

Chemistry 12 – Factors Affecting Reaction Rates Assignment

According to the Collision Theory, what are the two factors necessary for a successful collision?

What affect will each of the following have on the reaction rate (check correct box):

Change	Rate increases?	Rate decreases?
Increase in temperature		
Decrease in volume of container full of gas		
Crushing a solid reactant into powder		
Diluting one aqueous reagent with water		

What is meant by “the nature of the reactants”?

What is a “catalyst”? What do we call the opposite of a catalyst?

How does the rate change during the course of a reaction?

Draw a graph of showing the concentration of products over the course of a reaction. Using only the graph, how would one determine the rate of the reaction?

Which one of the following is NOT a result of collision theory and why?

1. Increasing the concentration of one of the reactions increases the rate
2. Raising the temperature increases the rate
3. Using a more reactive metal increases the rate
4. Grinding up a solid increases the rate

Why do we keep milk in the refrigerator to keep it from spoiling? Explain your answer using collision theory.