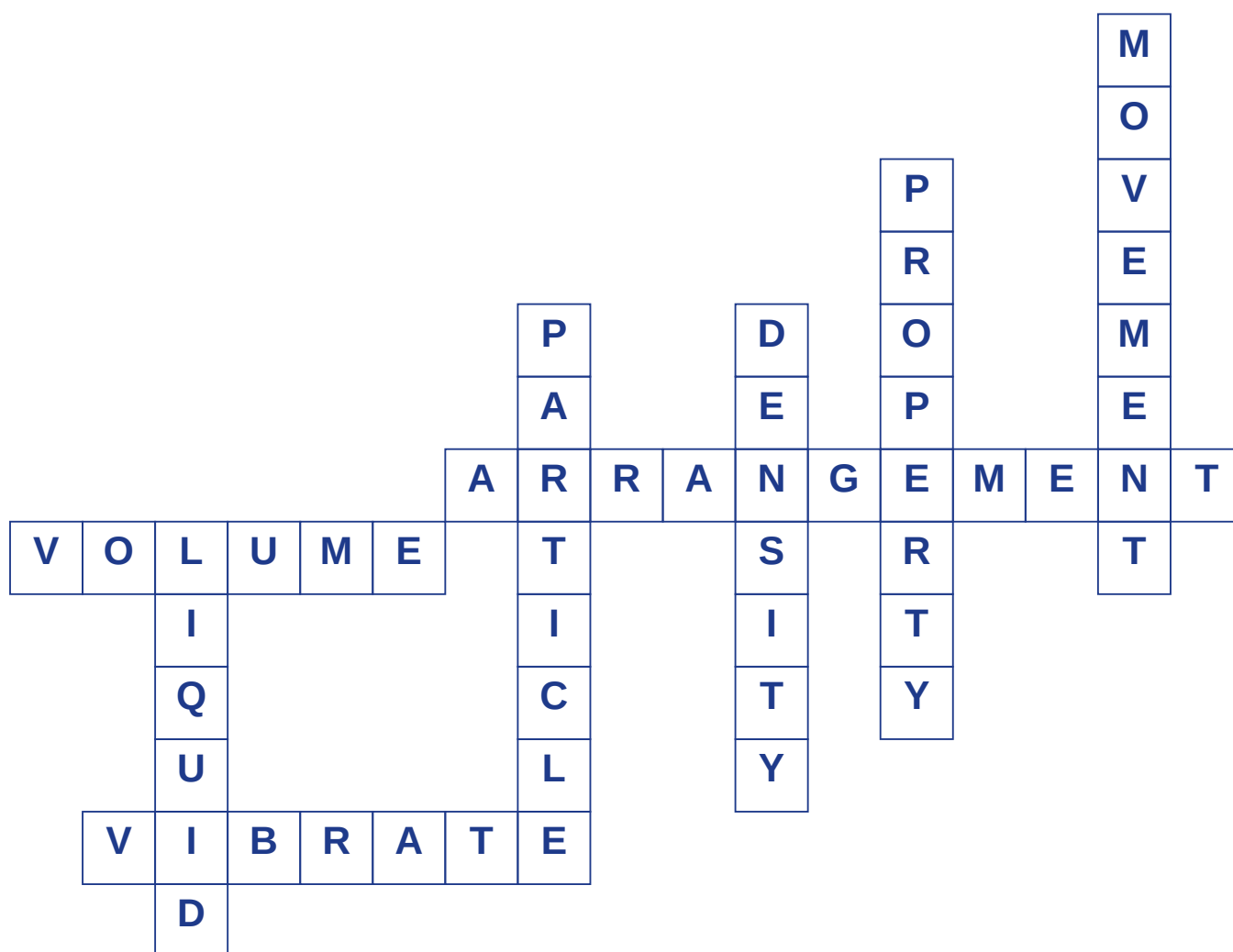
The Particle Model of Matter

Everything around you—solids, liquids, and gases—is made of tiny particles that never stop moving. Scientists use the **particle model of matter** to explain this idea and help us understand what we see and feel ([Understanding](#), [PDF p.1](#)). In this crossword, you will practice science words that describe how particles move and how they line up. You will also learn about properties like volume and density, which come from the way particles move and arrange themselves ([Knowledge](#), [Knowledge](#), [Understanding](#)).

How to play

Read each clue carefully and think about what you have learned about particles in solids, liquids, and gases. Write your answer in capital letters. Put one letter in each box. Your answers will fit across and down in the grid. Some answers share letters with other words. If you get stuck on one clue, try solving a crossing word first. Use its letters as a hint. Check your spelling against the number of boxes before you move on.

Puzzle grid



Clues

Across

5. The way particles are positioned relative to each other (11)
6. The amount of space something takes up (6)
7. To move back and forth quickly in one place (7)

Down

1. The act of particles changing position (8)
2. A characteristic of matter such as state, mass, or volume (8)
3. A tiny piece that makes up all matter (8)
4. How much mass a substance has compared to its volume (7)
5. State of matter where particles can slide past each other (6)

Answer key

- **1 down:** MOVEMENT
- **2 down:** PROPERTY
- **3 down:** PARTICLE
- **4 down:** DENSITY
- **5 across:** ARRANGEMENT
- **6 across:** VOLUME
- **7 down:** LIQUID
- **8 across:** VIBRATE