

SCIENCE FAIR

2018 PS 32

PACKET

Dear PS 32 Parents and Science Fair Participants,

I am pleased to announce PS 32's 6th annual science fair! Last year, was another great showing of students' hard work and scientific skills. I am looking forward to seeing the amazing work of all of our young scientists this year! This year's science fair is once again mandatory for students in grades 3-5. Mrs. O'Brien will be working on class projects with her 2nd grade scientists! **Participants should submit their science project ideas by the week of January 8th. Please email me directly (tanisha.ellerbee@ps32.org) or speak to me in person if you have any questions or issues.**

The Science fair will be held on March 28th for all 3rd-5th grade students. Mrs. O'Brien's 2nd grade class projects will be on display as well. Classes will visit the fair during the day and families are welcome during open viewing times in the evening.

In this packet you will find information to help guide you along the way. **Please make sure you review all of the information carefully and refer to it as you progress.**

See you at the Science Fair Scientists!!

Ms. Ellerbee

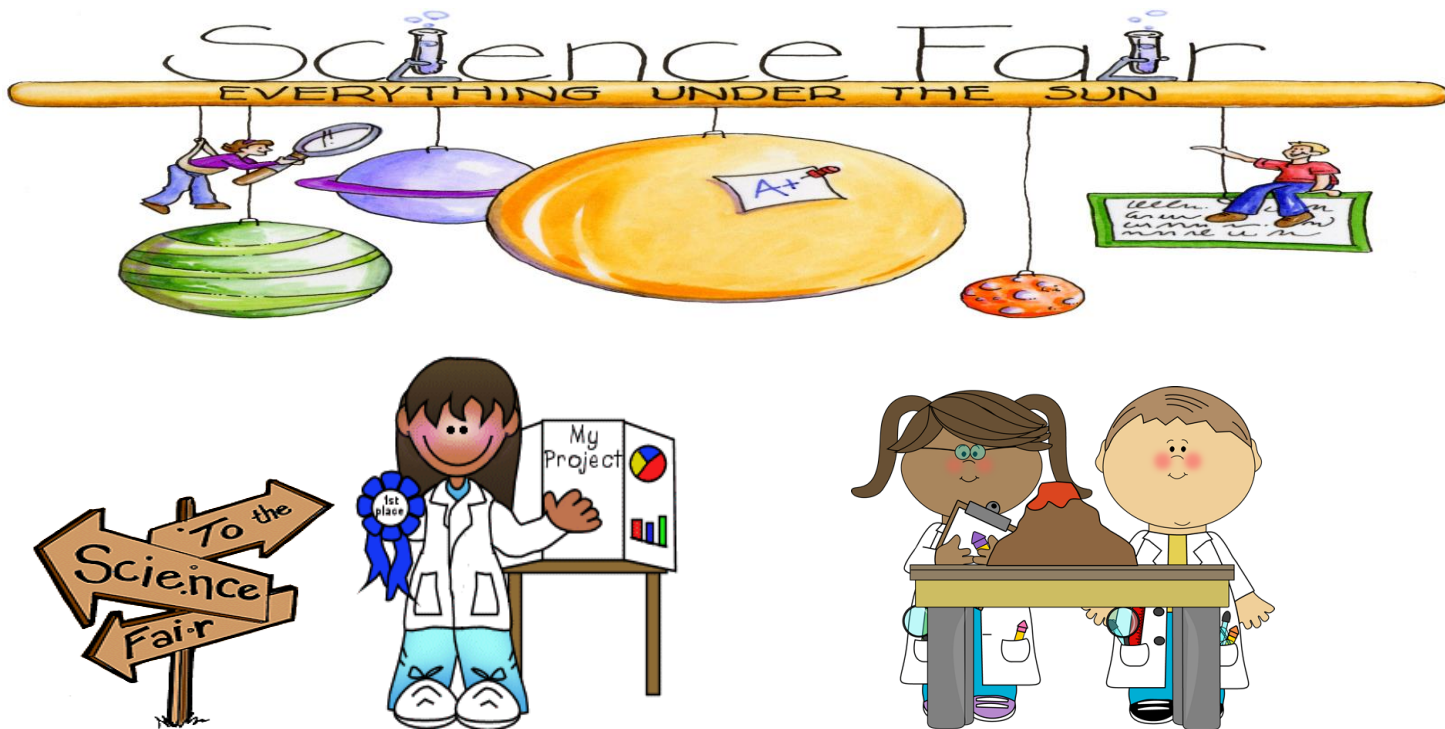


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Important Dates

- Proposal Deadline: Monday, January 8th
- Tri-board Due Date*: Monday March 26th
(Projects can be turned in starting Wednesday March 21st, but please not before then.)
- Science Fair: Wednesday March 28th
Open Viewing Times for Families: 5:30 - 7:30pm

***PLEASE BE SURE TO SUBMIT PROJECTS BY THE DUE DATE IN ORDER TO HAVE YOUR PROJECT SET UP IN TIME AND DISPLAYED AT THE SCIENCE FAIR.**

Science Fair Rules and Guidelines:

- This year, there will be no **SLIME** or **VOLCANO** projects allowed in the Science Fair. Over the years we have found it difficult to maintain these projects during the fair.
- **All projects, regardless of project type or grade of the participant, must be displayed on a tri-board with student's name and class clearly marked.** Tri-boards can be purchased from the school for \$2. (Money raised from the sale of tri-boards will go towards the purchase of science fair materials.) Supplies will be sold on a first come first serve basis. Tri-boards can also be purchased at any office supply store.
- Models must be able to fit on a space that is 3ft long by 3ft wide.
- Students may work in groups no larger than 4 on science fair projects. Please be aware that projects are done at home so groups will have to arrange for times to meet outside of school to work on their projects.
- Science Fair participants must be prepared to speak to and answer judges' questions.
- Experimenting on animals for the sake of the project is strongly prohibited.
- An adult must carefully supervise any projects requiring heat or hot objects.
- Use caution when cutting objects.
- If research online is needed, only use a computer with a parent or teacher.
- **Parents and guardians are guides and are strongly encouraged to assist children as needed. However, the project must be a work of the child's.**

PRACTICE, PRACTICE, PRACTICE! Practice presenting your project to people at home, friends, family, your neighbor or anyone who will listen.

