



# BULLARD'S 15TH ANNUAL SCHOOL SCIENCE FAIR

2018 CELEBRATION RECEPTION  
THURSDAY, JANUARY 18<sup>TH</sup>, AT 6:00 PM IN THE BULLARD CAFETERIA

## **Science Fair Rules & Guidelines**

Congratulations on deciding to explore the wonderful world of science by completing a Science Fair project! Participating in the science fair will give you a chance to better understand the world around you. Your project can be fun and educational at the same time. Everybody who participates will receive recognition with a Science Fair spirit stick and certificate of participation. Awards for first, second and third place will be given for K-5<sup>th</sup> grades!

All students in K-5<sup>th</sup> grade are encouraged to participate in the Science Fair. Your parents may assist you, but you must be the main scientist. The role of your parents should be to offer encouragement, to help test ideas, and to offer an extra set of hands and eyes. A project does not have to be complicated to be a good science fair project. Pick a topic that interests you! Be creative! Have fun!

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### **Project Drop-off Dates and Times:**

**Grades - K, 1, 2- January 11<sup>th</sup> at 7:15-8:00 AM**

**Grades - 3, 4, 5- January 12<sup>th</sup> at 7:15-8:00 AM**

Projects should be checked in at the **Bullard Media Center** on the mornings listed above. Judging/evaluations will begin promptly at 8:30a.m. The actual materials used in your experiment do not need to be presented, and you will not be present during judging. Late projects will not be judged.

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**Judging:** The categories being judged are stated in the Cobb County scoring rubric that you will find in this informational packet. Three impartial judges, chosen from our community, will evaluate each project.

**Display and Safety Regulations** Please also see the display and safety regulations that are included in this informational packet.

## **Project Requirements for all Grades K-5th**

Experiments must follow the Scientific Method as set out in the following requirements.

Project displays **must** include all of the following:

1. **TITLE:** Present your topic as a question. (For example, “Does taking a shower use less water than taking a bath?”) Your title must be clearly visible on your display board.
2. **PURPOSE:** The purpose explains why you chose your topic and/or what you wanted to learn from the project.
3. **HYPOTHESIS:** The hypothesis is a careful guess or prediction of what you think will happen when conducting your experiment. It should clearly answer the question in your title, be able to be supported or refuted (not supported) by your experiment, and be brief and to the point.
4. **MATERIALS:** This is a “shopping” list of all of the materials that you will need for your experiment, with size and quantities of each. For example, instead of simply listing a jar, you should list precisely what type and quantity of jars you will need. (e.g. three 2 liter, wide-mouthed jars.)
5. **PROCEDURE:** The experimental procedure is a simple list of directions you followed when conducting your experiment. Directions should be detailed and in correct order. (Photographs or drawings are helpful.) To fairly test your hypothesis, the experiment must be controlled carefully. You should change only one thing at a time and observe and record results. Conditions that are deliberately changed in your experiment are called *variables*. For example, if you are testing which type of detergent cleans clothes the best, you should vary only the detergent and keep all other factors constant, or the same. The water you use, the type of stain you try to clean and the method you use to clean should all remain the same throughout the experiment. You may also choose to use a *control* in your experiment. A control has no variables and is useful for comparison with other results. For example, a control in the experiment described above might be plain water with no detergent. A control is useful for deciding just how much of an effect your variables have.
6. **RESULTS:** Here you must include the measured results of your experiment. The results are achieved by counting, measuring a distance or a weight, or recording temperature changes, etc. Scientists use the *metric system* of measuring. **All of the measurements in your results section should be made in, or converted to, metrics.** For example, distances should be in meters rather than yards, weights should be expressed in kilograms instead of pounds, volume should be in liters rather than pints, quarts or gallons, and temperature should be written as Celsius and not Fahrenheit. **Repeat each measurement at least three times.** The more tests or measurements you make, the more valid the result. Use a clear and simple way to present the results (also called the *data*). Using a graph, such as a line graph or bar graph, is a good way to show results on your display. **If you use pictures taken during the experiment, be sure to NOT include pictures of the student scientist’s face. (The face must be blacked out or covered in some way.) If the judges know the student, they will not be able to judge their project resulting in disqualification.**
7. **CONCLUSION:** A concluding statement must either support or not support your hypothesis. Don’t worry if your hypothesis turns out to be wrong; this is very common in scientific research. If your results were inconclusive and didn’t prove anything, explain how you would change the experiment to get better results next time. You may also mention other things that you learned, as well as any problems you ran into, and how you worked the problem out. You may refer to charts, tables, or observations for this section.

