

JUDGES' RUBRIC
BNL MagLev Contest Student Design Portfolio
Speed Categories

Criteria	4	3	2	1
Investigation	Thorough research. 4 or more questions and answers.	Sufficient research with 2 or 3 questions and answers.	Little research with 1 answered question.	No background research or questions.
Brainstorming for Solutions	3 or more sketches on attached paper. Written design ideas, materials.	2 design sketches with written ideas.	1 sketch with a few written ideas.	No design sketches or ideas.
Optimum Design	Thoroughly describes vehicle design choice and lists several reasons to support their decision.	Describes design choice and gives a few reasons for their decision.	Describes design choice and gives 1 reason.	No choice listed.
Testing and Analysis	Testing was performed many times, problems were identified and logical changes were made to improve the vehicle. Performance chart or graph is included.	Testing was performed a few times, at least 1 problem was identified and an improvement was made. Performance chart or graph is included.	Testing was minimal. No chart or graph is included.	No testing was done.
Final Design	Improvements to the initial design were made, if needed, and results were listed with detailed descriptions.	Improvements were made, if needed. Results were listed.	Improvements were made, if needed, no reasons listed.	No improvements or results were listed.
Evaluation	Detailed description/sketch of the final vehicle.	Description/ sketch of vehicle included.	Description/sketch is minimal.	No description or sketch is included.