On the day of science fair, judges will be very excited and interested to hear about all of the hard work you did on your project and all of your discoveries. Here are some **helpful tips** to impress the judges when you're presenting.

1. Most importantly, be present at your tri-board when judges come to speak to you.
If you're not there they'll move on to another student.
2. Greet the judges and smile.
You smile, they'll smile.
3. Be eager to talk about your project and explain your process.
Show off what you've discovered!
4. Remember to look at the judges as you speak and try not to read directly from your tri-board the whole time.
No one wants to stare at and talk to the back of your head!
5. If you are asked a question about your project that you don't know be honest.
Say, "I'm not sure, that's not something I discovered working on my project, but I'd be eager to investigate it further."
6. RELAX!
The judges are all members of our PS 32 community who are curious about science. So take a deep breath and share all that you've learned.

Science Fair Presentation Rubric

AREA	Outstanding Work	Acceptable Work	Needs Some Work	Needs Lots of Work
1. Knowledge of the Scientific Method	4 – I can explain all parts of the scientific method in my project; and justify my conclusion.	3 – I can explain most parts of the scientific method in my project with understanding.	2 – I can explain some parts of the scientific method in my project with the help of my display board.	1 – I did not use the scientific method in my project or I have most steps missing.
2. Shows enthusiasm and interest in the project	4 – I am eager to tell all about my project.	3 – I am willing to share information if I have to.	2 – I will only tell about my project when someone asks me.	1 – I am not willing to talk to people about my project.
3. Speaks knowledgeably about the project	4 – I am able to share many details about the process, experience and outcome of my project.	3 – I understood my project and can talk about the outcome.	2 – I kind of understood my project and can talk about it if I read the tri-board.	1 – I didn't really understand my project and may have a hard time answering questions about it.
4. Presents data on a board that is well organized and visually appealing.	4 – My tri-board shows data in an organized, neat manner complete with charts, tables and pictures that are labeled. I have used and cited several sources for my project.	3 – My tri-board is neat and attractive and has limited charts, tables and pictures. I have used and cited some sources for my project.	2 – My tri-board list major headings of the scientific process and some data. I have used and cited at least 1 source.	1 – My tri-board is not organized or labeled and has very little data. I did not use and/or cite any sources.

PS 32 SCIENCE FAIR CHECKLISTS AND TRI-BOARD ARRANGEMENT

Checklist for Participants Conducting Experiments

	Done	Still Working On It
My experiment has a title		
My experiment starts with a question		
I stated my hypothesis		
I developed a plan or procedure to test my hypothesis		
I collected data using tables and/or charts, sketches and/or photos		
I reported a conclusion		
I discussed the variables in my experiment		
My name and class are listed on the tri-board.		
My work is neatly organized, labeled and displayed on a tri-board		
I included a list of at least 3 sources (i.e.; books, websites, documentaries, science magazines or journals)		

Tri-board arrangement for Experiments

(Steps of the Scientific Method: Question, Hypothesis, Plan/Procedure, Do Experiment, Draw Conclusions/Results)

	Title	
Question:		
Hypothesis:	Pictures/Visuals	Variables:
Procedure/Plan:	Data Tables and/or Charts	Results and Conclusion:
		List of Sources:

Examples of Experiment Questions:

- 1. Does the amount of sugar in gum affect how sticky the gum is?*
- 2. Does the mass of an object affect how fast the object moves down a ramp?*
- 3. Does music have an effect on plant growth?*
- 4. Do dark colors absorb more heat than dark colors?*

Checklist for Participants Making Models (Dioramas, Simulators, Demonstrations)

	Done	Still Working On It
I have a title written in the form of a question		
My model is based on my question		
I have a hypothesis		
I have researched my question and based my model and tri-board on my learning/understanding		
My model can fit on a space that is 3 feet long by 3 feet wide		
My model closely resembles the "real thing" and how that thing works		
My model is clearly labeled or includes a Key		
My tri-board includes an image or photo of the real thing, information on how it works and its' importance		
I included a list of at least 3 sources (i.e.; books, websites, documentaries, science magazines or journals)		

Tri-board arrangement for Models

	Title (In the form of a question)	
Materials used to create the model	Question* (related to my topic)	Images of the real thing
Description of what the model demonstrates	Hypothesis Research and information gathered to answer the question.	List of Sources

Examples of questions for model projects:

Solar System Model - Is the size of a planet related to the amount of time it takes to orbit the Sun?

Model of a tropical rainforest - Why do different animals live in different layers of the rainforest?

Model of the heart - How does exercise affect heart rate?

Model of the digestive system- Why does it take a longer time to digest some food than others?

HELPFUL WEBSITES (These can also be found on the school's library database page.)

The websites listed below offer **HUNDREDS** of science fair project ideas, topics and advice on how to complete your project.

<http://www.sciencebuddies.org/>

<http://school.discoveryeducation.com>

<http://sciencefair.math.iit.edu/links>

<http://www.cool-science-projects.com>

<http://www.education.com>

<http://www.all-science-fair-projects.com/>

Please feel free to email your questions to me at
tanisha.ellerbee@ps32.org.

HAVE FUN SCIENTISTS!!