Handed Out: _____ Name: _____
Due: _____ Date: _____

Momentum Problems 1
Physical Science and Technology

Simple Momentum Problems (show the five steps where indicated)

1. What is the formula for the momentum of an object?

2. If you know an object's momentum and velocity, what is the formula for its mass?

3. If you know an object's momentum and mass, how can you find its velocity?

4. What is the momentum of a 7,833 kg Bregar moving at 17 m/s? Show the Five Steps.

5. What is the velocity of Adam Nichols if he has a mass of 87 kg and a momentum of 762.2 kg m/s? Show the Five Steps.

6. What is the mass of Jason Flint if he has a momentum of 839.22 kg m/s and a velocity of 288 m/s? Show the Five Steps.

7. If Abelina Velasquez has a momentum of 33 kg m/s and is traveling at 0.5 m/s, what is her mass? Show the Five Steps.

8. What is the momentum of an 8.99 kg Bregar being dragged behind a truck with a speed of 2.3 m/s? Show the Five Steps.

9. Which is more important in determining the momentum of an object: its velocity or its mass? Explain your answer.

10. A car is traveling at 83 m/s.
    a. If the car has a mass of 1000 kg and has no passengers, what is its momentum? Show the Five Steps.

    b. If the car has three 54 kg Bregars sitting in it, what is the momentum of the car plus its passengers? Show the Five Steps.