Transcript: How to Do a Science Fair Project: Overview

Ota Lutz: Here at NASA's Jet Propulsion Laboratory, we conduct scientific investigations and engage in the engineering design process as part of our everyday operations. You are possibly watching this video today because you are interested in entering a science fair. Science fair projects can address traditional science questions or they can be engineering design problems. The important thing to remember is that this is not just a project, but a research investigation during which you will answer an actual testable question.

In the next five videos we will show you the steps involved in creating science fair projects.

The first step is to get your idea and do some research. This can be one of the most difficult things to do, coming up with something unique, but we'll help you a bit with that.

Next, ask a testable question also known as forming a hypothesis. This can be a little bit difficult to do, but with a little bit of practice, you can hone your idea into a question you can research.

After you get your testable question, the third thing you need to do is design your procedure so that you're testing only one variable and then conduct your experiment. Be sure to document your process and keep a neat log of your data.

Step 4: Examine your results and compare them to your hypothesis. Did you prove or disprove your hypothesis? Were there other contributing factors to your results that you didn't anticipate at first?

Your display should include a clear statement of your hypothesis and elements of your investigation from your logbook such as charts, graphs and images. Remember to keep it clear, keep it simple and keep it complete.

If we use any complex terms, we'll explain what they mean. Whenever you engage in any sort of science or engineering project be sure to follow safety procedures so no one gets hurt.

The next five videos will give you more details on each of these five important steps of creating a fantastic science fair project.