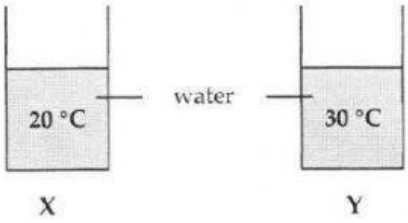
ACTIVITY # 12.2 KINETIC MOLECULAR THEORY Date due:_____

1. The diagram shows two beakers X and Y containing the same amount of water at different temperatures.



How are the molecules in beaker Y different from the molecules in beaker X ?

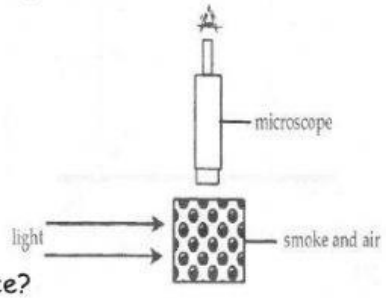
A. The molecules in Y have more energy and move slower than those in X.

B. The molecules in Y have more energy and move faster than those in X.

C. The molecules in Y have the same energy and speed as those in X.

D. The molecules in Y have less energy and move faster than those in X

2. An experiment demonstrates Brownian motion. Smoke particles in a glass cell are illuminated and viewed through a microscope. Small bright spots are seen in random motion. What is the cause of this observation?



A. smoke particles striking each other.

B. smoke diffusing through air.

C. refraction of light in the glass cell.

D. air molecules colliding with the smoke particles.

3. When sweat evaporates, which change of state takes place?

A. liqiud to solid C. vapour to liquid

B. liquid to vapour D. solid to vapour

4. Heat will always pass from one object to another one nearby if the objects have different

A. masses B. volumes C. surface area D. temperatures

5. Which statement best describes the molecules in a gas?

A. They are closer together and moving slowly.

B. They are closer together and moving quickly.

C. They are far apart and moving quickly.

D. They are far apart and moving slowly.

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6. A container full of gas is left to stand on a bench for a long time. Which statement about the molecules is correct?

A. all molecules are at the bottom of the container

B. the fastest moving gas molecules are at the top of the container

C. the molecules are moving at random throughout the container

D. the pressure caused by the molecules on the container is greatest at the top of the container.

7. A student finds the sample of a water boils at 105 °C. What could be the reason for this?

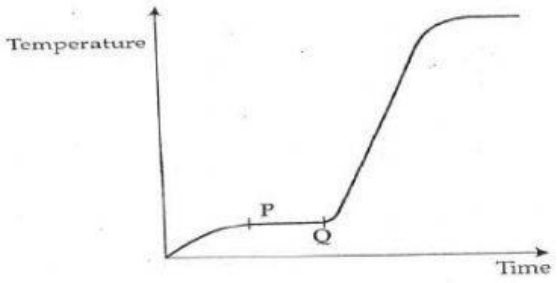
A. Air pressure is less than average atmospheric pressure.

B. Air pressure is greater than average atmospheric pressure.

C. The surface of the water container is too large.

D. The water is pure.

8. A pure substance is heated at a constant rate in a container, and the temperature is recorded at intervals giving the graph below.



What happens to the substance at Q?

A. boiling B. condensing C. freezing D. melting

9. The rate at which a liquid evaporates can be increased by

A. adding an impurity

B. blowing air over the surface

C. increasing the pressure above the surface

D. lowering the temperature

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