## **Chapter 7 Anticipation Guide.**

Conceptual Physics (Hewitt) Chapter 7 (Momentum); p. 86-99

Use your textbook to answer the following True/False Questions. Check the box with the corresponding answer, write the page where you found that answer to be True or False and if the answer is false, rewrite the statement to make it true.

| True | False | Page | Chapter 7 statement  |
|------|-------|------|--|
|      |       |      | 1. Momentum is defined as an object's mass times its velocity.   |
|      |       |      |  |
|      | 9     |      | 2. Impulse is defined as the force exerted on an object times the time it lasts.   |
|      |       |      |  |
|      |       |      | <ol> <li>If the net external force acting on a system is zero, then the total momentum of the<br/>system is zero.</li> </ol>   |
|      |       |      | <ol> <li>When two objects collide and completely bounce apart with no lasting deformation or<br/>generation of heat, the collision is said to be elastic.</li> </ol> |
|      |       |      | 5. When two objects collide and stick together, the collision is said to be inelastic.   |
|      |       |      | Automobile dashboards that are padded lengthen the time of impact in case of a collision.  |
|      |       |      | 7. If a net force acts on a system, the system's momentum will change.   |

[2.1.C.a]

Compare the momentum of two objects in terms of mass and velocity.

[2.1.C.b]

Explain that the total momentum remains constant within a system.