Objective: SWBAT describe the motion of particles and liquids in the properties of liquids according to the kinetic molecular theory.

CLASS NOTES

Properties of Liquids and the Kinetic-Molecular Theory

is anything that has mass and takes up space.

The ______ explains how matter can change among the phases of solid, liquid, and gas.

Liquids have a _____ because of the close arrangement of liquid particles.

When liquid water is at 20°C is compressed by a pressure of 1000 atm it's ______ only about 4%.

is the movement of particles from a high concentration to a low concentration. It can be seen as a spreading-out of particles resulting in their even distribution

_ are those bonds that hold molecules together.

Date:

Objectives 1): SWBAT describe the motion of particles in liquids and the properties of liquids according to the kinetic molecular theory.

CLASS NOTES

Properties of liquids:

Relatively High Density: At normal atmospheric pressure, most substances are hundreds of times denser in a liquid state than in a gaseous state. This higher density is the result of the close arrangement of liquid particles.

Relative Incompressibility: liquids are less compacted than gases. The result of this is because the liquids are more packed together. Liquids can transmit pressure equally in all directions.

Ability to Diffuse: Gases diffuse and mix with other gas particles and liquids does the same process when mixed with other liquids. Any liquid gradually diffuses throughout any other liquid in which it can dissolve. Diffusion much is much slower in liquids than in gases because they are closer together

Surface Tension: is a force that tends to pull adjacent parts of a liquids surface together, thereby decreasing surface area to the smallest possible size. It results from the attractive forces between particles of a liquid.

Evaporation and Boiling: the process by which a liquid or solid changes to a gas is <u>vaporization</u>. Evaporation is a from of vaporization. <u>Evaporation</u> is the process by which particles escape from the surface of a non boiling liquid and enter the gas state

Formation of Solids: when a liquid is cooled, the average energy of its particles decreases. If the eagerly is low enough, attractive forces pull the particles into an even more orderly arrangement. The physical change

Name: _

CLASS WORK

Class Work (Independent Practice) Directions: Finish as many questions as you can during class. Refer to your notes and ask at least three classmates before asking me for help. If you do not finish these questions in class, you must finish them for homework.

1. Describe the liquid state according to the kinetic molecular theory

2. List the properties of liquids

3. How does the kinetic-molecular theory explain the following properties of liquids

A. Relatively high density

B. Ability to diffuse

- C. Ability to evaporate
- 4. Compare Vaporization and Evaporation

5. The kinetic-molecular theory explains the behavior of a.gases only.b.liquids and gasesc.solids and liquidsd.solids, liquids, and gases.