Y12 – Rates and equilibrium checklist

Stick this checklist into your yellow book at the beginning of the topic. Tick off the topics as you cover them.		
In this module you are expected to be able to…	In Notes	Revised

• Define:
  ○ Rate of reaction
  ○ Catalyst
  ○ Dynamic equilibrium		

• Use collision theory to explain the effect of surface area and increased concentration of chemicals on reaction rate		
• Sketch mass/time, volume/time, concentration/time graphs for reactants or products.		
• Explain the effect of temperature on reaction rate using and referencing the Boltzmann distribution.		
• Explain the difference in the way heterogeneous and homogeneous catalysts work, and show how catalysts affect reaction rate using and referring to a Boltzmann distribution.		
• Give examples of ways to measure reaction rate and interpret and process results.		
• Explain the effect of temperature, pressure and concentration on an equilibrium yield, and explain the effect of a catalyst on equilibrium.		
• Apply this to the Haber process and explain the term ‘optimum conditions’ in this context.		
• Write expressions for Kc and calculate Kc for reactions given the data. Use Kc to suggest the likely makeup of the reaction mixture.		

Pre-test Evaluation

I have…	
Updated my yellow book notes	
Ensured I understand all of my notes	
Looked on the open drive for additional work	
Asked my teacher for guidance	
Confidence rating	I’m doomed! -- - = + ++ I am the BOSS!