

Unit 4 – Chemistry:

Day 5 – Kinetic Molecular Theory of Matter (KMT)

Name: schaub

Date: _____

Block: _____

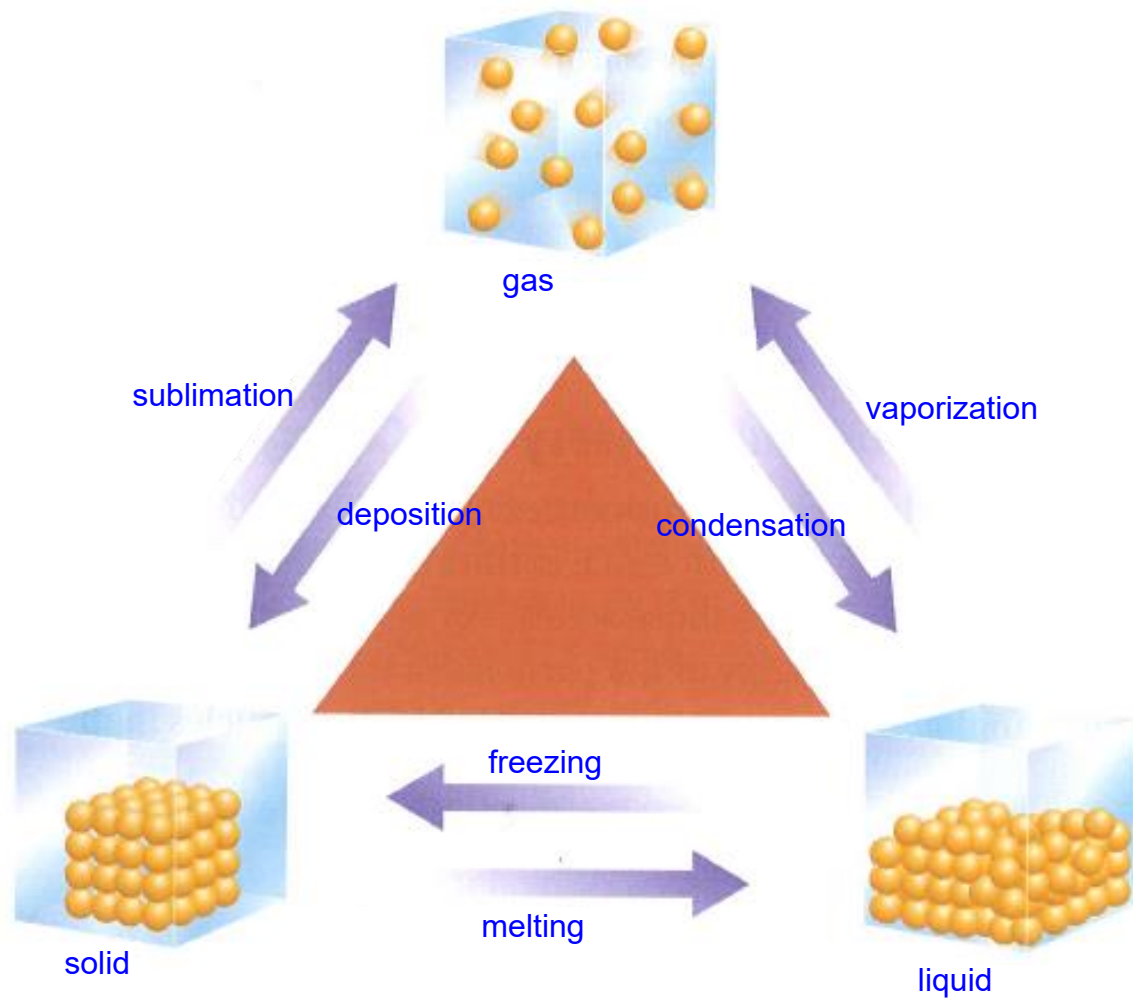
Kinetic Energy:
energy from movement

The Kinetic Molecular Theory of Matter (KMT)

- 1) all matter is made up of very small particles
- 2) the particles exist in empty space
- 3) particles are constantly moving
- 4) energy makes particles move. The more energy the particles have, the faster they can move and the farther apart they can get

State	Characteristics	Examples
Solid	particles are tightly packed particles vibrate but don't move around holds its own shape has a fixed volume	wood plastic rock metal
Liquid	particles will slip and slide particles are close together but still able to move takes shape of container has a fixed volume	water juice milk oil
Gas	particles are very far apart (relatively speaking) move randomly and quickly in straight lines no fixed shape but will take the shape of container (ex: balloon) no fixed volume but can depend on container	air helium hydrogen nitrogen
Plasma	same as gas but electrically charged (affected by magnetic and electric fields and can conduct electricity)	stars/sun lightning neon light

grapes in the microwave



Dissolving: _____

when sugar is added to water, the water particles hit into the sugar molecules (bombard) causing them to spread out in the water. This act of forced spreading out is known as dissolving.

Diffusion: _____
 The movement of one material through another from an area of higher concentration to an area of lower concentration. A fart moving through the air in the classroom.

