

AP® Physics 1 Summer Assignment 2026

Welcome to AP Physics 1 with Mrs. Meeks and Mr. Shah!

We are thrilled to welcome you to AP Physics 1, a course that we believe will be one of the most intellectually stimulating and rewarding experiences of your high school career so far. While the journey through both the course content and the AP exam will be challenging, it is also incredibly fulfilling. As you know, AP courses are designed to mirror the rigor and expectations of a college-level curriculum. AP Physics 1 is equivalent to a freshman, algebra-based college physics course, and this carries certain implications:

- **Your Learning, Your Responsibility:** Our primary role is to guide and support your learning. We will provide comprehensive instruction, resources, and opportunities for practice. However, your active engagement and independent effort are paramount. You are ultimately responsible for mastering the concepts and understanding everything covered in class.
- **Proactive Engagement:** We will clearly communicate assignments, deadlines, and test dates well in advance. It is your responsibility to stay informed and manage your workload. If you are absent, please proactively obtain missed materials, complete assignments, and arrange to submit them. We will not "chase" after late work.
- **Seeking Support:** If you encounter difficulties, we strongly encourage you to be proactive in seeking help. We are available for support outside of the classroom, and collaborating with classmates or seeking external resources are also excellent strategies. This expectation applies immediately, starting with this summer assignment. Remember, your success is our shared goal, and our ability to support you is directly linked to your commitment to your own learning.

The Unique Challenge of AP Physics 1

The AP Physics 1 exam goes beyond simply memorizing concepts and equations. It rigorously assesses your ability to apply physics principles to novel, complex, and multi-step problems and situations. While your previous academic experiences have likely honed your writing skills, they may not have fully prepared you for the systematic problem-solving approach required in AP physics 1. Many students have, perhaps inadvertently, learned to identify problem types and apply pre-learned formulas rather than developing a deeper understanding of how to approach unfamiliar scenarios methodically.

This makes AP Physics 1 a unique challenge. You may find it more demanding than many other AP courses because it emphasizes applied problem-solving as much as, if not more than, content knowledge. Furthermore, unlike AP Chemistry, AP Biology, or even AP Calculus and Environmental Science, which often build upon prior high school coursework, AP Physics 1 may introduce you to entirely new concepts.

About Your Summer Assignment

The summer assignment is designed with two crucial objectives:

1. **Mastering Graphical Analysis:** Graphing, both creating and interpreting, is a very large part of this course. This is NOT what you're used to seeing, I promise. Therefore, the first goal is to get you VERY acquainted with the graphing methods in AP Physics 1, as well as how you must be able to interpret the graphs you produce.

2. [Self-Directed Learning: One-Dimensional Motion](#): The second goal is for you to independently learn the foundational topic of one-dimensional motion. This includes both the mathematical descriptions and the graphical representation of motion in a straight line. This self-directed learning experience will not only introduce you to core physics content but also cultivate the independent learning skills vital for an AP-level course.

Important Information:

- **Due Date:** All components of this summer assignment are due on the very first day of class.
- **Consequences:** Failure to complete the assignment will result in a zero and will create an unfavorable first impression. We reserve the right to contact your guidance counselor and recommend a schedule change if the assignment is not submitted.
- **Avoid Procrastination:** This assignment is substantial. Do not underestimate the time and effort required. Leaving it until the final week of vacation will undoubtedly lead to significant stress and an incomplete assignment. Plan your time wisely and begin working on it well in advance.
- **AP Classroom:** Please note that I will invite you to AP Classroom after July 1. Please check GC and your email sometime soon after that to have access to the 5 videos we are assigning on there.