Allenwood School
Parent-Teacher Group

Allenwood School

11th Annual Science Fair – 2018

Wednesday, April 11, 2018 from 7:00-8:00pm

Dear 4th and 5th grade parents, guardians and students,

Allenwood PTG is proud to host the Eleventh Annual Science Fair at Allenwood School. We are very excited about the fair because it ties in so nicely with the "hands on" science curriculum the kids enjoy in the classroom. We thank you for your interest in the science fair and for taking the time to review this packet.

Entry into the Science Fair is OPTIONAL. Students who choose to participate will receive up to 10 points extra credit if their experiment fulfills all the criteria outlined in this package. **Their teacher will determine extra credit**. We will be taking some time out during the next assembly to recognize some of the exceptional projects. We will also be giving out prizes for the top three projects. **The prizes include: 1st Place: $50 Skyzone Gift Card. 2nd Place: $30 Fandango Movie Gift Card. 3rd Place: $20 Amazon Gift Card. All** students that participate will receive a participation ribbon and will get to enjoy a make your own ice cream sundae party, courtesy of Wall Teachers Education Association (WTEA).

To get the creative juices flowing, we will be doing a quick presentation in their classroom and showing them a genuine science fair exhibit, complete with a tri-fold board display.

Parents: Once your child decides to participate have them fill out the submission form (which is the last page of this entire packet), submit it to your child's teacher in an envelope labeled, "Science Fair" **along with entry fee of $15** by Friday, March 9th. The $15 entrance fee goes towards the tri-fold board and participation ribbons. The tri-fold board will be delivered to your child's classroom.

Key points/dates:

- Entry form and $15 are due by Friday, March 9th . Please keep in mind, **this deadline is firm. Proposed experiment sheets will NOT be accepted after this date as tri fold boards and ribbons will be ordered.**
- A parent/guardian & student signatures **are required** on the entry form at the back of this packet.
- Your child's teacher will be approving the experiment.
- Projects boards are due into school on Monday, April 9th.
- **STUDENTS MAY NOT BRING THEIR EXPERIMENTS TO SCHOOL UNTIL APPROVED BY THE COMMITTEE. ONLY THE BOARDS UNLESS EXPERIMENT IS APPROVED FOR DISPLAY.**

WE STRONGLY ADVISE YOU TO READ THE RULES SECTION IN ORDER TO AVOID A PROPOSED EXPERIMENT BEING REJECTED.

If you have any questions, please contact Alexandria Cerbone (cerbonefamily6@gmail.com) Thank you!

Sincerely,

Alexandria Cerbone

Science Fair Committee

Rules for Science Fair Projects

You must follow the rules below when designing your project. All the information below is a list of rules/guidelines you MUST follow. **PLEASE TAKE THE TIME TO READ THIS SECTION.**

Your project/experiment:

A few good websites for ideas:
http://www.ipl.org/div/kidspace/projectguide
http://www.chemistry.about/com/od/sciencefairprojects/a/sciproelem.htm
http://school.discovery.com/sciencefaircentral/
My favorite: https://www.sciencebuddies.org/science-fair-projects/project-ideas

- CANNOT be something you have already done in science class.
- CANNOT be a demonstration or model of something- it must be an actual experiment.
- CANNOT be a survey.
- Anything consumable- **nothing involving tasting, smelling, applying substances to the skin or eating things.**
- CANNOT be based on an opinion of something- favorite colors, flavors or how much somebody likes something are NOT experiments that have Scientific data.
- NO Science kits or math kits from a store.
- NO use of expensive or irreplaceable personal property.
- NO Matches, fire or flames (no candles or melting things).
- Live or dead animals. **PLEASE REMEMBER- IF IT INVOLVES AN ANIMAL IN ANY WAY IT WILL BE DEEMED UNACCEPTABLE.**
- Anything that may hurt or scare people.
- Dangerous chemicals.
- Anything too fragile that may break easily.

