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2.007 Design and Manufacturing I  
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## Milestone #1 – Final Strategy

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**DUE DATE:** Tuesday, 19 February

### **DESCRIPTION:**

The final strategy should be documented with about 4-6 pages in your lab notebook. These pages may include the below listed items. These items need not be separate and you may not need all seven under your particular circumstances:

1. Overall description – Explain, using words and graphics, what your strategy entails.
2. FRDPARRC sheet – Decompose the strategy into various functional requirements and lay out an analysis of each.
3. Pictures of sketch models – If you have made simple physical models to support your analysis, please get them into your lab notebook, perhaps by taking photos.
4. Sketches – A clear drawing will help communicate your ideas.
5. Scoring calculation – Rough estimates of how your machine performs according to the scoring formula.
6. Appropriate analysis – Demonstrate that you can bring material from physics and solid mechanics to bear in your design. This is particularly important for your education.
7. Description of bench level experiments – Show that you can identify key problems and resolve them with physical demonstrations and measurements.

### **PRESENTATION:**

To share and assess the results of this milestone, you will EACH do a short oral presentation with some staff, UAs, and your PREP group as the audience. Plan on 5 minutes to describe your work and 5 minutes of questions and answers. You can use any format you prefer – powerpoint, chalk board, or simply gathering the audience around your notebook itself. The presentation and notebook will be graded right at that time. The schedule is:

1:15 – Liz, Stephanie, Jake, and Ravi

2:15 – Alice, Katrina, Eric, Mike

3:15 – Deke, Nicolas, Theresa

### **OTHER ACTIVITY:**

The other principal goal of week #3 lab is to begin building a simple vehicle. During the time you're not assigned to present, you should put some time into that. You are also welcome to attend other PREP groups' presentations if you like.