

9.1 States of Matter

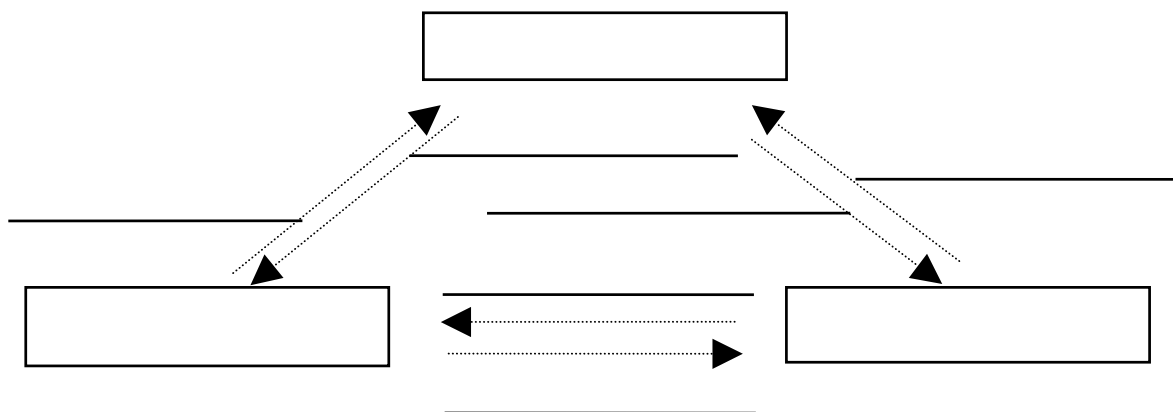
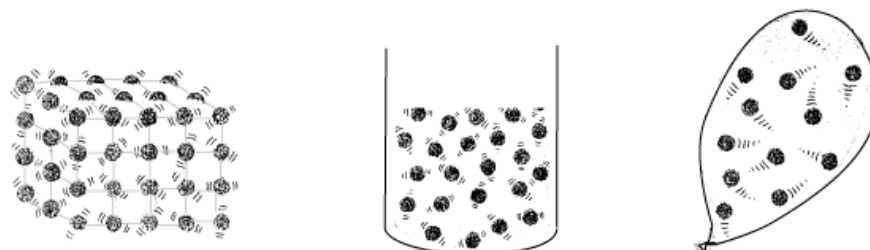
Definitions

- Kinetic molecular theory (KMT)
- Vibrational, rotational, and translational motion

Kinetic Molecular Theory

- The kinetic molecular theory of matter (KMT) says that all matter consists of many, very small particles that are constantly moving or in a continual state of motion. The particles might be atoms, molecules or ions.

Particles in solids	Particles in liquids	Particles in gases
<ul style="list-style-type: none"> • Packed tightly close together • Strongly attracted to each other • Fixed in positions but they do vibrate 	<ul style="list-style-type: none"> • Packed fairly close together • Some attraction between particles • Able to move around in all directions but movement is limited by attractions between particles 	<ul style="list-style-type: none"> • Have little attraction between them • Not attraction between particles • Free to move in all directions and collide with each other and with the walls of a container and are widely spaced out



Homework

- Practice Q's: 1-4
- Section Q's: 1-3