

Science Project Proposal Guidelines

The project proposal is essentially the submission of your idea for approval. You need to research your idea **before** you submit it to make sure it is **possible** and that it is **scientifically sound**. Your proposal must be typed in to the proposal template posted on my website and must include the following information. Late proposals will receive half credit. You will present your idea to the class and turn in your typed up proposal to Mr. Bausback after you present it to the class.

Put your name or both names (if you have a partner) at the top of your sheet. Remember, you may not change partners or your “solo” status after this date.

1. **Question:** State your question. It must be in the form of:

“How does _____ affect _____?”

The blanks need to be very specific and measurable. For example, “How does pollution affect humans?” is vague and not measurable. A modified version, such as “How does the concentration of dioxin in water affect the number of eggs produced by water snails?” is much better. It has one variable (the dioxin concentration) and a measurable effect (the number of eggs laid). This is graded on how specific and measurable your question is.

2. **Experiment:** Describe how you will set up your experiment and then answer these questions. Be very specific.

1. What is the one factor you will vary?
2. What measurements will you take?
3. What factors will be held constant?
4. What will be in your control group?

3. **Relevance & Value:** Describe how this project has value and is relevant in our world. In the example above, dioxin is a pollutant present in many food related products, such as paper milk cartons. If it causes reproductive harm, this is highly relevant in our world and has value. An example of an irrelevant project could be something like, “How do various household chemicals affect plant growth?” No one is going to be dumping windex, bleach, and pool acid in their houseplants, so this project has no valuable and relevant outcome.

4. **Mentor & Research:** Do you have a scientist who has agreed to be your mentor? What are your mentor's name, title, e-mail address, and phone number? How much contact have you had (be specific)? Describe what you have learned about your project from your mentor. Describe the other research you have done relating to your projects theme and question.