1. Explain, in terms of attractive forces, why there is no increase in temperature of a sample of during melting

- Energy is used to break bonds / overcome attraction
- Between molecules

2. Why ammonia gas spreads throughout a laboratory

- particles move from an area of high to low concentration
- particles move randomly

3. Why CO2 diffuses slower than NH3

 $\underline{\text{Molecules}}$ of CO2 are heavier than molecules of NH3 # CO2 has higher $\underline{\text{relative}}$ $\underline{\text{molecular mass}}$ than NH3

4.

A mixture of ice and water is left to stand and the ice melts.

Which row describes what happens as the ice is melting?

	temperature of mixture	energy changes
Α	increases	average kinetic energy of particles increases
В	increases	energy is used to overcome attractive forces
С	stays the same	average kinetic energy of particles increases
D	stays the same	energy is used to overcome attractive forces

Answer: D

5. How motion of particles of a solid changes when it is heated (before reaching m.p)

- Vibrations
- Increase

6. Why do gases diffuse

Due to random motion of molecules/ particles