Polymeric Nanoparticle Drug Delivery Lab Report Rubric

Teacher Name: **J Price**

Student Name: _____

CATEGORY	4	3	2	1
Variables	Identified and clearly defined which variables were going to be changed (independent variables) and which were going to be measured (dependent variables).	Identified which variables were going to be changed (independent variables) and which were going to be measured (dependent variables). Some feedback was needed to clearly define the variables.	With adult help, identified and clearly defined which variables were going to be changed (independent variables) and which were going to be measured (dependent variables).	Adult help needed to identify and define almost all the variables.
Hypothesis Development	Independently developed an hypothesis well-substantiated by a literature review and observation of similar phenomena.	Independently developed a hypothesis somewhat substantiated by a literature review and observation of similar phenomena.	Independently developed an hypothesis somewhat substantiated by a literature review or observation of similar phenomena.	Needed adult assistance to develop an hypothesis or to do a basic literature review.
Descripton of Procedure	Procedures were outlined in a step-by-step fashion that could be followed by anyone without additional explanations. No adult help was needed to accomplish this.	Procedures were outlined in a step-by-step fashion that could be followed by anyone without additional explanations. Some adult help was needed to accomplish this.	Procedures were outlined in a step-by-step fashion, but had 1 or 2 gaps that require explanation even after adult feedback had been given.	Procedures that were outlined were seriously incomplete or not sequential, even after adult feedback had been given.
Data Collection	Both quantitative and qualitative data was collected. Qualitative data was very descriptive.	Both quantitative and qualitative data was collected. Qualitative data was not descriptive enough.	Only one type of data was collected (quantitative or qualitative)	Data was not collected properly and adult assistance was needed to clearly summarize what was discovered.
Graph	Graph had a function and clearly served to illustrate some aspect of the experiment. Graph is neat and correctly labeled.	Graph had a function and served to illustrate some aspect of the experiment. Graph is fairly neat and correctly labeled.	The graph seemed incomplete or chaotic with no clear plan. Many labels were missing or incorrect.	The graph is missing.
Conclusion/ Summary	Student provided a detailed conclusion clearly based on the data and related to the hypothesis statement.	Student provided a somewhat detailed conclusion clearly based on the data and related to the hypothesis statement.	Student provided a conclusion with some reference to the data and the hypothesis statement(s).	No conclusion was apparent OR important details were overlooked.

<u>Final grade:</u>

A range 24-22,   B range 21-18,   C range 17-13,   D range 12-8,   F <8