

**ACROSS**

1. Impulse = the _____ in momentum.
3. Impulse is the product of a _____ acting over an interval of time.
6. The momentum of a body is the product of the body's mass and its _____.
8. The forces between objects WITHIN a system are called _____ forces.
9. If no external force acts on a system, the system is described as _____.
11. Newton's ___ law says forces occur in pairs.
12. The impulse-momentum _____ says impulse = change in momentum
14. Newton's ___ law says force is equal the the rate of change of momentum
17. The momentum _____ a collision is equal to the momentum AFTER...for closed, isolated systems.
19. Law of _____ of momentum states that the momentum of any closed, isolated system does not change.
22. The units for momentum is _____/s.

DOWN

1. If no objects leave or enter a system, the system is described as _____.
2. If a net-_____ force acts on a system, it is not isolated, and momentum is NOT conserved.
4. In a closed, isolated system, momentum is _____.
5. The product of the mass and velocity of a body is called _____.
7. The direction of the momentum of an object in motion is the same as the direction of the _____ of the object.
9. = change in momentum.
10. A collision in which objects collide and bounce apart without lasting deformation.
13. Mo teacher.
15. Momentum before a collision = momentum _____...for closed, isolated systems.
16. Momentum is a(n) _____ quantity.
18. The momentum of a body is the product of the body's _____ and its velocity.
20. A defined collection of objects.
21. A collision in which objects collide become distorted and interlock.