

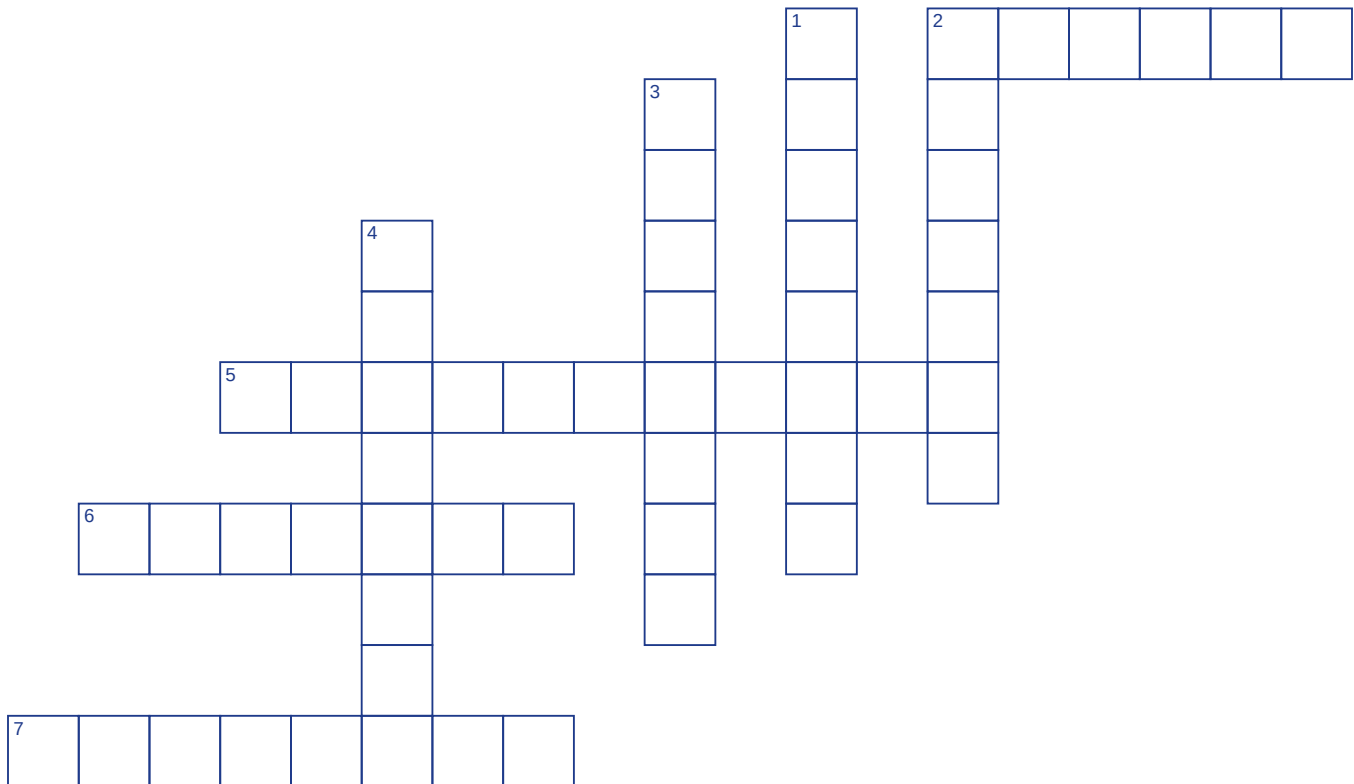
Particle Model of Matter Crossword

The particle model explains how all matter is made up of small particles that are always moving and have spaces between them ([Knowledge](#), [PDF p.1](#)). In this crossword, you will work with key terms about particles, their arrangement, and the physical properties of matter. As you solve the puzzle, think about how particles vibrate in solids, slide past each other in liquids, and move freely in gases ([Knowledge](#)). You will also explore ideas like density, volume, and how particles can compress ([Knowledge](#)).

How to play

Read each clue carefully. Write the answer word into the grid, one letter per square. Across clues run left to right. Down clues run top to bottom. Some letters will be shared between across and down words, which will help you check your work. Try to complete the grid using only the clues.

Puzzle grid



Clues

Across

2. The amount of space a solid, liquid, or gas takes up ([Knowledge](#)) (6)
3. The way particles are positioned relative to each other in matter ([Understanding](#)) (11)
4. A comparison of the mass of matter to its volume ([Knowledge](#)) (7)
5. The motion of particles that is always happening in matter ([Knowledge](#)) (8)

Down

1. To reduce in volume when under pressure ([Knowledge](#)) (8)
2. To move back and forth in place, as particles do in a solid ([Knowledge](#)) (7)
3. A characteristic of matter such as state, mass, or volume ([Knowledge](#)) (8)
4. A tiny piece that makes up all matter ([Knowledge](#)) (8)

Answer key

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

