

Students should be able to:

1. Define momentum.
 - Relate momentum to Newton's second and third laws.
2. Define impulse and relate it to momentum.
 - Use impulse-momentum theorem to explain shock absorbers.
3. State the conservation of momentum law.
4. Solve problems involving conservation of momentum and energy laws.
5. Distinguish between conservative and nonconservative forces.
6. Distinguish internal and external forces.
7. Distinguish kinetic and potential energy.
8. Identify gravitational potential energy.
9. Identify the two types of collisions.
10. Identify the angular analogs to linear dynamics.
11. State the conservation of angular momentum.
12. Explain how the conservation of angular momentum applies to various situations.
13. Solve problems involving angular momentum.