**Physics Unit 5: Work, Energy and Momentum Test Review:**

**Test Setup:**

Multiple Choice: 34( 1 pt each ) Short Answers: 3 (5 pt each) Problems: 12 (4 pt each )

**Short Answers:**

1. State, in words, the work-kinetic energy theorem.
2. Describe the relationship between kinetic energy and gravitational potential energy during the free all of a pencil from a desk.
3. The Millennium Falcon is a spaceship in the Star Wars universe commanded at one time by Corellian smuggler Han Solo and his Wookiee first mate, Chewbacca. Is it possible for Solo’s spaceship to be traveling with a constant velocity and to experience a change in momentum? Explain your answer.

**Multiple Choice:**

1. Define work ( know the formula and how to tell if work has been performed)
2. A force does work on an object if what happens?
3. Define:
4. Kinetic energy
5. Gravitational potential energy
6. Chemical potential energy
7. Elastic potential energy
8. Power
9. Impulse
10. Know formulas for:
11. Work
12. Kinetic Energy
13. Gravitational potential energy
14. Momentum
15. Work-kinetic energy theorem
16. Know what the work-kinetic energy theorem is.
17. What are the units for a spring constant?
18. What is gravitational potential energy measured in relation to?
19. What is the main difference between kinetic energy and gravitational potential energy?
20. Know what the law of conservation of energy says.
21. Friction converts kinetic energy into what?
22. Know what happens in :
23. Inelastic collisions
24. Elastic collisions
25. 2-body collision
26. Perfect inelastic collision
27. Perfect elastic collision
28. Know what the law of conservation of momentum states.

**Problems:**

* **Study the levers homework page: 4 problems**
* **Momentum: 2**
* **Kinetic energy: 1**
* **Potential energy: 1**
* **Work and net work: 2**
* **Power: 1**
* **Combined kinetic energy/gph problem: 1**