

Name:

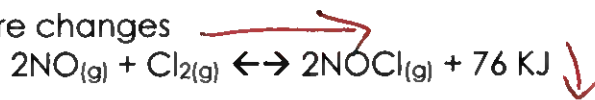
Date:

Chemistry 12: Equilibrium

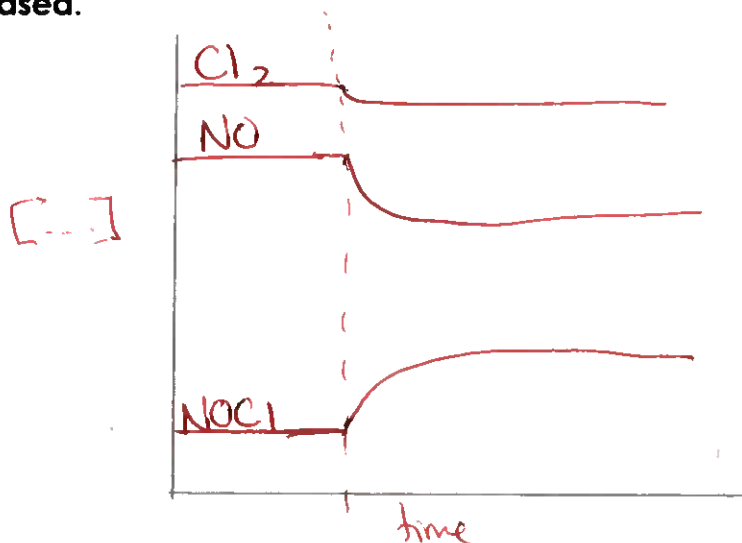
Lesson 6 – Graphs of Le Chatalier's Principle

Graphs of concentration vs. time are often used to show shifts in equilibrium.

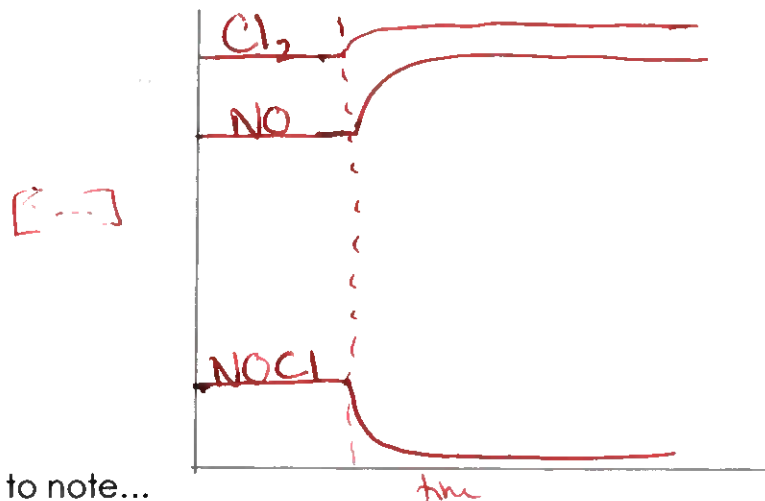
1. The effect of temperature changes



Sketch a concentration vs. time graph for the equilibrium when temperature is **decreased**.



Sketch a concentration vs. time graph for the equilibrium when the temperature is **increased**.



Important things to note...

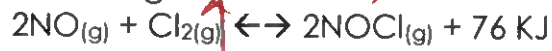
- You will always be given the starting positions

- Notice the concentrations shift quickly then slow down.

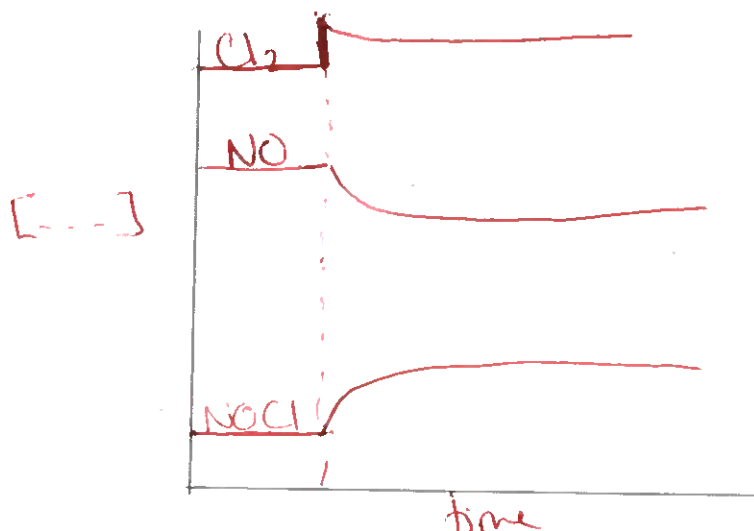
Why? *rxn rates increase when conc ↑ then slow down as reactant gets used.*

- The molar ratios of the reactants and products are accounted for in the graphs

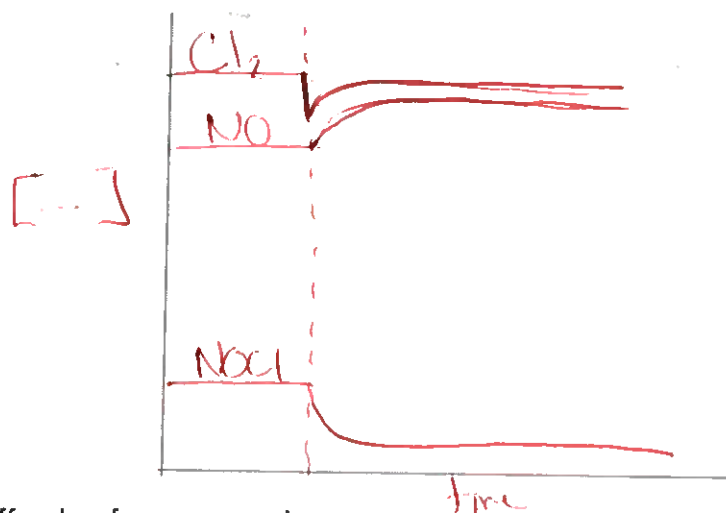
2. The effect of concentration changes



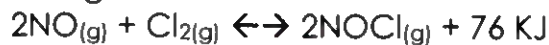
Sketch a graph of concentration vs. time for the equilibrium when Cl_2 is **added**.



Sketch a graph of concentration vs. time for the equilibrium when Cl_2 is **removed**.



3. The effects of pressure changes



Sketch a graph of concentration vs. time for the equilibrium when pressure is increased. Note this is the same as if volume is decreased.

