

Name: _____ SB#: _____

All work is to be done individually. You can use textbooks, notes, and resources on the internet.

1. Write a net ionic equation for the precipitation reaction you expect to occur in Part A of the experiment.
2. What experimental variable are you changing in Part A when you expose your set of three test tubes to different conditions?
3. What color is the chromate ion (formula CrO_4^{2-})?
4. What color is the dichromate ion (formula $\text{Cr}_2\text{O}_7^{2-}$)?
5. What variable are you changing in Part B of the experiment?
6. What color is $\text{Co}(\text{H}_2\text{O})_6^{2+}$?
7. What color is CoCl_4^{2-} ?
8. Does $\text{Co}(\text{H}_2\text{O})_6^{2+}(\text{aq})$ mean the same thing as $\text{Co}^{2+}(\text{aq})$? If not, how are they different?
9. What is the “common-ion effect”?