



To: 2014-2015 Science Pre-AP Students

From: MS Science Coordinator and Science Pre-AP Teachers

RE: Pre-AP Science Fair Participation

Our records show you have enrolled in Pre-AP Science for next year. Welcome! We are excited to see your name on the list. ☺

As summer approaches, it will be important for you to start planning now for your independent science fair project which begins the first week of school in Pre-AP Science. We know that finding a topic that is both broad enough to be interesting and narrow enough to be feasible can be a challenge. Understanding that picking an appropriate topic can be difficult, we wanted to equip you with some tips that could help you develop a well thought out and testable idea. Remember, a winning project is one that combines creativity, attention to detail and valid scientific thought. "Cookie-cutter" experiments that have been done before, science demonstrations and unoriginal ideas aren't going to excite you or help you develop as a budding scientist. We want this to be a fun and meaningful experience for you.

To begin, you will need a topic that interests you. What are some questions you wonder about, problems that need a solution, or a concern within your community worth investigating? How would society be impacted by a study that solved this issue? Accompanying this letter is a checklist to use as you work to generate some possible ideas. Please work to thoroughly develop your ideas for at least 5 potential questions you would like to answer. Most importantly, pick a question or problem that can be answered by using the scientific method. Be sure you can actually design an experiment that will help you solve your problem. Use the provided checklist for each of these 5 questions and have them ready to go when school starts. It is that simple!

While thinking about solutions, consider individuals who could help you along the way. A mentor is a person you feel comfortable working with who also has expertise on your topic of interest. A mentor could be a family friend or someone your parent works with. The key to finding the right mentor is whether they are knowledgeable about your topic.

Please remember, **you must have your Pre-AP Science teacher's approval of your desired project and proper paper work filled out BEFORE you begin your experiment.** Without this required approval you may only begin researching your ideas over the summer, so save the actual testing and data collection for the fall.

When school begins, you will be ready to start a memorable adventure in Pre-AP Science.

See you in August!

Your science teacher and
Kendra Durham, PhD
FISD Middle School Science Coordinator

FISD SCIENCE FAIR PROJECT SUMMER CHECKLIST

Developing ideas into feasible science fair experiments. (Print and use at least 5 copies of this checklist.)

Student Name: _____ Grade: _____

My big question I am thinking about investigating in my science fair experiment is: <i>(Write as a question.)</i>	
Checklist	Write Yes or No
Will my topic keep me interested for 2-3 months?	
Will I be able to find 5 or more reliable resources on my topic?	
Will I be able to measure changes to the important factors (variables) using a number that represents a quantity such as count, percentage, length, width, weight, height, voltage, speed, velocity, energy, time, etc?	
I can design a fair test to answer the big question. In other words, I will have a control and an experimental variable.	
My project is safe and will be able to be approved by my teacher because it does not pose any unnecessary risks.	
Will I be able to do at least 3 trials in the number of weeks provided for experimentation (likely to be about 6-8 weeks)?	
Will the data I collect be able to be represented in data tables and graphs?	
I have all the supplies or will be able to obtain all the necessary supplies including the scientific tool(s) used for measuring change for my project quickly and without it costing a lot of money.	
Will I be able to complete my project where I live and with integrity before the deadline (before winter break)?	
I, (student print name) _____ have explored the Dallas Regional Science and Engineering Fair Website http://dallasciencefair.org/join/students (Initial Here: _____)	
I, (parent print name) _____ have explored the Dallas Regional Science and Engineering Fair Website http://dallasciencefair.org/join/students (Initial Here: _____)	