

Qu	Marking Guidance	Additional Comments	Mark
5.1	3 minutes	M2 dependent on M1 or near miss	1
	(At equilibrium, $\text{rate}_{\text{fwd}} = \text{rate}_{\text{back}}$ so) concentrations (of O_2 and SO_3) remain constant	Not concentrations are the same/equal Allow (after this point) gradient is zero / curve flattens out	1
5.2	Sketch begins at origin <u>and</u> goes up until 3 mins		1
	Levels off at 0.3 mol dm^{-3}	Mark Independently	1
5.3	T_2 (Not worth a mark alone)	T_1 , CE=0	
	Equilibrium has <u>moved / shifted</u> to <u>RHS/forward</u> in <u>endothermic</u> direction	Both RHS / forward and endothermic needed	1
	Equilibrium has opposed the increase in T / Equilibrium moves to decrease the T	Not just to oppose the change	1