GRAHAM SCHOOL SCIENCE FAIR

Family Science Night: Wed Jan 24 6:00pm-8:00pm in MPR/GYM
Presentation Night: Wed Feb 28 5:30pm-7:00 pm

Are you a creator, innovator, visionary, scientist, or discoverer? If you are, then join us! We are inviting **all students K-5** to come and participate in our upcoming Science Fair (aka STEAM Night)! Participating in the Science Fair offers students the opportunity to develop positive attitudes about themselves and their work while increasing their awareness in the areas of science, technology, engineering, arts, and math. Additionally, the science project allows students to think critically, integrate all these areas of learning, and apply problem solving skills. *For the upper grade students, this is also a chance to become familiar with the science fair process since it is a requirement beginning in Middle School.*

CHECKLIST FOR PARTICIPANTS:

☐ **Fill out the attached application and submit it by FEB 1**

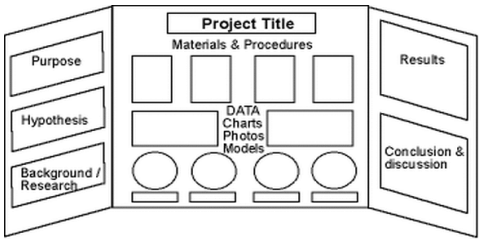
- Application is meant to help the student decide on a project and begin the scientific process.
- This also allows us to determine the number of participants and make sure we have enough resources.
- Once received, a committee member will contact you with approval and/or further questions.
- We will have 1 committee member assigned to each grade level to help with any questions or concerns.

☐ **Use the scientific method and start your project!**

1. Find a problem: ask a "how does" question
2. Research the problem: find out all you can
3. Hypothesis: predict what will happen based on what you know
4. Conduct the experiment to find out if you were right!
5. Gather your proof by recording data: perform experiment several times and keep a record of the outcomes
6. Organize your data in tables and graphs – don't forget to include what "went wrong". Mistakes are a part of the process!
7. Form a conclusion: check your hypothesis against the results – were you right?
8. Share your findings: write about what you learned and how it applies to the real world

☐ **Have a tri-fold ready for your presentation**

Example setup:



☐ **Prepare a short (3-5min) oral presentation** – it's time to share all your hard work!

- There will be "science masterminds" present to listen to each project and provide feedback. There won't be any scoring and all students will receive recognition for their hard work and participation!
- Share what your project is about and why you chose to study it. Remember to be respectful.
- Show any demonstrations that you have prepared and share what you have learned.

A few more pointers:

- K and 1st graders will need help for most of the projects. Keep it simple and keep them interested.
- 2nd and 3rd graders should be able to do many parts on their own. Focus on forming hypothesis and how to collect data.
- 4th and 5th graders should be doing almost the entire science project by themselves. Work on expanding their thoughts and creating discussion about results.

QUESTIONS? Contact: **Emily Chen** emilychen@gmail.com, **Tammi Anderson** tanderson937@comcast.net**, Kanchana Mendes** k_natarajan@yahoo.com, **Jeanne Puacz** holbapuacz@yahoo.com, **Della Kim** dellakim1@gmail.com

**Optional worksheet to help get you started and organized!

PROJECT GUIDE

Title:_____

Question (statement of purpose) *Written as a question*
Hypothesis: *If…Then I think….*
Materials I will need:
Procedures: *(Detailed steps)*
Collect Data: *How do you want to present your data?*
Conclusions:

QUESTIONS? Contact: **Emily Chen** emilychen@gmail.com, **Tammi Anderson** tanderson937@comcast.net**, Kanchana Mendes** k_natarajan@yahoo.com, **Jeanne Puacz** holbapuacz@yahoo.com, **Della Kim** dellakim1@gmail.com

Science Fair Application

Due: THURSDAY February 1, 2017

- ☐ Individual
- ☐ Team (3 students max) – all members must still turn in an application

Name(s) _____

Grade/Teacher: _____

Parent Email address: _____

Project Title: _____

Hypothesis:_____

_____

Brief Project Description:

_____

_____

_____

_____

Project Area (please check one):		
☐ Biology	☐ Physics	☐ Engineering
☐ Health & Medicine	☐ Chemistry	☐ Mathematics
☐ Environmental Science	☐ Earth & Planet Sciences	☐ Computers
☐ Other (fill in): _____	☐ Behavioral & Social Science	☐ Robotics
		☐ Technology

- ***Will you need access to an outlet***: ____No ____Yes (please bring extension cord and duct tape for safety concerns)
- ***Other special considerations needed***: (please note, we will not allow fire or flammable materials due to safety concerns) :_____

****All parents must sign and approve their student's Science Fair Project.**

Student Signature: _____ Parent Signature: _____

PTA APPROVAL & Signature: _____