



Independent Research Project Proposal

My independent research project proposal is due on: _____

Your independent research project proposal is an explanation of the investigation or engineering project you have chosen to work on through the year and present to the class in the spring. You will be writing a formal proposal and submitting it to your science teacher for approval **BEFORE** you begin working on your independent research project. The proposal will need to be typed and turned in using gapps or via an e-mail to your teacher. This proposal must include the following sections:

1. The Question (2 pts)

State the question that you wish to investigate. Make sure it is appropriate for an 8th grade independent research project.

2. Scientific Knowledge (5 pts)

This section will include the information you gathered about the scientific principles related to your topic. The goal is to explain the science behind what you are planning to do. Information from this section will help you to write your hypothesis and set up your experiment. The scientific principles should be written in paragraph form. You must include all of the sources that you used in this section.

3. Prediction (3 pts)

Stated as an "If...then..." statement. The prediction should also include reasoning that is found in the scientific knowledge section of the proposal.

4. Investigation Plan

• **Variables (4 pts)**

In this section you must identify the dependent and independent variables in your experiment. Also include a list of which variables you will be keeping constant during your investigation.

• **Materials List and Procedure (6 pts)**

This section must include a complete list of all materials and a step-by-step procedure that you intend to follow. The procedure should be written as a numbered list.

5. Application (2 pts)

This section must explain the connection between your project and the real world. Tell how or why someone might use the information you learn from this experiment in their everyday life. Answer the question "How will I (or someone else) use what I have learned?"

6. Feasibility Statement (5 pts)

This section must explain how you will accomplish your plan. You must answer the following questions:

How will you obtain the materials?

What is the projected cost?

What is the time line you plan to follow?

Note: Some materials may be available from the science department. For instance, if you need to borrow a graduated cylinder or if you would like to bring plants to school to put under the grow lights, you may speak with your science teacher.

7. Parent Signature

Because the majority of the work for this project will be done outside of class and because some projects may involve the purchase of materials, it is imperative that your parents or guardians are aware of your plan. Please discuss your proposal with the adults that will be supporting you throughout this project and sign the attached consent form.

Independent Research Project Proposal Parent Signature Form

Parents/Guardians and Students,

Please review the formal proposal together, paying special attention to the timeline and the materials that will be needed. Then, sign and return this form to your science teacher with your proposal. Thank you.

Student Name

Student Signature

Date

Parent/Guardian Name

Parent/Guardian Signature

Date