**Introduction/ Motivation Worksheet Answer Key**

**Instruction**: Watch the video at the following link and then answer the questions below. <https://www.youtube.com/watch?v=EzNfvwPCFs0&t=6s>

1. Rank the amount of momentum from least to greatest.
   1. A bullet travelling at a very high speed.
   2. A 1 kg melon rolling at a very low speed.
   3. A truck at rest.

Ranking: \_\_\_Truck, melon, bullet \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Explain your answer:

The truck has zero momentum because its velocity or speed is zero. The melon is next, even if it’s more massive than the bullet, because the bullet has a very high speed that would compensate for its small mass.