Analysis of Ag Pre-Lab Feedback Rubric

Category	General	Pts	Specific	Self-Assessment

Summary	Summary is brief, does not have any procedure, explains the experiment, goal of experiment, includes any/all reactions that are part of the experiment	2	• Using Gravimetric analysis, a Sterling Silver alloy will be dissolved, precipitated, and filtered to determine content
			   ○ $AgCu + 3HNO_3 \rightarrow AgNO_3 + Cu(NO_3)_2 + 3H^+$
			   ○ $AgNO_3 + NaCl \rightarrow AgCl + NaNO_3$	

Purpose	Relevant, thoughtful, Complete Sentences, taken from the lab sheet (if given). Clear, concise, to the point and direct. Not part of the objectives. Does not contain any objectives. Include any/all reactions that are part of the experiment. What are you trying to do in the experiment?	2	The purpose is the analysis of Ag content in a sterling silver alloy.	
Objectives	Not part of the procedure, does not contain or match the purpose in any way, taken from the lab sheet (if given), listed, not explained, align with lab techniques of the experiment. Should not contain any reactions. Reactions are not the objective. [**Ex**. For the Analysis of Ag Experiment, the objectives are: Redox, Gravimetric Analysis, and Precipitation – the 3 are to be listed, that's it, nothing more]	2	• Redox (oxidation-reduction) • Precipitation • Gravimetric Analysis • Filtration	
Background - Reactions	All pertinent reactions occurring in the experiment including: states, balanced, subscripts, superscripts. Should be complete reaction(s) unless specified otherwise	2	• $AgCu + 3HNO_3 \rightarrow AgNO_3 + Cu(NO_3)_2 + 3H^+$ • $AgNO_3 + NaCl \rightarrow AgCl + NaNO_3$	
Background – Essential Question	Essential question (in the form of a question) the experiment is trying to solve. Turn your purpose into a question. "HOW," "DOES," "CAN," questions not included. The question should not ask if the lab will prove the lab. The point of the experiment is not to see the experiment do its thing, we know it will, that is why we are doing the experiment.	2	What is the silver content, mass, and percent silver in a Sterling silver sample? (This is not the only question)	

Background – Chemistry Topics	Chemistry topics: all chemistry topics that are part of the experiment, underlined and **explained**. Does not include vocabulary words, only topics. Did not put many terms down in the hopes to get them all. Objectives must be included here as they are not explained in the Objectives section.	**4**	*Each topic must be explained and underlined per directions • Redox • Precipitation Reaction • Gravimetric Analysis • Filtration • Stoichiometry	
Procedure Flow Chart	A good mix of words and images, pics, steps rewritten in your own words, multiple steps are not combined into single steps, the flow chart is created so that anyone could use it to conduct the experiment. Completed on paper, image inserted, **NAME** in **INK** is included in the image. mage is clear and legible - check your image before you insert	**3**	Clear, concise, legible, good mix of words (rewritten in your own words) and images/drawings. Anyone can use the flow chart to carry out the experiment. Name in INK on the image that is inserted	

Reagents Table	All reactant chemicals are included with EACH having name (loss of 3 pts if missing chemicals), formula, molar mass, all physical properties (MP, BP, D), state of chemical used in experiment, DETAILED safety concerns. Intermediate Table has same parts as the Reagent table EXCEPT only products of reactions that BECOME reagents in later steps belong in this table. NO PRODUCTS EVER GO IN EITHER TABLE. Does not have extra chemicals included that are not part of the experiment.	**10**	• Must include:
			   o HNO_3, NaCl, Sterling Silver (Agentium Sterling)
			   o Correct State of Matter used during the experiment
			   o All other relevant data included
			   o Significant detail for Safety concerns
			• Intermediate table:
			   o $AgNO_3$	

Pre-Lab Questions	Completed on paper, image inserted, NAME in INK is included in the image. All work shown for any calculations, final numerical answers in a 2D box. Image is clear and legible - check your image before you insert	**3**	• All pre-lab questions answered with thought, detail, with relevant information. • Name on the image inserted in INK	