Name Date

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Different rates of reactions

1. Indicate whether each of the following would increase or decrease the rate of reaction.

   (a) adding heat _____

   (b) removing heat _____

   (c) adding a catalyst _____

   (d) diluting a solution _____

   (e) removing an enzyme _____

   (f) lowering the temperature _____

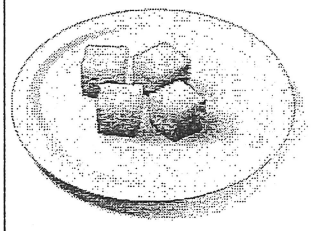
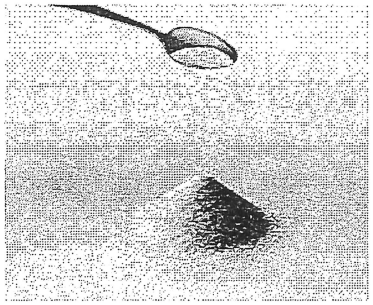
   (g) increasing the temperature _____

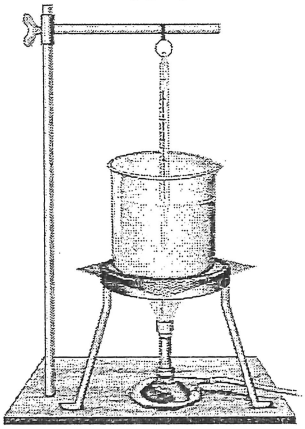
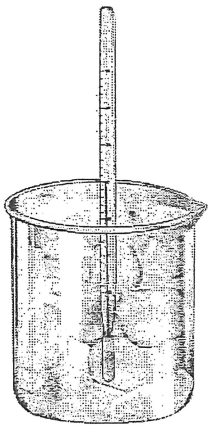
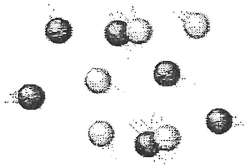
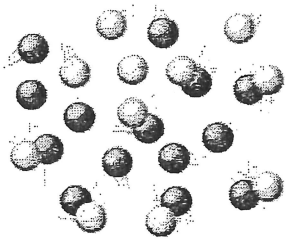
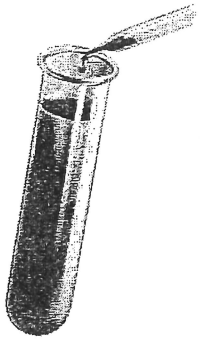
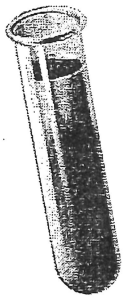
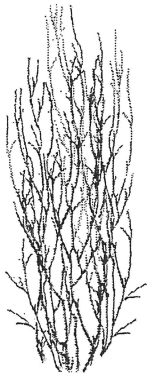
   (h) decreasing the surface area _____

   (i) increasing the concentration of a solution
   _____

   (j) breaking a reactant down into smaller pieces
   _____

2. Identify which situation would have a higher reaction rate. Then state the factor that affected the rate of reaction in each situation.

	Situation X	Situation Y	Situation with a higher reaction rate (X or Y)	Factor affecting the rate of reaction
(a)	1 g of sugar (cubes) 	1 g of sugar (grains) 		

(b)	50 °C 	0 °C 		
(c)	low number of particles = few collisions 	high number of particles = more collisions 		
(d)	enzyme added 	no enzyme added 		
(e)	twigs 	logs