

High Tunstall College of Science Curriculum Intent

Subject: Chemistry Year: 11

Thread 4 —The rate and extent of chemical change



	Chemistry Thread 4—The rate and extent of chemical change	Progress		
Topic	Key ideas	R	A	G
The rate and extent of chemical change	I can use ideas of collision theory to explain how factors affect the rate of a chemical reaction			
	I can use results from practical work and graphical representations to calculate the rate of a chemical reaction, describing how and why this changes as a reaction progresses			
	I can define the term reversible reaction and give examples of these			
	I can define what is meant by the term 'dynamic equilibrium'			
	I can explain how pressure, concentration and temperature can affect the position of equilibrium in a reaction (HT)			
	I can apply understanding of equilibrium to unfamiliar contexts (HT)			

Lesson	Learning Focus	Assessment	Key Words
1	What factors affect the rate of reaction?	Practice questions	Collision theory, activation energy
2	How can we measure rate of reaction?	Practice Questions	Gradient, rate, tangent
4	Rates of reaction RPA	Completion of rates of reaction practical tasks	Factor, rate, collision
3	What are reversible reactions and equilibrium?	Modelling of equilibrium, completion of practical activities	Equilibrium
4	How do concentration and pressure affect equilibrium?	Practice Questions	Dynamic equilibrium
5	How does concentration affect equilibrium, and how can this be utilised in industry?	Application task	Dynamic equilibrium