| 1 | |
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| 0 1 | Methane is reacted with steam to produce hydrogen and carbon monoxide. The forward reaction is endothermic. |
| 0 1 . 1 | $CH_4(g) + H_2O(g) \implies CO(g) + 3 H_2(g)$ What would happen to the amount of products formed, and why, if the temperature was increased? [3 marks] |
| 0 1 . 2 | What would happen to the amount of products formed, and why, if the pressure was increased? [3 marks] |
| 01.3 | What would happen to the amount of products formed, and why, if more steam was added, without altering the pressure? [3 marks] |
| 02 | Yellow chromate ions are in equilibrium with orange dichromate ions. $2 \text{ CrO}_4^{2-}(aq) + 2 \text{ H}^+(aq) \Rightarrow \text{ Cr}_2\text{O}_7^{2-}(aq) + \text{H}_2\text{O}(l)$ yellow orange What would you observe, and why, if acid was added to a yellow solution of chromate ions? [3 marks] |
| | (Total 12 marks) End |