Student Name: _____ #:___

A LETTER TO PARENTS AND STUDENT - PLEASE READ, SIGN ON THE BACK, AND RETURN TO McChesney

Welcome to AP Physics. I want to convey to you what this course will be like for your student. I agree with top college professors who believe that the concepts of physics are the most important ideas to get across to students. There will be a lot of math in AP Physics. However, math is only a tool to better understand physics concepts and how they relate to each other. Learning and understanding concepts is a much more challenging task than learning how to "plug and chug" work that only follows a formula. Every student will be provided with a formula sheet that has all of the formula that we shall use during this course. This course will stress concept understanding more than performing formula-based problems.

I interpret "problem solving" somewhat differently than a math teacher might. I think mathematicians often think of problems as the traditional physics problems such as v = d/t or a = v/t. While these calculations are a part of the course, I interpret problem solving to mean the creative solution of real-world or realistic problems using whatever means possible, and I will often pose such problems to students as part of this course. For example, I might ask students to determine the height of the flagpole at PHSC indirectly--by **three different ways**. It's a real problem, there is a real solution, and there is a bunch of different ways for students to get a correct answer, but there is a lot of good physics involved for them to solve the problem three different ways!

Some problems that I will pose will be extremely challenging, and hopefully your student will develop a good support network of students with which to work. In preparing for teaching this course, I have read many articles about what should be taught in AP Physics. There is one theme that seems to be prevalent throughout my readings. Professionals universally agree that students need to learn how to think "3-dimentionally" and solve problems with more than one approach. This will be difficult but together I believe that we can accomplish it.

Most students enrolling in AP Physics intend to pursue a professional field, and although very few will ever be physicists, there is a large number of students who indicate an interest in engineering, architecture, and/or medicine. These fields all have something in common. They all require the use of one's hands to build (or repair) very important things. Much of the architect's and engineer's work is now done on computers, but they often need to build models of what they are trying to do. It is for this reason that I want students to get some practice "engineering" objects for physics class. Several projects will allow students to construct items (such as bridges and rockets) and test their designs. I will always tell students well in advance exactly how they will be graded on these projects, and I will try to keep the expense as low as possible, partly by allowing students to work with a partner.

In summary, AP Physics may well be the most rigorous course in the school, but it can also be the most rewarding. Getting good grades will not be easy, but I pledge to offer as much assistance as I can so that your child does well. I am usually at school at 6:45 AM and am here until at least 4 or 5 PM in the evening. My cell phone number is **614-264-9816**. My e-mail address is **kevin_mcchesney@plsd.us** or **tigerphysics@hotmail.com**. My website is **http://www.tigerphysics.org** or follow on **twitter http://twitter.com/tigerphysics** If your son or daughter needs help and cannot get it from another student, I encourage them to call me at home! AP Physics may cause your child some stress because it is such an independent learning experience. I believe that learning will be greatly facilitated by the three of us working and supporting each other. As a parent or student, by signing this form I want you to agree to contact me directly if the student appears to be having major problems with this course.

Some of our labs and projects will make use of potentially hazardous equipment, such as high voltage power sources, slingshots, and rockets. I promise you that I will thoroughly review safety procedures before any such equipment is used and do my best to ensure the safety of your child. If your child (or any other) fails to act in a safe and responsible manner, that student will be removed with a loss of any graded work until we all feel he or she can safely return to the classroom. I do not anticipate that

this will happen, but your child deserves to learn in a safe environment. By signing on the page, I want the parent(s) and student to agree that the student will act in a safe and responsible manner.

What, as a parent, can you do to help your son or daughter? First of all, ask what was done in class each day. I guarantee you that it was not "**NOTHING**"! Next, try and make sure you see that your child has a regular study area away from the TV and other distractions. It is great to set aside study time each night; even if there is not homework, students get a lot out of looking over notes and labs. Third, take a look and see what we are doing in class. Parent interest and involvement is great! If there is something you as a parent are interested in, let me know. Students will be provided with a grade sheet and you might want to check it on a regular basis.

It is my goal that your child not only learns the required material, but that the students find the learning to be an enjoyable experience. I volunteered to teach this course because I firmly believe that it can be an invaluable preparation tool for continuing education.

Kevin C. McChesney, AP Physics Instructor, PHSC

_____ _____

Parent Signature **Phone Number**

_____

E-mail address

_____ _____

Student Signature **Phone Number**

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E-mail address

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Student Name Printed

Any additional information you think I should be aware of: