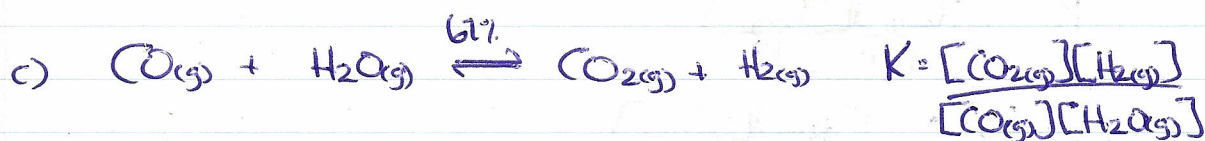
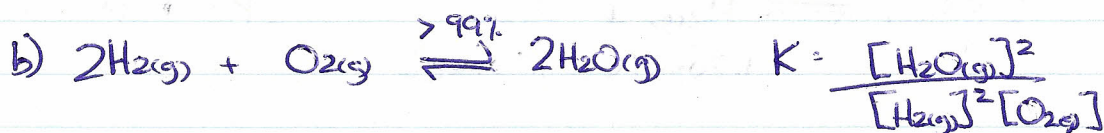
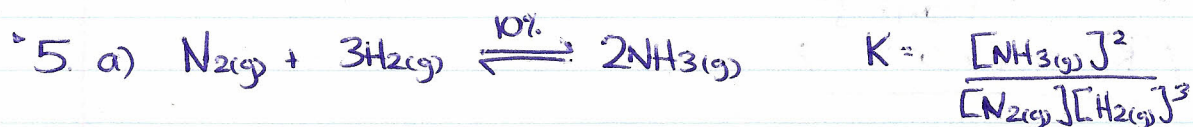


WORKSHEET: CHEMICAL EQUILIBRIUM REVIEW

- *1. Chemical equilibrium \rightarrow two processes (forward and reverse) occurring at the same rate.
- *2. Reaction rates can be increased by:
- 1) Adding a catalyst
 - 2) Increasing the temperature
 - 3) Decreasing the particle size
- *3. Le Chatelier's Principle \rightarrow when a stress is placed on a system, the system will act to relieve the stress and re-achieve equilibrium.
- *4. Changing the volume of a system will result in the opposite change of pressure.
i.e. Decrease volume, increase pressure.
Increase volume, decrease pressure.



- | | |
|--------------------------------------|-------------|
| a) increase temperature | SHIFT LEFT |
| b) decrease pressure | SHIFT LEFT |
| c) increase $[\text{O}_2(\text{g})]$ | SHIFT RIGHT |
| d) add a catalyst | NO CHANGE |