

Please read this form and the instructions carefully.
Return this completed form to your teacher by *Thursday, February 14th, 2019.*

Buffalo Elementary School Science Fair Project Application- Page 1 of 2

Name _____ Date _____

Teacher _____ Grade _____

Email Address _____

Best Contact Phone Number _____

If you are a **fifth grader**, did you participate in the Buffalo Science Fair when you were in third grade?
_____ YES _____ NO

If you are a **fifth grader**, did you participate in the Buffalo Science Fair when you were in fourth grade? _____ YES _____ NO

PROJECT CATEGORY (circle one)

Biology Chemistry Physics Earth/Space Science Human Anatomy/Physiology Zoology
Engineering Consumer Products/Food Science Botany Mathematics/Computer Science

PROJECT TYPE (check one)

_____ **Experimental** – For **3rd through 5th graders**. This type of project uses the scientific method: forming a hypothesis (question) about something the student does not know the answer to, doing an actual scientific experiment, making observations, collecting data, comparing it to the original hypothesis and reaching conclusions. This type of project can also be used for designing and engineering a practical solution.

_____ **Demonstration** - For **3rd and 4th graders only**. This type of project demonstrates a scientific principle in a show and tell format. The student knows what is going to happen when he or she begins. This includes models, collections, posters, and displays. It may be biological in nature (involving living things such as insects, birds, food, people, etc.) or physical in nature (involving things not living such as chemicals, stars, rocks, weather, etc.). If you are doing a demonstration type project, please **use the word “*Demonstration*” in your title or subtitle**. An example title would be, “Winter Star Constellations - A Demonstration”.
You will not be actively demonstrating the project for the judges.

PLEASE NOTE:

- The following are **not permitted**: **No distribution of food to students as they view projects**
 - **Neither your name nor a picture of your face may appear on the display board or report. Students will not be present during the judging process.**
 - **No living animals, dangerous chemicals, or sharp objects are permitted.**
 - **No erupting volcanoes are permitted.**
 - **No active chemical reactions are permitted. No fire hazards.**
- **Projects are to be done individually. No dual-student or team projects will be accepted.**

Project Display Boards and Report Cover will be available for each student.

The boards will be distributed on **Thursday, February 14th from 4-8pm** during Parent -Teacher conferences and will also be available **Friday February 15th morning** during Parent - Teacher conferences and *in the school office after February 15th.*

Buffalo Elementary School Science Fair Project Application- Page 2 of 2

Name _____

Project Title _____

Project Description **Please write a description of the project below: PLEASE PRINT CLEARLY**

_____ _____

Electrical outlet: My project will require an electrical outlet **Yes** ____ **No** ____
The project will be connected to the outlet under supervision.
The use of batteries is encouraged.

Student signature _____

Parent/Guardian signature _____

By signing this document, the student and parent(s) agree that they have read the entire Science Fair application and instructions and agree to use safe practices in designing and performing scientific procedures and experiments.

KEEP: IMPORTANT SCIENCE FAIR INFORMATION (page 1 of 2)

Dear Student and Parents/Guardians,

Thank you for entering the PTO's 28th Annual Buffalo Elementary Science Fair.

Projects will be due on Thursday, March 21, 2019 between 4:15 pm and 6:15 pm to check in and set up. These projects will be on display on **Friday, March 22nd** during the day for students to view and in the evening at **6pm** at which time the student is encouraged to be available to describe their work to others.

Please note that food is not to be distributed to students as they view the projects.

The **Awards Ceremony** will be held on **Friday, March 22nd at 6:30 pm.**

We hope you enjoy the experience and learn more about science in the process.

Remember, have fun with this project!

