Name: _____
Date: _____
Period: _____
Mozart or Beethoven? _____

Inertia and Mass

Please remember to *thoroughly* explain your answers when necessary.

1. **Inertia** is…

2. The amount of inertia possessed by an object is dependent solely upon its _____.

3. Two bricks are resting on edge of the lab table. Dobby stands on his toes and spots the two bricks. He acquires an intense desire to know which of the two bricks are most massive. Since Dobby is vertically challenged, he is unable to reach high enough and lift the bricks; he can however reach high enough to give the bricks a push. Discuss how the process of pushing the bricks will allow Dobby to determine which of the two bricks is most massive. What differences will Dobby observe and how can this observation lead to the necessary conclusion?

4. Would Dobby be able to conduct this same study if he was on a spaceship in a location in space far from the influence of significant gravitational forces? Explain your answer.

5. If a moose were chasing you through the woods, its enormous mass would be very threatening. But if you zigzagged, then it's great mass would be to your advantage. Explain why.

6. Mass and velocity values for a variety of objects are listed below. Rank the objects from smallest to greatest inertia. _____ < _____ < _____ < _____