



RUBRIC FOR EVALUATING PROPOSED EXPERIMENT

	Not demonstrated	Inadequate	Needs improvement	Demonstrated
Identifies model or system to be investigated	No model or system is mentioned.	The description of the model or system to be investigated is unclear or inaccurate.	The description of the model or system is incomplete.	The model or system to be investigated is clearly stated.
Describes how this model or system is related to gravity	No description	Inaccurately attributes gravity to the system	Although gravity is involved in the model, the description does not properly attribute it	Clearly describes the role of gravity within the system
Designs an experiment that investigates the model or system	The experiment does not investigate the model or system.	The experiment may not yield appropriate data.	Important aspects of the model or system will not be observable.	The experiment addresses meaningful patterns to the investigation of the model or system.
Identifies relevant observations to be measured and notes independent and dependent variables	The observations are omitted or not relevant.	Only some of observations are relevant.	The observations are relevant. However, independent and dependent variables are not identified.	The observations are relevant and independent and dependent variables are identified.
Describes how to conduct experiment	A fundamental step or component is omitted	While accurate, the procedure is not described in a replicable manner	The procedure could be open to misinterpretation	The procedure is clearly described.
Describes what is to be observed or measured	No description is mentioned.	A description is incomplete, e.g. it may refer to observations that are not exposed by experimental design.	A description is complete, but contains observations which are not relevant to hypothesis.	Clearly describes what happens in the experiments both verbally and by means of other representations.
Describes how observations and measurements will inform the model	No attempt is made to describe interpretations.	Observations and measurements are not connected to the underlying model or system.	Outcomes are related to model but the connections are not clearly described.	The description indicates clear interpretations for the model or system.



RUBRIC FOR EVALUATING STUDENT WORK

	Poor	Unsatisfactory	Satisfactory	Excels
Participation	Does not focus on task and allows others to do the work	Must be asked to participate. Only participates some of the time	Is on task and works well within the group	Takes a leadership role and is helpful to others while allowing others to participate
Respect and Responsibility	Does not respect others time: misses meetings or is frequently late. Does not complete assigned tasks	Misses deadlines and is late to group meetings	Respectful of other's time and completes most assigned tasks on time	Always on time with meetings and assignments
Discussions	Either does not listen or is not respectful to others while they are speaking	Has issues listening and often tries to dominate the conversation	Listens well and participates actively in answering and posing questions	Helps to effectively lead conversations by including others actively
Research	Fails to provide new information or does not share results	Does some research but only contributes when asked	Finds useful information and contributes to collaborative resources	Serves as a leader in managing the resources and distributing them to the team
Group Dynamics	Does not compromise to achieve common goal	Occasionally helps the group achieve its goal	Usually does what is in the best interest of the group	Serves as a leader in managing individual ideas for the common goal
Attitude	Is often negative and unsupportive of others	Occasionally is publicly critical of the task(s) or the work of other members of the group.	Typically demonstrates a positive attitude	Always has a positive attitude about task at hand