

Thermal revision

- The temperature of water is raised from 5°C to 90°C . Which of following best describes the changes to the molecules of liquid?
 - They gain kinetic energy and move more quickly.
 - They gain thermal energy and the intermolecular forces become stronger.
 - They move close together and the density increases.
 - They move freely and randomly in all directions resulting in an increase in volume.
- A student conducted an experiment to study Brownian motion of smoke particles in air. What should the student see when he looked into the microscope?
 - air molecules moving in a random manner
 - air molecules colliding with each other
 - smoke particles moving in random manner
 - smoke particles vibrating about their fixed positions
- Which statement is true when water is heated at boiling point?
 - The water molecules do not gain energy
 - The water molecules gain potential energy.
 - The water molecules gain kinetic energy.
 - The water molecules gain kinetic and potential energy.
- Why are smoke particles used to observe Brownian motion?
 - The smoke particles are visible and allow us to understand the motion of air molecules.
 - The smoke particles are visible and air molecules are constantly in random motion
 - The smoke particles are lighter than air particles and hence they can be bombarded by air particles.
 - Smoke particles are in constant random motion while the air particles are vibrating about a fixed position.
- Which of the following contains molecules with the highest average speed?



