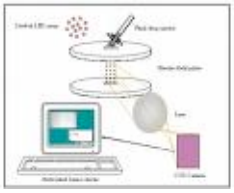


# Physics – Mini Project

## It's the Law!

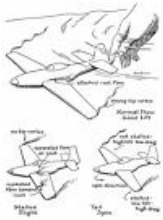
Due Date:
Tuesday. May 12
Grade Value: 40 Points

The due date is **Tuesday, May 12.**

Students are to research ideas for creating a working model to be demonstrated in the science classroom. The model should illustrate any Law or Principle of Force and/or Motion. (Newton's 1st, 2nd, & 3rd Laws, Bernoulli's Principle, gravitational laws, spinning forces, simple machines, or any topic dealing with **forces** and/or **movement**).

Students can refer to Chapters 9, 10, and 11 in the textbook for a better understanding of the different kinds of laws and principles.
Ideas can be found on the internet and library reference books.

These three internet sites are examples of places to locate different physics demonstrations:



http://www.oberlin.edu/physics/catalog/demonstrations/mech/flyball.html

http://www.mip.berkeley.edu/physics/physics.html (printed version in classroom)

http://www.physics.ncsu.edu/demoroom/resources.html

The above example sites contain many demonstrations that are very simplistic. It is not possible to separate simple from complex within these sites. It is up to the student to research and perform a final project that will illustrate the complexity of effort given to a project with a six weeks time frame for completion.

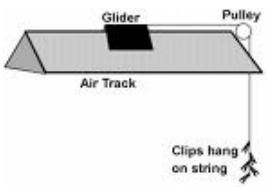
The working model is to be demonstrated in the classroom. An explanation of "how it works" is to be given during this time. Videos may be used to demo a working model during the live oral presentation.

Presentations should have a time frame of 2 to 4 minutes. (More complex projects will be given appropriate time for explanation and demonstration.)

Students may work alone or in teams of 2 or 3 (no more). Complexity is a MUST when the project is not an individual effort. It is usually best to work alone.

This project is worth 40 points credit. Do not expect extra credit to be given. It is intended that the true reward will be in deriving a very unique idea and presenting it with *panache* to your fellow students.

Illustrations and examples have been presented in the classroom. It is understood that you will not repeat the demonstrations already presented in the classroom.




**Physics Is Phun!**