iClicker Quiz

$C(s) + 2Cl_2(g) \longleftrightarrow CCl_4(g) + \text{energy}$

+ C (s) ; + Temperature	=	No change ; Left	because C is solid
Decrease Volume (↑ Pressure)	=	Right	because there are fewer moles of gas on the right
Increase Volume (↓ Pressure)	=	Left	because there are more moles of gas on the left
Introduce Argon (constant P)	=	No change	the partial pressures are just diluted. They're still in the same ratio.

With acids + bases water takes part in the reaction

See slide notes and worksheet for reference

Quiz 2

$K = 1.8 \times 10^{-5} = \dfrac{[CH_3COO^-][H_3O^+]}{[CH_3COOH]}$

Change $\dfrac{[+x][+x]}{[.2-x]} = 1.8 \times 10^{-5}$

Solve quadradict or assume $.2 - x \approx .2$

Safe to approximate when $K < 1 \times 10^{-3}$

Quiz 3

If H_3O^+ is added, $[CH_3COOH]$ will decrease.

Quiz 4

HCl dissociates completely, there is none of it left at equilibrium.

Quiz 5

HCl dissociates completely, all .2M of H^+ goes to forming H_3O^+.

Ionization ≈ Dissociation

Weak acids are important in BioChemistry

Bromophenol blue turns yellow in acids } More intense in strong acids due to higher concentration of ions.
Acids conduct electricity. }

Acid Base Brain Dump

ACIDS

- Donate Protons
- Low pH
- Sour
- Turns litmus red

BASES

- Accepts Protons
- High pH
- Bitter
- Slippery
- Turn litmus blue

See slide notes

The conjugate base of an acid has a lower charge (probably negative)

The conjugate acid of an base has a higher charge (probably positive)