

Lesson 5 Set A Goal

Part 2 Design Criteria and Goal Setting for Engineering Projects

Engineering projects do not usually need an hypothesis. Engineers try to create new things and test out new ideas. They start with a goal and come up with the design and testing criteria to meet the goal.

Goals are what you want to accomplish with your project. A goal is the end product and the answer to your question.

Criteria are the guidelines, standards, and requirements you decide upon to control the design and testing in a fair and equal way.

Here is an example:

Billy Bass wants to test paper airplanes for distance flying.

- 1) What problem is Billy trying to solve?
- 2) What do you think his engineering **goal** should be?
- 3) What **criteria** should Billy Bass set up for building his planes?
- 4) What **criteria** should Billy Bass set up for testing his planes?
- 5) How will Billy Bass **test** his paper airplanes to see if they meet the goal?



Try setting your goal and developing your criteria here:

- What is the **problem or need** or your **question**?
- What engineering **goal** do you have in mind? What is it you want to accomplish?
- What **criteria** will you use for the materials and conditions of your idea?
- What **criteria** will you use for the testing of your idea?
- Using your criteria, what **steps** will you use to meet your goal?

Now your next steps should be much clearer. Write your answers to these questions into your log book.