Answer on Question #67820 - Chemistry - Physical Chemistry

Question 6: Powdered marble reacts more rapidly with HCl than the chips of marble because:

Surface area of powdered marble is more that of chips of marble and hence there is more collisions between the molecules of reactants
Number of molecules increases.
Energy of activation decreases
Marble chips will not react with HCl

Answer: Surface area of powdered marble is more that of chips of marble and hence there is more collisions between the molecules of reactants

Question 7: In the reaction: 2B→Product; the rate equation is: Rate = k[B]. If the concentration of 'B' is doubled, the rate of reaction will increase by a multiple of

Four
Three
None of these
Two

Answer: Two

Question 8: For a reaction: $2H_2+2NO\rightarrow 2H_2O+N_2$ the rate law is $R=K[H_2][NO]^2$
The Order of the reaction is?
2
3
0
1

Answer: 3

Question 9: The rate of chemical reaction
Remains constant as reaction proceeds
Increases as the reaction proceeds
Decreases as the reaction proceeds
Both (a) and (b)

Answer: Decreases as the reaction proceeds (but rate of chemical reaction remains constant as reaction proceeds for zero-order reactions)