General Chemistry 2 | 3rd Quarter

The Study of Phase Change: Self Evaluation

January 17 2021

Virtual Lab Link

1) During phase change, average kinetic energy of the molecules of the substance

- ○ Increases ○ Decreases
- ◉ Remains the same ○ Doubles

2) In the part of the transition curve where the temperature decreases,

- ◉ the kinetic energy decreases while the potential energy stays the same
- ○ the potential energy decreases while the kinetic energy stays the same
- ○ kinetic energy as well as potential energy changes
- ○ None of these

3) The amount of energy needed to melt 'm' gram of a solid substance to its liquid form is

- ○ Q= mCdT, where C is the Specific heat capacity of the substance
- ◉ Q=mLf ,where Lf is the Latent heat of fusion of the substance
- ○ Q=σA(T24-T14)Δt, where T1 and T2 are the temperatures of the body and the surroundings
- ○ None of these

4) Heat exchanges are generally governed by

- ◉ Newton's law of cooling
- ○ Stephan's law
- ○ Planck's law
- ○ Law of conservation of energy

5) The specific heat capacity of water is

- ○ 333KJ/KgK ○ 2.108 KJ/KgK
- ○ 670 KJ/KgK ◉ 4.187 KJ/KgK