CHEM 1032 – Week 7 Questions

1. For the following reaction what happen if it exposed to an open flame?

    $C (s) + CO_2 (g) \longleftrightarrow 2\ CO (g)$ ΔH°_{rxn} 35 kJ/mol

2. For the reaction and conditions below determine the al of the equilibrium concentrations.

    $H_2 (aq) + I_2 (aq) \longleftrightarrow 2\ HI (aq)$ K = 50
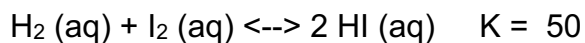
	$[H_2]$	$[I_2]$	$[HI]$
At some point	0.0360	0.0360	0.500
Equilibrium	???	???	???

3. What is the concentration of Cl- in a saturated AgCl solution? K_{sp} is $1.77x10^{-10}$

4. What is the concentration of F- in a saturated CaF_2 solution? K_{sp} is $1.46x10^{-10}$

5. If AgCl solids were added to 0.100 M NaCl and if CaF_2 were added to 0.100 M NaCl, which equilibrium would be more affected?

6. What is the concentration of AgCl in a 0.100 M NaCl solution?