**Statement of Purpose**

Three years of science are required by the State of Ohio in order for one to receive their high school diploma. In addition to the required courses, students must take and pass the science portion of the Ohio Graduation Test. “Ohio Graduation Tests (OGT) are aligned to Ohio’s academic content standards, which were adopted by the State Board of Education in English language arts, mathematics, science and social studies. These standards have been carefully designed to ensure that students are armed with the knowledge they need to be successful in higher educational pursuits as well as the jobs and careers of the future (Ohio Department of Education)”.

Many wonder why science in important or relevant to every day life. Harvey Craft, Suite101.com, writes “In the physical world, however insignificant or small a part of it might be, science is involved at some level in defining it, describing it, or figuring out what it is and how it works. The activities that people take for granted ­– riding a bike, cooking, watching TV, using computers, and on and on – cannot be understood or explained without science. Science is concerned with the living and the non-living; it is about the past present, and future. Since science is primarily about how to think and process information, it trains the mind to be more orderly in problem-solving. An understanding of science enables citizens to better evaluate an increasing number of issues like climate change, alternative energy, personal health, etc., thereby producing informed, responsible citizens (Craft, 2011).” Science, regardless of the topic being studies is important.

The focus of my unit is on the forces and motion, physics portion of the ninth grade Physical Science curriculum. I chose this area to focus on, because a lot of what we do throughout their freshman science year builds upon the formulas and concepts that they learn in this unit. There are also many questions on the OGT that are geared towards these concepts. It is my hope that with this specific unit, we will ensure that our students are getting the necessary instruction needed to become successful in their freshman science class as well as on their OGT’s.

Students will walk away from this unit with an understanding of the motion, force, acceleration and Newton’s laws of motion. They will be able to use various formulas to calculate force and acceleration, and will be able to apply Newton’s laws of motion to their everyday lives.

The curriculum that I am creating for this unit is brand new to the upcoming students. While the concept is not new, I did a lot of research to find activities that will grab the students’ interests and help them to understand Newton’s laws of motion more easily. There are so many resources at our fingertips that we really do not have to recreate the wheel, rather find something that will work for our students, because not everything will.

Craft.H. (2011, January 17). How teachers can promote the importance of science to students. Scientific Inquiry by suite101, Retrieved from <http://www.suite101.com/content/how-teachers-can-explain-the-importance-of-science-to-students-a333919>

Ohio department of education. (2010, June 10). Retrieved from http:// www.ode.state.oh.us/GD/Templates/Pages/ODE/ODEDetail.aspxpage=3&TopicRelationID=216&ContentID=4347&Conten t=86702