

Name _____ Section _____ TA _____

*This homework is due at the start of lab during the week of April 17 - 19. You may use books, notes, and the Internet, but **you may not seek help from anybody, including friends or e-mail contacts**. If you have questions about this homework, direct them to Dr. Anderson (but he will not help you solve the problems).*

1. Given the following experimental data:

2.1125 g 2.3028 g 2.0999 g 2.2476 g 2.1987 g

How would you report the average and standard deviation?

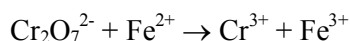
How many significant digits are there in your average?

How many significant digits are there in your standard deviation?

2. Write the net ionic equation for the reaction of aqueous potassium phosphate with aqueous silver nitrate. Include the physical state of each species in your equation.

3. What volume of 0.25 M HNO₃ (in ml) is required to neutralize 1.0000 grams of Ba(OH)₂? Show your work and report your answer to the correct number of significant digits.

4. Balance the following redox reaction in acidic solution. Show your work.



5. Using your balanced equation from problem 4, how many grams of K₂Cr₂O₇ would be required to completely oxidize 100 grams of dissolved FeCl₂? Show your work and report your answer to the correct number of significant digits.