Use the PDF link or video to complete the worksheet:



<http://somup.com/cYhhY3jcmo>

**Cobalt System**



This chemical equation has “\_\_\_\_” on the \_\_\_\_ side of the arrows, meaning that heat is given off or released as a \_\_\_\_. This is an \_\_\_\_thermic reaction.

**Predict what will happen if you add HEAT to the system.**

This reaction is \_\_\_\_thermic (heat is a product). Therefore, adding heat will \_\_\_\_ the system.

To \_\_\_\_ the stress, the reaction will go toward the \_\_\_\_ to \_\_\_\_ the heat.

**Predict what will happen if you click on the COLD.**

This reaction is \_\_\_\_thermic (taking heat away from the product side) and STRESSing the system.

To relieve the stress, the reaction will go toward the \_\_\_\_ to \_\_\_\_ the heat.

**Predict what will happen if you click on the water.**

Adding water (\_\_\_\_) will STRESS the system with too much reactant.

To relieve the stress the reaction will go towards more \_\_\_\_ to remove the \_\_\_\_ water.

**Predict what will happen if you click on the KCl.**

KCl \_\_\_\_ (splits up) into K+ and Cl- ions, making \_\_\_\_ \_\_\_\_ ions available on the product side, and STRESSING the system.

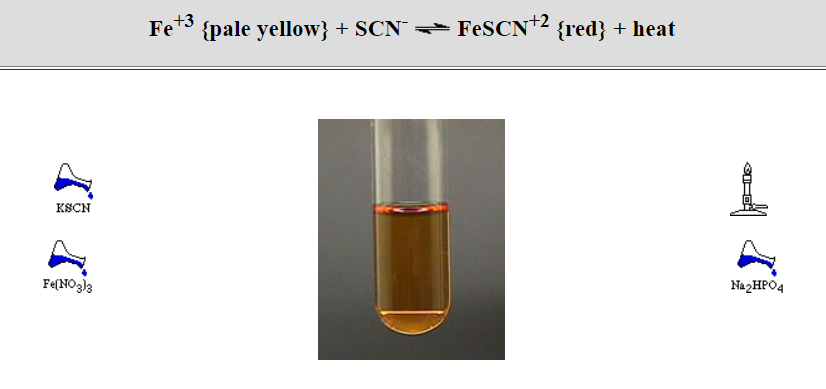
Adding KCl will, therefore, push the reaction towards the \_\_\_\_ to \_\_\_\_ the excess Cl- ions.

**Predict what will happen if you click on the Silver Nitrate.**

Silver Nitrate dissociates (\_\_\_\_ up) into cations/anions. The Silver (Ag+) cations bond with the Cl- ions, \_\_\_\_ them from solution. The STRESS is that now there are \_\_\_\_ \_\_\_\_ Cl- ions on the product side of the reaction.

Adding silver nitrate removes the Cl- ions from the product side. To remove the STRESS, the reaction \_\_\_\_ to make \_\_\_\_ Cl- ions (\_\_\_\_).

**Iron Thiocyanate system**



**Predict what will happen if you add HEAT to the system.**

This reaction is \_\_\_\_thermic (heat is a \_\_\_\_). Therefore, adding heat will push the reaction toward the \_\_\_\_ to \_\_\_\_ the heat.

**Predict what will happen if you click on the KSCN.**

KSCN dissociates (\_\_\_\_ up) into cations/anions. Potassium (K+) cations form and \_\_\_\_ anions also form, meaning there is MORE SCN- \_\_\_\_ in solution. This stresses the system.

To relieve the stress, the reaction will go toward the \_\_\_\_ to remove the \_\_\_\_ SCN- anions.

**Predict what will happen if you click on the Fe(NO3)3.**

Fe(NO3)3 \_\_\_\_ (splits up) into cations/anions. Iron (Fe+3) cations form, meaning there are MORE Fe+3 \_\_\_\_ in solution. This stresses the system.

To relieve the stress, the reaction will go toward the \_\_\_\_ to \_\_\_\_ the excess Fe+3 anions.

**Predict what will happen if you click on the Na2(HPO4).**

Na2(HPO4) dissociates (splits up) into \_\_\_\_/\_\_\_\_. HPO4 bonds with the Iron (Fe+3) cations, removing the (Fe+3) cations from the reactant side. This stresses the system.

To relieve the stress, the reaction will go toward the \_\_\_\_ to \_\_\_\_ the Fe+3 anions.

GAS Pressure

How does pressure affect a solid?

How does pressure affect a liquid?

How does pressure affect a gas?