

1. As a group, choose a problem from the Hi-School Mathematics Contest in Modeling. (Google HiMCM) and click on “Previous Contests” on the left.)
2. Due Monday 10/2 – At least 2 pages of well-written and organized work that demonstrates at least two hours’ worth of work on the problem. If you work as a group/subgroup, you can submit a group/subgroup paper; otherwise each person must submit their own. If you meet as a group/subgroup over the weekend, you must make an effort to include everyone in the meeting.
3. You will have time in class next week to discuss your problem.
4. Due Friday 10/6
 - a. (Group) The 1-2-page report that accompanies the problem (as specified by the problem description)
 - b. (Group) A 15-25 minute presentation to the class that includes a clear explanation of the following:
 - i. Your problem
 - ii. Your model – What is it? Why did you choose it? What was the most important factor? etc.
 - iii. How you verified/tested/refined your model
 - iv. Limitations of your model
 - v. Additional information needed to improve your model
 - vi. A summary of your 1-2 page report
 - vii. The top 3 CCSSM Standards for Mathematical Practice you used in this project and how they were used
5. Due Monday 10/9
 - a. (Individual) A 1-2 page reflection of how your group worked. Include the following (“nothing” is not an acceptable answer for any of these components)
 - i. Successes (what went well in your group)
 - ii. Difficulties (what were the difficult aspects of working through this problem in a group)
 - iii. Improvements
 1. What could the teacher do to help the group work better together?
 2. What could your group have done to work better together?

The CCSSM High School: Modeling domain says this about modeling:

The basic modeling cycle is summarized in the diagram. It involves (1) identifying variables in the situation and selecting those that represent essential features, (2) formulating a model by creating and selecting geometric, graphical, tabular, algebraic, or statistical representations that describe relationships between the variables, (3) analyzing and performing operations on these relationships to draw conclusions, (4) interpreting the results of the mathematics in terms of the original situation, (5) validating the conclusions by comparing them with the situation, and then either improving the model or, if it is acceptable, (6) reporting on the conclusions and the reasoning behind them.