Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Physics 11

**Conservation of Momentum Activity**

**Part 1: Carts start from rest, *without* extra weight**

1. Describe the momentum of the system before the explosion.
2. Describe what you expect the momentum of the system to be after the explosion.
3. Use the space below to calculate the momentum of the system after the explosion. Show all your work.

**Part 2: Carts start from rest, *with* extra weight**

1. Describe the momentum of the system before the explosion.
2. Describe what you expect the momentum of the system to be after the explosion.
3. Use the space below to calculate the momentum of the system after the explosion. Show all your work.

**Part 3: Carts have initial velocity**

1. Describe the momentum of the system before the explosion.
2. Describe what you expect the momentum of the system to be after the explosion.
3. Use the space below to calculate the momentum of the system after the explosion. Show all your work.