## Welcome to Physics!

## What is physics?

Physics is one of the oldest branches of science, though early physicists referred to themselves primarily as natural philosophers. (think Archemedes, Galileo, Newton, etc.) It is an extremely broad subject covering the motion of objects and forces, how energy flows from one material or object to another, how waves propagate through space and time and how matter itself is constructed.

Physics is also a precise science and, in its most useful forms, requires use of mathematics (pre-calculus in this class, calculus and beyond in college) as well as lots of drawing pictures (labeled diagrams), graphs and writing. We will write a fair amount in this class

TEXT BOOK: PHYSICS by GIANCOLI (college level text).



## Summary of chapters we'll cover this year

## First semester:

Analyzing motion (2, 3)
Forces, energy and the "laws of motion" $(4,5)$
Collisions and transfer of energy (6)
Things that spin $(7,8)$

## Class policy: Come to learn

Grading (please see Clark's 'philosophy' page)

| $90 \%$ and up $=$ A | $40 \%=$ tests |
| :--- | :--- |
| $75 \%-89 \%=$ B | $40 \%=$ labs |
| $60 \%-74 \%=C$ | $20 \%=$ classwork |
| Less? D/F/Inc |  |

Note: final exam will be fixed at $15 \%$ of overall grade. more details as the class progresses. Please check the website for more. CLARKRULES.com

## Second semester:

Sound, waves, etc. (12-16)
Electricity, currents fields and forces (17-20)
Magnetism, induction, alternating current (21-22)
Light $(\mathbf{2 3 , 2 4}, 25)$