Your display:

- Must include all steps of the Scientific Method (SEE EXAMPLE OF DISPLAY BOARD ON NEXT PAGE)

How does air pressure affect the height of a basketball bounce?
What solids dissolve in water? How long does it take and why does it vary?
What effect does temperature have on.....(you fill in the blank)
What kinds of materials exhibit static electricity?
Which batteries last longer name brand or not?
Do balloons stay filled longer with helium or air?
How does the shape and size of ice effect how long it takes to melt?
What type of plastic wrap best prevents evaporation?
What effect does temperature or density have on how fast an object falls or moves through a liquid? (Like dropping a marble in maple syrup)
Does a plant (or grass) grow best in sunlight or artificial light?
How does music affect plant (or grass) growth?
Which paper towel is more absorbent?
What type of oil has the greatest buoyancy?
How does my shadow change at different times of day?
How do different amounts of salt affect the boiling point of water?
What materials melt ice the fastest?
What type of water boils fastest (distilled, tap, cold, hot, salted, etc.)?

Students' key points:

Students should choose a science investigation that involves observation or experimentation. This investigation is known as the Scientific Method - an explanation of the Scientific Method is attached.

Students must choose a question that can be answered with results from an experiment or investigation of their own design.

The question CANNOT be answered with a simple "yes" or "no.

The question CANNOT be one that elicits an opinion as the answer.

Examples:

Acceptable	Not acceptable
How does air pressure affect the height of a basketball bounce?	Do more people like chocolate ice cream than vanilla? (This is based on opinion).
What is the relationship between the price of a battery and how long it powers a light bulb (or other small item)?	How to make a bridge out of popsicle sticks (This is a demonstration)
How does the shape of an ice cube affect how quickly it melts?	Which dog food is more nutritious? (This is survey)

Our goal is for the kids to practice the Scientific Method and realize that real-world, high-tech scientists use this method all the time to discover new things. This kind of approach teaches questioning strategies and experimental design skills. Please note: there is a difference between a scientific experiment and a scientific demonstration. A scientific experiment poses a question that is not based on opinion, has a stated hypothesis and has results that are measurable.

We encourage students to complete the experiment with only a little help from their parents.

Kids: Don't be afraid to make mistakes. Some of the world's best and fun discoveries happened when the experiment didn't turn out as planned (can you say "Silly Putty?"). Please remember that we want you to keep it simple, do some experimentation, answer a scientific question that interests you and have some fun. The experiment does not have to be elaborate, but it should be complete. Try to do as much of it as you can without help from your parents. If you can't think of a question, please just use one of the suggestions provided or one that we talked about in your classroom. Remember that even with the same question, two projects are never the same. Have someone take pictures of you doing your experiment- it will look great on your display board! Please remember to get creative and enjoy yourself!

Question
(your choice)

Hypothesis
(What do you predict will happen?)

Purpose of the Experiment

(Why did you pick this idea?)

Pictures

Title

Name and Class

Experiment Procedures

(How did you set up the experiment, what steps did you follow to gather your data?)

Materials Used

Data Collected (show numbers here & multiple trials)

Results

(What happened?)

Conclusion

(What did you learn? Was your hypothesis correct?)

Pictures

More Pictures

Background Information

(Anything else you want people to know about your experiment?)

Tri-Fold Exhibit Display: Example of Board Layout (use this as a general guide)

Name_____ Grade_____ Teacher_____

STUDENTS THIS PAGE IS FOR YOU TO KEEP A COPY OF YOUR EXPERIMENT.

WRITE DOWN YOUR IDEA SO YOU DON'T FORGET IT!!

Science Fair Project:

Your Scientific Question:

Brief description of your project:

Your project is due into school on Monday, April 9th, 2018.

Name_____ Grade_____ Teacher_____

2018 Allenwood School Science Fair Entry Form

Return this form along with $15 entry fee to your teacher by Friday, March 9th.

Science Fair Project:

Your Scientific Question:

Brief description of your project:

Your project is due into school on Monday, April 9th, 2018.

I have read all the rules and understand my responsibility in entering the Science Fair.

_____ _____

Student's signature Parent/Guardian signature

Parent/Guardian Email: _____

Entry Fee: (**$15.00**) enclosed: Cash ___ or Check___ (Check #_____) Payable to Allenwood PTG

Teacher approved Y/N_____ (initial)