

Year 10: ASK Yourself!

Subject: Chemistry

Unit: 6 – The Rate and Extent of Chemical Change

	Launching 1-2	Developing 3-4	Progressing 5-6	Mastering 7-9
S kills				
	To be able to develop a measurable hypothesis. To be able to select suitable equipment to carry out an experiment.	To be able to plan experiments to test the hypothesis and check data. To be able to recognise or describe patterns and trends in data. analyse experimental data on rates of reaction. To be able to identify the main hazards in a practical context.	To be able to make and record measurements using gas syringes. To be able to draw tangents to the curve to observe how the slope changes.	To be able to calculate the slope of the tangent to identify the rate of reaction. To be able to evaluate methods and suggest improvements and further investigations.
K nowledge				
	To be able to identify how to measure the amount of gas given off in a reaction To be able to identify which factors affect the rate of reactions Identify catalysts in reactions. To be able to identify a reversible reaction. To be able to identify reactants and products in a	To be able to describe how different factors affects the rate reaction. To be able to describe how exothermic reactions behave if the temperature of systems at equilibrium changes. To be able to define activation energy. To be able to describe how equilibrium is reached.	To be able to calculate the mean rate of a reaction. To be able to explain how the changes of surface area affect rates. To be able to predict the effects of changing conditions on rates of reactions. To be able to explain catalytic action. To be able to explain how changing concentrations	To be able to explain how rates are affected by different factors. To be able to explain the effects of changes of factor on rates of reaction using collision theory. To be able to explain activation energy. To be able to predict the effects of changes on systems at equilibrium. To be able to interpret data to

	<p>reversible reaction. To be able to predict the effects of changes in pressure.</p>	<p>Identify which reactant is in excess.</p>	<p>changes equilibrium. To be able to explain how endothermic reactions behave if the temperature changes. To be able to explain why these effects of pressure change occur.</p>	<p>predict the effect of a change in concentration and temperature on reactions at equilibrium. To be able to apply Le Chatelier's principle to reactions in equilibrium.</p>
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