8. **ACKNOWLEDGEMENT:** State who helped you, and in what ways (e.g. Parent helped with typing, sister held the thermometer, etc.)

9. **BIBLIOGRAPHY,** List the books, websites, articles, and any other sources you used to research your project. Each reference should include the author's name, title of the book or article, publisher, year published, where published and pages used.

10. **IDENTIFYING INFORMATION:** Your name, the title of your project, your grade, and your teacher must be included on the **BACK** of your project display.

**\*\*\*\*\*If your name is visible on the front, your project will be disqualified\*\*\*\*\***

### **Project Requirements for Displaying your Project**

- **Displays must be able to stand on their own and be no more than 3 feet tall, 3 feet wide, and 2 feet deep when displayed.** Please do not use a flat poster board unless you attach something to make it stand up. Please do not use boards with headers (for titles) attached to the top, unless the total height does not exceed 3 feet. Displays may be one-sided, two-sided (like an open book) or three-sided. Only the front sides of the displays will be viewed by judges.
- Use sturdy materials such as heavy cardboard. Standard-sized tri-fold display boards (36x48) are available in office supply stores for about \$4.00. (Target, Wal-Mart, Michael's, and Hobby Lobby have them, too.)
- The **title and subheadings** must be clearly visible on the display. Lettering for the title should be large and bold.
- Display should be neat and easy to read but feel free to be creative and colorful!
- All extra materials must fit in front of the display.
- Please list your **name, title of project, grade, and teacher** on the **BACK** of your display board.
- **REMINDER: Do not have your name visible on the front of the display.**
- **If you use pictures taken during the experiment, be sure to NOT include pictures of the student scientist's face. (The face must be blacked out or covered in some way.) If the judges know the student, they will not be able to judge their project resulting in disqualification.**

**If you have any questions after reading through the information packet, please contact the Science Fair coordinator or your teacher:**

**Blair Ivey**

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# Additional Tips for Participating in the Science Fair

## Getting Started

**\*A good experiment doesn't have to be expensive, complicated, or overly time consuming.\***

1. Begin by reviewing the Science Fair Rules and Guidelines for participation (on the Bullard Web site, under "Quick Links"). Read the rules carefully to prevent disqualification. Advanced registration is not required.
2. Start by asking questions about everything around you. That is what science is! (Who, what, where, when, and why) From that process, you may come up with an idea to help you answer your question.
3. Choose a topic that is interesting to you! If it isn't interesting to you, it will probably not be fun to do. Think about what you like to do...sports, hobbies, after-school activities, or just things that you use every day.
4. Great ideas for projects can be found in books or on the internet. It may not be a project that you want to do, but it may spark an idea for another experiment! (Tweak it to match your interests.)
5. Don't wait until the last minute, because it then becomes more about the deadline of the project rather than the excitement of the discovery!

## Tips for Displaying Your Project

**Once you've completed your experiment, you want people to stop, look, and learn about your discovery!**

1. Your display tells the story of your experiment. Sketch a rough layout on a piece of paper before pasting/taping to your display.
2. Clearly display your title at the top.
3. The human eye travels left to right, top to bottom. Keep that in mind when displaying the different parts of the Scientific Method.
4. Though it is not required, displaying materials or supplies from your project will help people visualize what you did.
5. Pictures are worth a thousand words! If you add pictures of your experiment in action, be sure to include captions. STOP! ... Be careful not to show your face (for judging purposes).
6. Be creative to make it stand out. Let your display reflect your personality. You want people to stop and look!
7. **Have FUN!!!** If you enjoyed your experiment, it will show!