Quiz Outline: States of Matter and the Kinetic Molecular Theory (Topic 2.3, Science 8)

OVERVIEW:

What is matter?

States of matter

Changes of state

Kinetic molecular theory

Dissolving, diffusion, thermal expansion

LEARNING MAP CRITERIA: LIFE PROCESSES ARE PERFORMED AT THE CELLULAR LEVEL

Relevance	Extending	Proficient	Developing	Emerging
☑	Construct an analogy that accurately represents elements of the kinetic molecular theory. Explain the phenomena of dissolving, diffusion, and thermal expansion using the kinetic molecular theory. Predict how matter will respond in novel circumstances, based on the student's understanding of the kinetic molecular theory.	Explain the relationship between changes of state, temperature, and kinetic energy. Describe how the motion and the spacing of particles changes during a change of state.	List the four states of matter and their properties. Identify the state of matter of a material. State the main tenets of the kinetic molecular theory. Explain how they relate to solids, liquids, and gases. Label a phase change triangle with the appropriate vocabulary words.	Identify whether everyday objects/materials are solids, liquids, or gases.

VOCABULARY:

(Disclaimer: This is not meant to be an exhaustive list. Vocabulary words may appear on the test that are not in this list.)

- Matter
- Volume
- Mass
- Shape
- State of matter
    - Solid
    - Liquid
- Changes of state
    - Melting
    - Freezing
    - Condensation
    - Vaporization
    - Sublimation
    - Deposition

    - Gas
    - Plasma
- Scientific theory
- Kinetic molecular theory of matter (KMT)
- Kinetic energy
- Temperature
- Melting point
- Boiling point
- Dissolve
- Diffusion
- Thermal expansion

PRIMARY STUDY MATERIAL:

- Powerpoints:
    - 2.1 Powerpoint (slides 3-5 only)
    - 2.3 Powerpoint + any in-class notes
- Textbook pg. 96, 132-145
- Workbook pg. 78-87