

Congratulations!

Your science project has been selected to compete
at the AACPS Innovators of
Science and Engineering Challenge: *Research Expo*

Tips for Scientists

Be prepared to answer questions about:

- Your **Problem**
- Your **Hypothesis**
- The **Materials** you used
- The **Procedures** you followed to complete the project
- How you made sure you conducted a **Fair Experiment**
- How you **Organized** the data into a table
- The **Graphs** showing your data
- Your **Conclusion** based on your data and your hypothesis

Tips for Engineers

Be prepared to answer questions about:

- The **Problem** or need your design addresses
- Your **Design Plan** and solutions you explored
- How the **Construction** of your design helps to solve a need or a problem
- How you **Tested** your design
- How your design shows **Creativity**
- **Engineering Skills** that were needed

Tips for Parents

Help your child prepare for the Research Expo by:

- Reviewing the Evaluation Form with your child and be sure they can explain how they made certain the experiment was fair.
- Allowing your child to practice explaining his or her project.

Plants, animals, bacteria, food, or chemicals will not be allowed into the event!

If you have any questions, please contact:

Robert Jackson, ISEC Director, rajackson1@aacps.org | 443-534-4516

Valerie Wesner, Coordinator of Science, vwesner@aacps.org | 410-222-5451

Project Readiness Checklist

Please check that your project meets the following requirements:

Please note:

**You must have been selected by your school
in order to enter the AACPS Innovators Research Expo**

Entry

- The project must be your own work or that of your team.

Responsibility

- You are responsible for the materials and display board used in the project. This includes a laptop or other device if your project requires one.

Size & Construction

- Your project board must be able to stand up without support. It cannot be bigger than two feet wide and six feet tall or take up space bigger than two feet by six feet. The depth cannot be greater than two feet. Project boards are not required. Students may present using a laptop or other electronic device.

Electricity

- Electricity will be available for students using electronic devices. Please indicate a need for electricity when registering online.

Living Things

- You may display photos or drawings. You may not bring or display animals, plants, other living or non-living organisms, or their parts.

Food and Chemicals

- Do not display food, drinks, chemicals, or water.

Awards

- Please remove school names, ribbons, or other awards from your display board.

Evaluation

- Be present during the judging time. You will explain your project to judges and the other students in your group.

At the Research Expo...

You will get a label with your name, project title, and category when you register your project on the day of the Expo.

You will also receive a nametag to wear during the judging.

Your parent/guardian will also receive a nametag with your name on it to show at pick-up time after judging.

Schedule of Events

Saturday, April 25

9:00–10:30 a.m.

Projects are Set Up

- Arrive at Old Mill Complex.
Do not park along the front curb (fire lane) of the school.
- Enter building at the ISEC signs.
- Check in your project.
- Set up your project, take time to get a snack, and/or use the restroom.

Projects will be grouped by category and grade level.

1. **Animal Science**
2. **Behavioral and Social Sciences**
3. **Chemistry**
4. **Computer Science**
5. **Earth and Space Sciences**
6. **Engineering**
7. **Environmental Science**
8. **Health Science**
9. **Mathematics**
10. **Physics**
11. **Plant Science**

10:30–11:00 a.m.

Projects Open to the Public For Viewing

- Invite family and friends to view your project and all of the other science experiments!

11:00 a.m.

Friends and Family Exit the School

- There is no waiting area in the school building.

11:00 a.m.–12:15 p.m.

Project Judging

- Judging will begin promptly at 11:00 a.m.
Parents leave the judging room and school building at this time.
- Judges will come to your category.
- Students will go from project to project with the judge.
- Some students choose to bring a brief, typewritten (one page) abstract to hand out to the judges.
- Judges will ask questions about your project.
- You will answer questions about your project and explain it to the judges and the other students in your group. When you are not speaking, you will listen to the other students explain their projects.
- The judges will use the evaluation forms, like the ones included in this packet, to judge your project.
- You may ask the other student scientists in your group questions after the judges have completed their questions.
- **You will take your project home with you!**

12:15 p.m.

Projects are Taken Down

- All students will be dismissed to their parents.
- The parent/guardian with the nametag receipt must enter the cafeteria to pick up student scientists and project boards. ***Parent/guardians must have a name tag receipt.***

Wednesday, May 6

6:00 – 8:00 p.m.

Awards Ceremony

- Please arrive at 5:45 p.m.
- Photographers will be taking photos, come looking your best!
- Guests are invited to bring their cameras!



This rubric is a guideline for a complete science research project. Projects should include the following weighted items.

	Yes	No	Comments	Points Possible	Points Scored
Question What is the question you are trying to answer with this experiment?				10	
Hypothesis Based on what you already know, what do you predict will happen, and why?				5	
Procedures Describe your procedure and explain how this is a fair test of the question.				10	
Data Log/Observation Log Is data numerical and clear?				10	
Graphs/Charts Do the graphs and charts display the data accurately?				20	
Analysis of Data Does the analysis explain what the data means?				20	
Conclusion Is the conclusion based on the data? Does the conclusion include evidence from the Data/Observation Log? Does the data support the hypothesis?				15	
Interview Is the student able to discuss the project in a knowledgeable way?				10	
TOTAL				100	

Additional Comments/Strengths:



Engineering Project Evaluation Form

Project Number:

This rubric is a guideline for a complete engineering project. Projects should include the following weighted items.

	Yes	No	Comments	Points Possible	Points Scored
Problem What is the practical need or problem you are trying to solve?				10	
Design Plan Describe your plan and what solutions you explored to solve this need or problem.				15	
Construction Describe how your design demonstrates the solution to the need or problem.				20	
Testing Describe how you tested the project, how many times it was tested, and the conditions of the tests.				20	
Creativity Describe how your project creatively meets the need or problem you recognized.				20	
Presentation Does your presentation include an understanding of the engineering skill? Can you describe how this model solves the problem or how it can be adjusted to meet the need?				15	
TOTAL				100	

Additional Comments/Strengths:

Directions

Old Mill Complex

600 Patriot Lane, Millersville, MD 21108

From Route I-97 N (toward MD-3 N/Baltimore):

1. Take the Veterans Hwy. exit, EXIT 10, toward Benfield Blvd./Severna Park.
2. Keep left to take the Veterans Hwy./Benfield Blvd. ramp toward Severna Park.
3. Turn left onto Veterans Hwy.
4. Turn right onto Old Mill Rd.
5. Turn left onto Patriot Ln. 600 Patriot Ln. is on the left.
6. At the stop sign turn right and parking is on the left.

From Route I-97 S:

1. Take I-97 S to the New Cut Rd. exit, EXIT 12, toward MD-3 Business/Glen Burnie.
2. Keep left to take the ramp toward MD-3 Business/Glen Burnie/Veterans Hwy.
3. Turn left onto New Cut Rd./MD-3 Business.
4. Turn slight right onto Veterans Hwy.
5. Turn left onto Old Mill Rd.
6. Turn left onto Patriot Ln. 600 Patriot Ln. is on the left.
7. At the stop sign turn right and parking is on the left.



ANNE ARUNDEL
COUNTY PUBLIC SCHOOLS

George Arlotto, Ed.D
Superintendent of Schools

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