

Sophomore Clinic I  
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## **Selected comments on first draft of rocket design report**

### Definition of the design problem

Since this project does not address a real “problem” that needs to be solved, you might find it easier to begin by stating the goal of the project. Treat the project goal as **real**. Don’t discuss the learning goals of the project as an assignment; discuss the design project goals.

Clearly distinguish between parameters and constraints and how they are related. Parameters are variables; constraints are limitations on how you can vary the parameters. It makes more sense to identify the parameters first, and then the constraints.

Indicate the nature of the one parameter defining the family of fins—it’s not enough to say the fin must belong to a certain family.

Don’t forget to mention the constraints on materials as well as the constraints on design specs.

Write this section in the past tense; when you submit the final report, the project is done and the “problem” has been solved.

This section should not discuss your particular approach or solution—since all teams were given the same design problem, anything you say here should be applicable to all teams.

### Technical description

Follow the description outline and remember you are describing the object so that it would be possible for someone to draw it.

Do not include information about how or why the rocket is constructed as it is—just describe the object.

Do not just list the materials. Incorporate the materials into the description of the relevant parts.

Although the technical specs for duct tape do not need to be given, some other material specs are relevant.

Remember to explain the function of the parts—either as you describe each part or when you explain the cycle of operation.

Eventually, the description will also include the performance results—how the rocket performed at its final launch.

Coca-Cola, Coke, etc. are registered trademarks—they should be capitalized.