

Name: Key
Blk: _____ Date: _____

Chemistry 12
EQUILIBRIUM Lesson #2

On the given piece of graph paper answer exercises #6+7 pgs 40-41 HEBDEN.
This will be collected at the end of the class for marks.

CHARACTERISTICS OF EQUILIBRIUM

The system that you are investigating is at equilibrium when:

1. The RATE of CONSUMPTION is EQUAL to the RATE of PRODUCTION
2. When the reactants concentration is CONSTANT with time and the products concentration is CONSTANT with time.
NB: the [REACTANTS] ≠ [PRODUCTS]
3. The forward and reverse RATES DO NOT CHANGE as time passes.
4. A closed system that is not in EQUILIBRIUM will tend to move toward a position of EQUILIBRIUM.
5. The FORWARD RATE MUST EQUAL the REVERSE RATE



The rate at which $\text{H}_2 + \text{Br}_2$ react = the rate at which $\text{H}_2 + \text{Br}_2$ are produced.

The rate at which HBr is produced = the rate at which HBr reacts!

6. When the above example is in equilibrium:
1 mole of H_2 and 1 mole of Br_2 react for every 2 moles of HBr that is produced. While 2 moles of HBr reacts for every 1 mole of H_2 and 1 mole of Br_2 that is produced.

SEAT WORK/HOMEWORK: Exercises 8-13 pgs 42-43
PLO's: D3 and D6