## Astronomy Ranking Task: Momentum

## Exercise #1

**Description:** All of the following are typical examples of the named objects and have no unusual qualities.

- A. baseball
- B. bowling ball
- C. ping pong ball
- D. small metal BB

**A. Ranking instructions:** If all of these objects are traveling with the same speed, rank their amounts of momentum.

Ranking Order: Greatest 1 \_\_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ Least

Or, all of the objects have the same amount of momentum. \_\_\_\_\_ (indicate with a check mark)

Or, there is not enough information to determine this. \_\_\_\_\_ (indicate with a check mark)

Carefully explain your reasoning for ranking this way:

**B. Ranking instructions:** If all of these objects have the same amounts of momentum, rank the speeds with which they must be moving.

Ranking Order: Fastest 1 \_\_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ Slowest

Or, all of the objects are traveling with the same speed. \_\_\_\_\_ (indicate with a check mark)

Or, there is not enough information to determine this. \_\_\_\_\_ (indicate with a check mark)

Carefully explain your reasoning for ranking this way: