The Rate and Extent of Chemical Change

Specification statement These are the bits the exam board wants you to know, make sure you can do all of these…	**Self-assessment**		
	First review 4-7 months before exam	**Second review** 1-2 months before exam	**Final review** Week before exam
I can calculate the mean rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall way to measure the quantity of a reactant of product	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall the units for measuring rate of reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can give the quantity of a reactant in moles	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can draw a graph to show the progress of a reaction by showing the reactant being used up or a product being formed	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can draw tangents to curves and interpret the slope of these	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate the gradient of a curve from the tangent	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe how to investigate the rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe and explain how a change in temperature will affect a rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe and explain how a change in pressure will affect a rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe and explain how a change in concentration will affect a rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe and explain how a change in surface area will affect a rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe and explain how catalyst will affect a rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use collision theory to explain how different factors (temperature/ pressure/ concentration/ surface area) will affect the rate of a reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe how a catalyst lowers activation energy	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can draw an energy profile diagram for a catalysed and an uncatalysed reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use symbols to represent a reversible reaction	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe what happens to ammonium chloride upon heating and cooling	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe what happens to copper sulfate upon addition and removal of water	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹

I can describe what happens to the energy in a reversible reaction, where one direction is exothermic and the other is endothermic **Higher tier only**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can describe what is happening to the rate of reactions when they have reached equilibrium **Higher tier only**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can determine the effects that a change in temperature will have on the system, according to Le Chatelier's Principle **Higher tier only**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can determine the effects that a change in concentration will have on the system, according to Le Chatelier's Principle **Higher tier only**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can determine the effects that a change in pressure will have on the system, according to Le Chatelier's Principle **Higher tier only**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