**Physics**

**ACE Strategy**

ACE is a writing/problem solving strategy that can be very helpful when trying to complete word problems in math or science. While you may not need to formally write out each step for every problem you solve, this strategy is a key component of successful problem solving.

**A**nswer

Answer the question completely and correctly. Make sure you answered all parts of the question and included units (and directions in the case of a vector quantity) with your answers. Does your answer make sense?

**C**alculate

Calculate your answer. Write the equation or formula that you used at the beginning of your solution. Make sure to show all the steps in your solution to the problem.

**E**xplain

Explain your solution. Many times, this part is completed first. Before you can start finding a solution you have to decide on a plan. Make a list of what you are given in the problem. Describe a set of steps you will follow to complete the solution. This is especially important in a multiple step problem.

***Example Problem –***

A photographer in a helicopter accidentally drops a camera out the window when the helicopter is stationary 60 m above the ground. (a) How long will the camera take to reach the ground? (b) What will its speed be when it hits? (Remember the acceleration of gravity is -9.8m/s2.)