PHYSICS 2015-16

Physics is the next unit we will cover. It is lab extensive, and project based.
In this unit, you will meet the following objectives:

PART A:

- VOCABULARY
  - See vocabulary hand out for part A

- MOTION
  - What is a reference point – how is position defined
  - How to determine average speed
  - Be able to use the formula to determine speed, distance and time
  - What is velocity/acceleration
- FORCES
  - Balanced Forces (no change in velocity), Unbalance forces (changes in velocity)
  - Many vocabulary words are included in "forces"
  - How to calculate Net force
  - Electric and Magnetic Forces
- NEWTON'LAWS
  - 1st Law, inertia – lab and explain how it applies to motion
  - 2nd Law – how force and mass can affect acceleration
  - 3rd Law of Motion – create a balloon car.
- FRICTION
  - Types of friction; sliding, rolling, fluid, static
- ENERGY
  - Potential and kinetic energy – roll marbles, create a rollercoaster.

PART B:

- SOUND AND LIGHT WAVES
  - Amplitude, wavelength and also electromagnetic waves
- VOCABULARY
  - More Vocabulary for WAVES.

At the end of this unit, there will be a unit test. There will be physics projects. We will be incorporating iPads NGSS standards into this unit blended with our curriculum from past years. There will also be quizzes on all of the objectives listed above.