**Physical Science Chapter 3**

**Wkst: Momentum Practice**

**Show all Steps in solving problems, given, equation, and all work with units**

1. Calculate the momentum of a 75 kg speed skater moving forward at 16 m/s (L2)

2. Calculate the momentum of a 135 kg ostrich running north at 16.2 m/s (L2)

3. Calculate the momentum of a 5.0 kg baby on a train moving eastward at 72 m/s (L2)

4. Calculate the velocity of a 0.8 kg kitten with a momentum of 5 kg m/s forward (L2)

5. If a car with a velocity of 30 m/s has a momentum of 36,000 kg m/s southwest, what is the car’s mass? (L2)

6. Calculate the momentum of a seated 48.5 kg passenger on a train that is stopped (L3)

7. Explain the difference between an object having momentum and an object having inertia. (L4)