

Last Name: \_\_\_\_\_

First Name: \_\_\_\_\_

Date: \_\_\_\_\_

Period: \_\_\_\_\_

## Introduction to Kinetic Molecular Theory

### Question 1

**Kinetic Molecular Theory** states that gas particles are in constant motion and exhibit bounced elastic collisions.













The average **kinetic energy** of all ion of gas particles is **directly proportional** to absolute **temperature** only.

**Instructions:** Use the above statesmen to complete the paragraph below

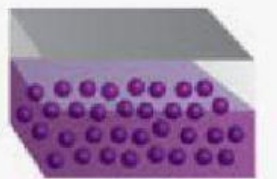
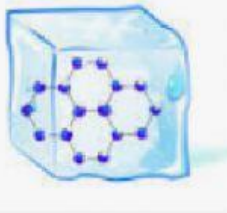
**Kinetic** \_\_\_\_\_ **Theory** states that \_\_\_\_\_ are in \_\_\_\_\_ and exhibit \_\_\_\_\_ elastic \_\_\_\_\_.

The average \_\_\_\_\_ **energy** of \_\_\_\_\_ gas \_\_\_\_\_ is **directly** \_\_\_\_\_ absolute \_\_\_\_\_ only.

### Question 2

solid	liquid	gas
		
<ul style="list-style-type: none"> <li> rigid</li> <li> fixed shape</li> <li> fixed volume</li> </ul>	<ul style="list-style-type: none"> <li> not rigid</li> <li> no fixed shape</li> <li> fixed volume</li> </ul>	<ul style="list-style-type: none"> <li> not rigid</li> <li> no fixed shape</li> <li> no fixed volume</li> </ul>
<div>cannot be squashed</div>	<div>cannot be squashed</div>	<div>can be squashed</div>

**Label and Identify Solid, Liquid or Gas**



**What is it?**

**Vibrate on the spot,  
cannot move from  
one place to another**

**What is it?**

**Move and slide  
around each other**

**What is it?**

**Move very quickly in  
all directions**



### Question 3

**Instructions:** Complete by using the word “more” or the word “less”

- The faster the molecules move the \_\_\_\_\_ **Temperature measurement.**
- The slower the molecules move the \_\_\_\_\_ **Temperature measurement.**

### Question 4

**Instructions:** Complete by using the word “more” or the word “less”

- The less average kinetic energy the \_\_\_\_\_ **temperature measurement**
- The more average kinetic energy the \_\_\_\_\_ **temperature measurement**

## Question 5

### "THE 3-THINGS"

#### The kinetic molecular theory

1. All matter is made of particles

2. Particles are in constant , random motion.

3. Particles constantly collide with each other and with the walls of their container

**Instructions:** Read and Copy statements 1, 2 and 3.

1. \_\_\_\_\_

2. \_\_\_\_\_

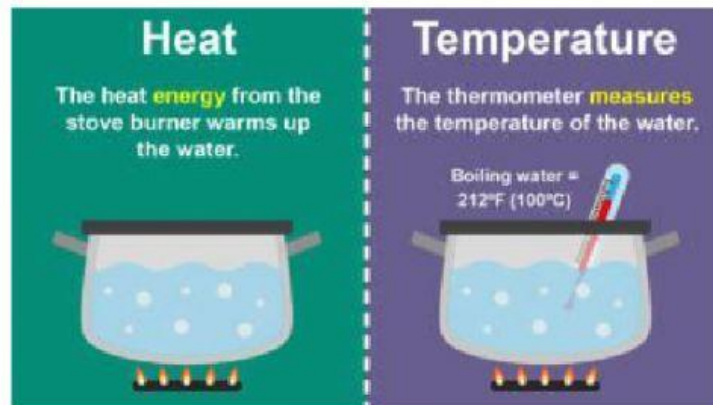
3. \_\_\_\_\_

\_\_\_\_\_

4. Are you made of particles? Yes or No \_\_\_\_\_

## Question 6

### Heat vs Temperature



**Instructions:** Use the above picture to answer the questions below

1. What is **Heat**? \_\_\_\_\_

\_\_\_\_\_

2. What is **Temperature**? \_\_\_\_\_

\_\_\_\_\_

3. Is **Heat** and **Temperature** the same? Yes or No \_\_\_\_\_

\_\_\_\_\_