**Iron (III) thiocyanate Equilibrium**

**Fe3+(aq) + SCN- (aq) ↔ FeSCN2+(aq)**

What colour are Iron (III) ions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What colour are SCN- ions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What colour are FeSCN2+ complex ions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What colour is the equilibrium mixture of all of these ions together? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How did we stress the equilibrium?

1) Added more iron (III) ions Stress

Want

Shift

Colour as a result

2) Added more thiocyanate ions Stress

Want

Shift

Colour as a result

3) Added hydroxide ions--what is the real stress? Stress

Want

Shift

Colour as a result

4) Added silver ions--what is the real stress? Stress

Want

Shift

Colour as a result

5) In the video--the reaction is said to have a negative ⧍H--add the heat energy to the

correct side in the BCE above and predict what would happen to colour if the equilibrium were cooled down.