WOOD BUFFALO REGIONAL SCIENCE FAIR

MY SCIENCE FAIR PROJECT

LOG BOOK

Student Name(s):

WOOD BUFFALO REGIONAL SCIENCE FAIR

MY SCIENCE FAIR PROJECT

TITLE: _____

Science Fair Category _____

Topic _____

Key Words to research:

_____

_____

_____

_____

Names of reference books I might use:

_____

_____

_____

_____

Supplies that I will need to get:

[ ] _____ [ ] _____

[ ] _____ [ ] _____

[ ] _____ [ ] _____

[ ] _____ [ ] _____

Tips for Completing the Work Without Significant Stress:

Start early. Plan to work on the project every day and every week; make a schedule for your work and stick to it. When the research is done, and the experiment has been completed, remember that the project must still be presented to a wider audience. Take time in completing the display board first. Then be sure to practice describing your project to your family and friends; listen to their questions to find gaps in your presentation and/or display and make corrections. Remember that you know the project best and you need to effectively share with your audience what you did and observed.

On the day of the Science Fair, dress for success. Along with your display board and materials, some students also bring a table covering to add colour and interest to their display. Remember that a science fair is not a beauty pageant; simple display boards can be very effective, and the project will be evaluated mainly on what you have done and what you have learned. However, the creativity of a project will be rated more favourably by judges if time, care, and an effective use of design are obvious. Use lettering for the headings that can be read from five feet away. Use one or two colours to attract attention to certain features of your project which you feel are important. You may want to talk to your art teacher for advice on your layout. Use a large font size for any written work displayed on the backboard. If your project is accompanied by a written report, type it if possible, and present it as professionally as possible, with a cover and an inviting layout. The first sentence of your report should grab the attention of the reader so that they will want to know more.

You may wish to take a book with you the day of the fair in case the wait for judges is long. Be on the lookout for judges, and stand up when they approach you. Introduce yourself, offer to shake hands, look them in the eye, and say firmly to yourself, "I can do this, and my project is really great!" Present what you have to say with animation; allow your interest to show!

Tips for Presenting the Project in Original and Creative Ways (Making the Display):

Science fair display boards can be purchased or created from plain brown cardboard sheets, foam core, lightweight plywood, or pegboard. Most students purchase a cardboard or foam core board from a store or their teacher at school. These are available in different colours and have two vertical seams that allow them to stand open on a table. There are size stipulations that must be followed; be sure to consult the regulations on the WBRSF and CWSF websites. Sometimes students add a bridge to the top of the display to both hold the board open and promote their project.

The display board allows for creative expression and showcases your artistic talent; the older the student, the more professional the display should be. Avoid clutter. Use at most two or three colours. Label all data tables, charts, graphs, and photographs you use. Artwork, diagrams, and other elements of the display should be your own work. Careful planning and a logical layout will result in an attractive display.

Tips for Demonstrating the Sophistication of the Project and Your Depth of Knowledge:

When students begin a science fair project, they may have some idea of how the experiment will turn out, and they may have some background knowledge of the topic. A superior project is one in which the student has done extensive research and has used the scientific process carefully and effectively. Judges will look for creativity and originality in topic selection, the approach taken, and the format in which the material is presented. Remember that you know your own project better than anyone else and you should be able to explain what you did, what you learned, and what you plan to do next to anyone who asks!

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What Makes A Great Science Project Logbook?

Whether you are a research scientist or a first time science fair student, a logbook is a crucial part of any research project. It is a detailed account of every phase of your project, from the initial brainstorming to the final research report. The logbook is evidence that certain activities occurred at specific times.

Following the pointers below will help keep you organized. It's a great opportunity to show off all of your hard work and impress the science fair judges!

1. **Label your logbook** with your name, phone number, email address, and teacher's name in a prominent location.

2. **Always date every entry**, just like a journal. Entries should be brief and concise. Full sentences are not required.

3. **Don't worry too much about neatness**. Your logbook should be organized, but keep in mind that this is a personal record of your work. Think of the logbook as your "Diary" for the science fair. It's not just for recording data during the experimental phase of your project and it's not just for your teacher.

4. **The logbook should be used during all phases of your project** for jotting down ideas or thoughts for a project, phone numbers, contacts or sources and prices of supplies, book references, diagrams, graphs, figures, charts, sketches, or calculations. Log entries should include your brainstorming, calculations, library/internet searches, phone calls, interviews, meetings with mentors or advisors, notes from tours of laboratories, research facilities and other related activities. Remember that the logbook documents everything you did and should be a permanent record of all the activities associated with your project.

5. **Use the logbook regularly and write down everything**, even if it seems insignificant; it could later be extremely useful. For example, you may find yourself frantically searching for the title of a crucial reference the night before the fair. Make sure that you describe things completely, so that when you read your notes weeks or months later you will be able to accurately reconstruct your thoughts and your work.

6. **Glue, staple or tape any loose papers into your logbook**, such as photocopies of important items. Loose papers look messy and tend to fall out and go missing. If you

have several pages to include you may want to download and print off your own version of the logbook and organize all of these pages into a binder along with your own table of contents.

7. **Organize your logbook**. If you have a large amount of data to organize, make a table of contents, an index, and create tabs for different sections within your logbook. This helps keep you organized for different activities. For example, have a data collection section, a section with contacts, sources, etc. and a section of schedule deadlines.

8. **Include a reflections section in your logbook.** For example, what, if anything would I do differently next time? What part of the experiment could be changed to improve the experimental procedure?

9. **Always include any changes made to procedures**, as well as mishaps, failures, or mistakes. As human beings, all of us make mistakes! (e.g. *"1/4/05 my cat dug up the soil in my pots and ate 4 of my 12 plants. I will have to replant everything! I need to protect my plants from the silly cat. Maybe I should try putting a screen around the pots or keep the cat outside!")*

10. **Include any and all observations made during your experiment.** In other words, record ALL data directly in your logbook. If this is not possible, then add photocopied pages of data to your logbook.

Remember, keeping up a great logbook throughout the entire duration of the science project really pays off later! Not only will a nicely maintained logbook impress your teacher and the judges at the fair, it will also help you stay out of trouble later when you need to look back and provide details of what you did.

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Student Log Booklet

Project Title: _____

This should be in question form. (i.e. What objects are attracted by magnets?)

Hypothesis: This is an "educated guess" or a possible answer to your question.

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List of Variables: THE VARIABLE is the one factor you wish to change (or use in different amounts) in the experiment. Everything else is controlled. In a controlled experiment everything remains the same for all experimental treatments except for the variable you are testing.

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Materials: List the things you used to do your experiment.

Procedure: List step by step what you did to test your hypothesis.

Results: Outline what happened when you tested your hypothesis. You should do your testing at least 5 times to make sure your results are valid. Graphs, charts, tables, photographs, or other visual aids may be used to present the results.

Date	*Activity*	*Outcome*

Date	***Activity***	***Outcome***

Date	***Activity***	***Outcome***

Date	***Activity***	***Outcome***

Date	***Activity***	***Outcome***

Conclusions: What did you show or find out? Was your hypothesis correct? Compare your initial hypothesis to your actual results. Interpret your results and explain what process produced the results you observed. How might you improve your project?

Bibliography: List all the sources of information you used in your report (books, encyclopedias, journal articles and websites for instance). Format your list as it would appear in a scientific article or book.

Notes:

Notes: