

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

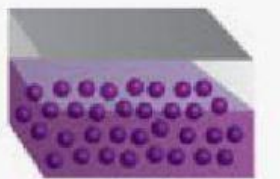
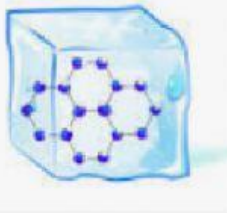
Kinetic _____ **Theory** states that _____ are in _____ and exhibit _____ elastic _____.

The average _____ **energy** of _____ gas _____ is **directly** _____ absolute _____ only.

Question 2

solid	liquid	gas
		
 rigid	 not rigid	 not rigid
 fixed shape	 no fixed shape	 no fixed shape
 fixed volume	 fixed volume	 no fixed volume
 cannot be squashed	 cannot be squashed	 can be squashed

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. _____

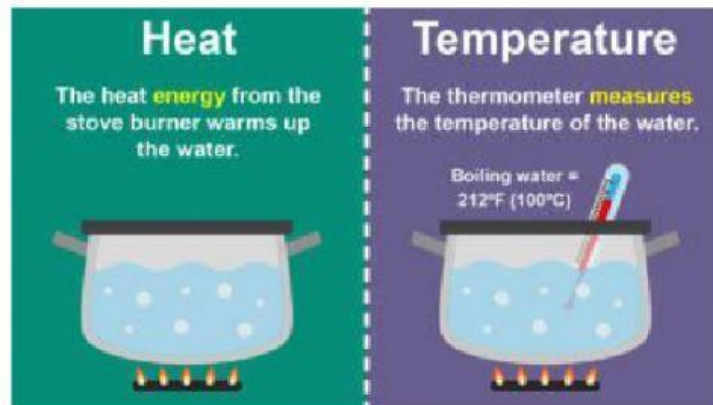
2. _____

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 _____