# Physics at SFHS

## What is Physics?

Physics is an attempt to describe *how* (not *why*, that is a philosophy question) the universe works using mathematics. The "laws of physics" that scientists have postulated over the centuries are all mathematical ideas. Physics at SFHS is an introduction to these mathematical concepts and an explanation of how to use them to describe the universe we live in and to predict its behavior.

The main topics we will cover may include:

- Motion and Forces
- Energy and Power
- Gravitation
- Electricity and Magnetism
- Waves
- Nuclear Physics
- Relativity

#### Is it hard?

Yes. But not so hard that only the smartest students can be successful. You should approach the class as a math class. To be successful you will need daily practice, patience, and a willingness to ask questions when you get stuck.

You do not need to be a math genius to be successful, but you do need to be comfortable with your math skills. The course is taught with the assumption that you have a firm grasp of algebra and right-triangle trigonometry.

# **Levels of Physics offered at SFHS**

- · On-level physics
- AP Physics B
- IB Physics SL

## Who should take Physics?

No matter what your future plans, physics looks great on your high school transcript. A student who is successful in physics must have good problem solving and reasoning skills – this is good for most any career. Traditionally, physics is for students that may be pursuing a career in math, science or technology. Anyone going into engineering in college needs to take physics.

At SFHS, all levels of physics are for juniors or seniors only. Traditionally physics has been a senior level class, but juniors with strong math skills may attempt the class.

#### Who teaches it?

The only teacher currently at SFHS teaching physics is Mr. Howard. He has been teaching physics for about 15 years, mostly higher level IB Physics at various international schools around the world. He is in his 4<sup>th</sup> year at SFHS.

## What if I have more questions?

Please email Mr. Howard for more information at: jehoward@forsyth.k12.ga.us