

Physical Science  
Introduction to Motion  
Velocity and Momentum

Name: \_\_\_\_\_

Section: \_\_\_\_\_

Date: \_\_\_\_\_

Directions: You must use complete sentences and proper grammar for vocabulary or short answer questions. You must show your work for "problem" questions.

1. Define the following vocabulary terms:

a. Velocity

b. Momentum

2. What is the momentum of a car that has a velocity of 24 m/s north and a mass of 1,200 kg?

Known information  $m =$  \_\_\_\_\_  $v =$  \_\_\_\_\_

Equation:  $p =$  \_\_\_\_\_ No Algebra.

Answer:  $p =$  \_\_\_\_\_ with a direction of \_\_\_\_\_

3. A baseball has a momentum of 6.0 kg·m/s south and a mass of 0.15 kg. What is its velocity?

Known information  $m =$  \_\_\_\_\_  $p =$  \_\_\_\_\_

Equation:  $p =$  \_\_\_\_\_ Algebra:  $v =$  \_\_\_\_\_

Answer:  $v =$  \_\_\_\_\_ with a direction of \_\_\_\_\_