

22 Any Avenue  
Baltimore, MD 21228

March 20, 20xx

Ms. Alissa Smith  
Principal  
First Academy High School  
2345 North Avenue  
Baltimore, MD 21229

Dear Ms. Smith:

I am writing to express my interest in a teaching position in calculus or trigonometry with First Academy High School. I learned of your opening through the SchoolSpring website. After working as a teaching assistant for four years with the University Maryland, Baltimore County (UMBC) physics department, I believe now is an excellent time to pursue a career in math and physics education. My initial career path was to obtain a PhD in applied physics. After passing my PhD qualifying exams and conducting a year of research, I realized that the most enjoyable part of my week was when I was in the classroom engaging with students. As a result, I have decided to alter the trajectory of my career from researcher to educator, with the specific intention of becoming a math and physics teacher.

I believe as a physicist, it is absolutely vital to have a strong background in math. Math without physics is, in a sense, simply half the story. Calculus and physics are two subjects that are connected in such a way that to appreciate each fully, you must understand the other. Having a Master's degree in physics, makes me uniquely qualified to explain the significance of various mathematical concepts to the physical world. In my experience, students are most interested in the relevancy of what they are learning. My strong background in physics provides me the ability to explain this connection in order to help students to better understand the practical value of what they are learning.

I believe that learning is best achieved through multiple angles. Simple chalk and blackboard is often not enough for students to fully understand key concepts. Computer simulations through various programming languages such as Mathematica can serve as vital tools in the teaching process. When conveying the importance of physical phenomenon to my students recently, I was able to construct a computer simulation of a double pendulum using Mathematica. As such, I was able to adjust certain key parameters of the system as a means of demonstrating this phenomenon.

My interest in applying to a teaching position with First Academy High School, aside from your strong academic curriculum, is also because of the value that is placed on developing your students outside of academics. I have a strong passion for soccer that began when I was five years old. I am also an avid chess player; I began when I was very young. First Academy treats its students and teachers as a community which I would love to be a part of, both academically and in other activities.

Enclosed is my resume for your review. I welcome the opportunity to meet with you in person to further discuss my qualifications in greater detail and to answer any questions you may have.

Thank you for your consideration. I look forward to hearing from you soon.

Sincerely,

Your Name