- **Complete and sign the 2 page Application. Print neatly.**
- **Turn it in to your homeroom teacher by Thursday, February 14th.**
- There are many good resources that can help you learn how to do a science project. In addition to parents, teachers, and other professionals that you know, you should check out your school and local libraries.
- The internet has sites with good information, including Project Guides as listed below.
 - Discovery (Channel) Education: www.sciencefaircentral.com
 - Science Buddies: www.sciencebuddies.org
 - All-Science-Fair Projects: www.all-science-fair-projects.com
- Two types of projects are acceptable, depending upon your grade level:
Demonstration (for grades 3 and 4 only) and an **Experimental project (for grades 3 through 5).**
- **Demonstrations** include making a display of a working model, demonstrating a basic scientific principle (for example, electromagnetism), observing the environment. If you are in 3rd or 4th grade and are doing a demonstration type project (see the application for description), please use the word "*Demonstration*" in your title or subtitle. An example title would be: "Winter Star Constellations - A Demonstration".
- **Experimental projects must follow the Scientific Method (required for 5th grade)**
These include conducting an experiment, inventing something, or collecting and analyzing data (for example: the efficiency of various pulley systems).
The general steps of the **scientific method** are:
(Science Buddies: www.sciencebuddies.org has a more detailed explanation of the scientific method)
 - The **Purpose/Background**: This includes picking the topic you are interested in and explaining why you want to do the study.
 - The **Problem Statement**: This is asking a question to which you want to find the answer.
 - **State Your Hypothesis**: A hypothesis is what you think is going to happen based on scientific principles.
 - Write Your **Procedure**: How are you going to test your hypothesis? Use controls and variables. Include a list of materials that are needed.
 - **Conduct Your Experiment**: Follow your procedure above. What are your observations?
 - **Collect Data**: Collect your information. Graph or chart as needed.
 - **State Results**: This is an explanation of the information or data
 - **Draw Conclusions**: Explain why the results supported all, some or none of your hypothesis.
 - **List Resources**: List books, websites, etc. that you used. Recognize the people that helped you.
- **A written report explaining your project is required** (it may be hand written or typed). Note that the report will be similar to the information on the display, and may include additional information on how you collected your data. Include a project log recording your experimental data if you followed the scientific method. **One page of your report should list any assistance provided by parents, teachers or others.** This report should only be a few pages long.

KEEP: IMPORTANT SCIENCE FAIR INFORMATION (page 2 of 2)

- Tri-fold project display board and report cover will be supplied for each student.
- When your project is due for judging, your display space on the table will be large enough for a standard display board, or a maximum of 32" wide x 15" deep. If you need additional space, please notify one of the Science Fair Coordinators by **March 15th, 2019**. Otherwise, you will be limited to the original space size. You may include equipment or displays that will fit on the table in front of your display board.
- Electricity is available if you mark this on the Application (or by notifying one of the Science Fair Coordinators by March 15th). Projects using electricity must be attended at any time the project is plugged into an electrical outlet. The use of batteries is encouraged.
- The following are not allowed: **Food is not to be distributed to students as they view the projects**
 - **Neither your name nor a picture of your face may appear on the display board or report.**
 - **No living animals, dangerous chemicals, or sharp objects are permitted.**
 - **No erupting volcanoes are permitted.**
 - **No active chemical reactions are permitted. No fire hazards.**
- Projects are to be done individually. No dual-student or team projects will be accepted.
- **What are the Judges Looking For?**
 - On **Thursday, March 21**, bring your display board, report log, and other props to the **Buffalo Elementary School Gym** between **4:15 pm and 6:15 pm** to check in and set up.
 - That evening, judges (scientists, engineers, and science educators not affiliated with Buffalo Elementary School) will evaluate projects on originality, thoroughness, attractiveness, accuracy, and knowledge of the topic related to the student's age level.
 - If you have a Demonstration-type project, you should state the scientific principle and clearly demonstrate this principle. If you have an Experimental-type project, you should show that you used the scientific method. For either, you should demonstrate that you understand your topic through your display board and report.
 - A clear and well-organized presentation is important. Neatness counts. Displays can have hand-printed or typed information, or a mix of these. Photos, hand drawn graphs and computer-generated graphs are all acceptable.
 - Remember, a report is required.
 - Projects are judged by category. The degree of difficulty should match the grade level.
 - Note that it does not matter that your project did not turn out as planned as long as you show what you did, your understanding of the topic and an explanation of why it did not turn out as planned.
- **Awards Ceremony**
 - You and your family may visit the fair beginning at **6:00 pm on Friday, March 22nd evening**. The participating student is encouraged to be available at their project display to describe their work to others.
 - The awards presentation will start at **6:30 pm in the LGI**.
 - **All participants will be recognized at the Awards Ceremony.**
 - **All projects are to be taken home Friday after the Awards Ceremony.**

Please contact us if you have any questions!

2019 Science Fair Coordinators,
Sheela Bhat at sheelaarakali@hotmail.com and
Stephanie Legin at salegin@yahoo.com

Comments from the 2018 Judges~

"We appreciate original/creative projects. If your experiment fails, test it again, and tell us about it! Don't forget to submit your report! We like neat handwritten reports and display boards. We need to know what assistance was given to the student."