**Chapter 4 Study Guide**

Define the following terms: acceleration, air resistance, terminal velocity, centripetal force

Use Newton’s Second Law equation to answer the following problems.

Find force.

Find acceleration.

How large is acceleration due to gravity on earth?

What force is at work when a glider hangs in the air instead of falling straight down?

Which would better slow the speed of a skydiver falling towards earth: a small parachute or a large one? Why?

One basketball goes through the hoop. Another ball rolls off the opposite hoop at the same instant. Which will hit the ground first? Why?

While standing on skates, Ramon pushes off the wall. What will happen? Which Law explains this?

Roberta, who has a mass of 40kg is running at 5m/s. What is her momentum? (p=mv)

What could Roberta do to increase her momentum?