**Motion Webquest Name:**

**A. Intro to Speed and Velocity -** <http://www.ducksters.com/science/physics/speed_and_velocity.php>

1. What is the formula for speed?
2. How do people measure or think of speed in the United States?
3. In science and physics, what is the standard unit of measure for speed?
4. What is the rate of change in an object’s position?
5. What two parts make up velocity?
6. What is the difference between speed and velocity?
7. What is the formula for velocity?
8. What is the standard unit for velocity?
9. What is the difference between instantaneous and average speed?  What is the greatest example of an instantaneous speed?
10. What is the fastest possible speed in the universe?
11. Who was the first scientist to measure speed and distance over time?

**B. Design a Roller Coaster** – <http://www.learner.org/exhibits/parkphysics/index.html>

Design your roller coaster to achieve an overall “thumbs up” rating for Fun and Safety. List below what the individual designs would have to be for

1) Height of the First Hill =

2) Shape of the First Hill =

3) The Exit Path =

4) Height of the Second Hill =

5) The Loop =

**C. The Science of Hockey** - <http://www.exploratorium.edu/hockey/>

Answer 3 of the 7 questions found on the bottom of the page – Write the questions and answers below.

1)

2)

3)

**D. Fear of Physics** – <http://www.fearofphysics.com/index1.html>

Choose and “play with” at least **4**of the topics presented and write down 1 thing you have learned from each topic.

1)

2)

3)

4)