DES SCIENCE EXPO 2018

Tuesday, 2/27/18, 7:00-8:00PM

What is the Science Expo?

The DES Science Expo is a PTA-sponsored event designed to stimulate excitement, interest, and appreciation for all areas of science. All students are encouraged to participate! Projects are judged only by appreciation from staff and peers, and all presenters will receive a medal to honor the effort and hard work on display.

Types of projects:

Students may:

- Perform an experiment using the scientific method (described in this packet).
- Research an interesting topic (a favorite animal, hobby, exotic place…).
- Explore how something works, and share what was learned.

Participation:

All students K-5 are encouraged to participate. Teams of 2 or more, and sibling teams are also encouraged. Local libraries have books with suggested projects if a student would like help in choosing an experiment, or follow the links on the next page to find internet resources.

Entering the Science Expo:

Decide on a project, fill out the entry form attached, and return it to school by **February 16th.** Extra forms will be available in the school office, and on the DES PTA website (*www.darnestownelementary.my-pta.org)*.

Displaying your project:

For projects involving experiments, a suggested display format is included in this packet. Other types of projects should use the display to post pictures, drawings, and other important information found during the student's research. The student may display the project on a three-sided board, available from local crafts stores. A student can also create a display board using a large box with top, bottom, and one side removed.

Things to avoid due to MCPS policies:

- No bacterial, viral, or fungal cultures.
- No experiments that might harm children or animals.
- No open flames, poisons, dangerous chemicals or explosives.
- No high voltage or open top cell batteries.
- No live animals are allowed at the Science Expo. If an experiment involves an animal please post pictures on the display board. Sealed and contained insects are permitted (e.g. ants in an ant farm), provided that there is NO risk of accidental release.
- Anything else considered dangerous…please use common sense, or contact organizers for specific info.

The Expo Experience

The actual **Science Expo Event** will take place in the gym on **Tuesday, February 27th, from 7-8 pm**. Families are invited to come and view all of the displays. There will be no formal judging…just an emphasis on participation and family fun! Students are encouraged to stand by their displays to give demonstrations and answer questions. The display must be taken home at 8 pm.

Important Dates to remember:

Friday, February 16th	**3:30 pm**	**Entry forms due**
Monday, February 26th	**5-6 pm**	**Display set up in gym (student with parent)**
Tuesday, February 27th	**9:30 am – 3:30 pm** **7:00 – 8:00 pm** **8:00 pm**	**Classroom Visits** **SCIENCE EXPO** **Take Home Displays**

DES-PTA SCIENCE EXPO ENTRY FORM

Expo date is Tuesday, 2/27/18
Entry deadline is Friday, 2/16/18

Student Info: **(***only one entry form needs to be submitted for each project for group projects)*

Name/Grade/Teacher _____

Name/Grade/Teacher _____

Name/Grade/Teacher _____

Parent info:

Name/phone # _____

e-mail address _____

Is a parent willing to volunteer for set-up, clean-up, or monitoring during EXPO class visits?

YES _____ *NO*_____

PROJECT TITLE: _____

BRIEF PROJECT SUMMARY: _____

_____

_____

_____

Will project require more than 2' x 3' display space? *YES* _____ *NO*_____

If yes, how much space is needed? _____

Will project require an electrical outlet? *YES* _____ *NO*_____

Outlets are limited, so please let the organizers know ASAP if project needs change.

Please state any other special project needs or location requests. Organizers will contact parent if requests cannot be accommodated.

_____

PLEASE RETURN FORM TO SCHOOL BY TUESDAY, FEBRUARY 16, 2018.

Questions? Please contact Christina Swick (cmswick76@yahoo.com) or Vicki Mostrom (Victoria_M_Mostrom@mcpsmd.org).

Science Expo Tips

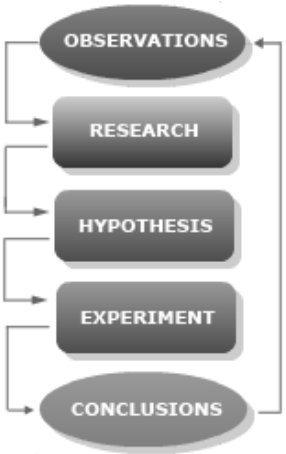
Do you want to do a science project, but don't know how to get started? Here's are 2 great websites that explain the scientific process in kid-friendly language!
http://www.sciencebuddies.org/science-fair-projects/project_ideas.shtml

http://www.education.com/science-fair/

It's pretty simple, but first you need to think of a question that you'd like to answer, such as 'I wonder why clouds are different shapes?' or 'I wonder why my cat sleeps in that window?' or 'why does snow stick to the driveway sometimes, but not to the grass?' or 'how does soap work, anyway?' If you had to guess the answer to your question, what would you guess? How do you test your prediction or find more information to answer your question? Check out the method below – it's the one used around the world by scientists to find answers to all sorts of questions! But, before you get started, here's another science tip for you: always take good notes on your research or experiments….without them, you can't show what you learned!

Steps of the Scientific Method for Kids

Scientists use the scientific method to find answers to questions and to solve problems. Although there are many different versions of it in use today, you will find that what they are really based on is making observations, asking questions and looking for answers to questions through science experiments. In order to use the scientific method to find answers to your own questions, you will need to first ask a question, and then…



- **Make Observations**
- **Do Some Research**
- **Form a Hypothesis***
- **Test Your Hypothesis**
- **Draw Conclusions**

> ***** *A **hypothesis** is a guess or prediction based on your observations or research.*

Displaying Your Science Project

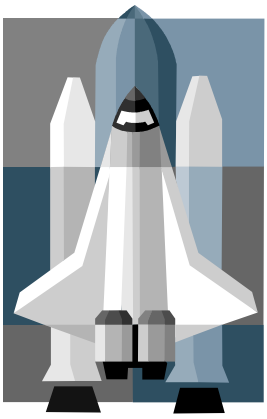
It's simple to present your project on a trifold display board (like the cardboard ones sold in craft stores). How fancy you make your display is up to you, but your display should include:

- your **project title, your name, and grade**
- a description of how you gathered your information or did your experiment (your '**methods**')
- **research sources** you used (like websites or books used to gather information).

- Other than that, just show what you learned! It's easy to organize your display board to show:
    - y**our question**
    - **your observations**
    - **your research and/or experiment,**
    - **what you learned (your conclusions)**

If you have photographs or illustrations, or samples that you can show, include them to make your project attract more interest. But, remember that no dangerous materials or live animals can be displayed –use photographs to show any parts of your research that can't be safely displayed in the gym!

Final Tips



So what happens if you plan this GREAT project, but then something goes wrong? Guess what…that's science too! Figure out what you can learn from the failure, what you would do differently if you tried it again, and present those conclusions with your project. Science is a process of learning from the things that turn out unexpectedly, so just be honest about what happened, and start asking more questions!

No question about it, science can take time, energy, and hard work. But – science is also fun, so grab a friend or parent, or *(gasp!)* brother or sister, think about what you'd like to learn, and we'll see you at the Science Expo on February 27th!