Physics
Coach Romine

Materials needed: pen, pencil
3 ring binder
Scientific Calculator

Text: Holt Physics

Grading: Total Point System
For example, TEST 1- 100
TEST 2- 50
TEST 3- 100
Notebook- 100
Total possible points: 400
Total points earned: 350
Divide total points earned by total possible points- 350/400 = 88 AVG

Notebook: Worth 100 Points
Taken up at the end of each six weeks

Course Content/Objectives:

- Describe the basic natural forces.
- Understand the interrelationships among mass, distance, force, velocity, acceleration, and time.
- Explain the significance of slope and area under a curve when graphing motion data.
- Analyze vector problems graphically and trigonometrically.
- Use vectors to analyze the motion of an object acted upon by more than one force.
- Demonstrate an understanding of momentum.
- Explain planetary motion and navigation in space in terms of Kepler's and Newton's laws.
- Apply quantitative relationships involving mass, weight, distance, work, power, gravitational potential energy, and kinetic energy.
- Explain the laws of thermodynamics.
- Describe relationships qualitatively and quantitatively between changes in heat energy and changes in temperature.
- Classify waves according to type.
- Explain wave behavior in terms of reflection, refraction, and diffraction.
- Differentiate between constructive and destructive wave interference.
- Relate physical properties of sound and light to wave characteristics.
- Explain the impact of change in media upon the speed, frequency, and wavelength of a wave.
- Describe how different components of the electromagnetic spectrum are used for communication.
- Demonstrate an understanding of reflection, refraction, and diffraction. (light)
- Explain polarization.
- Describe similarities in the calculation of electrical force, magnetic force, and gravitational force between objects.
- Explain the production of static change in an electroscope through induction and conduction.
- Identify methods by which an electric field can be created.

- Apply quantitative relationships among charge, current, potential energy , potential difference, resistance, and electrical power for simple series, parallel, or combination DC circuits.
- Determine the force on charge particles using Coulomb's law.
- Demonstrate an understanding of the scientific explanations of the following as they relate to the nature of particles.

  Thomson's cathode ray experiment
  Rutherford's gold foil experiment
  Bohr's bright line spectra experiment
  Millikan's oil drop experiment
  DeBroglie's wave theory
  Einstein's photoelectric effect
  Michelson/Morley theory

Class Policies:

No food or drink
Bathroom is for emergency only (sign out and get a pass)
No sleeping
Raise your hand if you have a question or comment
Respect others
Do not be tardy
Make up work/tests in a timely manner (see me about all makeup work/tests)