General Chemistry 2 Quarter 1- Module 1 - Kinetic Molecular Model

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**Give This a Try:**

1.

2.

3.

4.

5.

**Learning Activities**:

1. Model used to explain the behavior of matter
2. Fill in the blanks
3. Particles
4. Kinetic, Temperature
5. Particles, State

**Guide Questions:**

Based on the activity on Part I of explore, how can you compare the

properties of the two materials above?

The shape of the two is dependent of the state or phase matter there in which is also dependent to temperature or amount of kinetic energy of every particle in the object that either makes it more rigid or fluid.

**Remember This:**

What happens when ice is exposed in a hot environment? Or even

when you just place it on a table? It melts right? Why do you think so?

Can you write your answer below?

Because of the tendency of the universe to disorder. Also, because there is a temperature difference or potential as heat from the outside ice melts it.

**EXTEND**

1. C
2. (1) The particles in a gas are in constant, random motion, (2) the combined volume of the particles is negligible

|  |  |  |  |
| --- | --- | --- | --- |
| Substance | State of Matter | Description of Molecular Motion | Picture of Molecular Motion |
| Rubbing Alcohol | Liquid | In a fix shape because of the container it is in but is able to slush around due to the strength of bond and heat energy making liquid at room temperature | Q17 Describe the molecular model for a liquid How does it explain that a  liquid has no definite shap... |
| Pencil | Solid | Has a definite shape with its molecules being more-dense and its primary materials which are made of wood and graphite. Though flammable but has high heat resistance | The molecular model of a solid (left), a liquid (middle), and a gas... |  Download Scientific Diagram |

Your Post Test:

A.

1. a 2. c 3. a 4. d 5. a

B.

|  |  |  |  |
| --- | --- | --- | --- |
| Substance | State of Matter | Description of Molecular Motion | Picture of Molecular Motion |
| Mineral Water | Liquid | Has a definite volume, because molecules in a liquid do not break away from the attractive forces. The molecules can, however, move past one another freely, and so a liquid can flow, can be poured, and assumes the shape of its container. | Q17 Describe the molecular model for a liquid How does it explain that a  liquid has no definite shap... |
| Pencil | Solid | Molecules are held rigidly in position with virtually no freedom of motion. Many solids are characterized by long-range order; that is, the  molecules are arranged in regular configurations in three dimensions | The molecular model of a solid (left), a liquid (middle), and a gas... |  Download Scientific Diagram |

ASSIGNMENT

1. Enumerate at least two substances in your house and identify its state.

Window glass – Solid

Body Sweat – Liquid

2. Explain their properties using the Kinetic Molecular Theory. You may use the

postulates that were stated in our discussion.

Window glass is solid as the kinetic energy of its particle is low and therefore not moving which also could be attributed to the bond strength or temperature present.

Body Sweat is liquid at room temperature because of the earth atmosphere and pressure and due to its higher kinetic energy of its particles compared to window glass