Answer on the question #60123, Chemistry / Physical Chemistry

Question:
8 Rusting of iron Is an example of_____ reaction
Slow
Fast
Moderate
explosive

9 In the reaction: $2B \rightarrow Product$; 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
Two
Three
None of these

10 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

11 The term — dx/dt in the rate expression refers to the
instantaneous rate of the reaction
Average rate of the reaction
increase in concentration of the reactants
Change in concentration of the reactants with time

Answer:

8. Rusting of iron is an example of slow reaction.
9. If the kinetic equation is dx/dt = k[B], then it is logical that if the concentration of B is doubled, the rate of reaction will increase by a multiple of 2..
10. 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
11. The term — dx/dt in the rate expression refers to the instantaneous rate of the reaction.