

Intermediate Science 8

Unit 2: Fluids



Know the following terms:

Matter	Fluid	Melting	Solidification
Sublimation	Evaporation	Condensation	Viscosity
Flow rate	Mass	Volume	Density

Know the following:

- 1) The three states of matter
- 2) The Particle Theory (five points)
- 3) Compare solids, liquids and gases in terms of the particle theory of matter. Include:
 - (i) shape
 - (ii) volume
 - (iii) particle arrangement
 - (iv) particle movement
- 4) Use the particle theory to explain the changes in matter
 - (i) Melting (S →L)
 - (ii) Solidification (L→S)
 - (iii) Evaporation (L→G)
 - (iv) Condensation (G→L)
 - (v) Sublimation (S →G or G→S)
- 5) What is a fluid?
- 6) Provide exams of fluids in everyday life
- 7) What is viscosity
- 8) Relate the viscosity of a liquid to the amount of friction between particles.
- 9) Identify examples of viscosity in everyday life (ie. motor oil, paints, foods etc)
- 10) Compare the viscosity of various liquids
- 11) Understand the three factors that affect viscosity.
 - (i) Temperature
 - (ii) Concentration of particles
 - (iii) Force of attraction between particles
- 12) Define flow rate
- 13) Identify examples of liquids with different flow rates (ie. water, dishwashing liquid corn syrup...etc)
- 14) What is the relationship between viscosity and flow rate
- 15) What is density?

- 16) Describe the relationship among the mass, volume, and density of solids, liquids and gases
- 17) Calculate the density of a material, given mass and volume
- 18) Calculate the mass of a material, given density and volume
- 19) Calculate the volume of a material, given density and mass

