

The Particle Model

Name:

Date:

INQUIRY

If you could zoom in a billion times, what would you see inside a drop of Korean barley tea?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Particle	Tiny pieces that make up all matter (atoms/molecules).
Diffusion	Particles spreading from high to low concentration.
Brownian motion	Random zigzag movement of particles.

Part A — Understanding

1. State three key ideas of the particle model of matter. [3 marks]

2. When you spray perfume in one corner of the NIS classroom, everyone smells it within minutes. Explain using the particle model. [3 marks]

Part B — Application

3. Explain why a balloon deflates slowly over several days, using particle theory. [3 marks]

4. When making Chinese tea, the colour spreads from the tea bag into clear water. Explain using diffusion. [3 marks]