

FLPS

Name _____

Physical Science

Study Guide

MP 5

VOCABULARY

Directions: On a separate sheet of paper, define each word using complete sentences.

1. Momentum
2. Terminal velocity
3. Satellite
4. Newton's second law of motion
5. Law of conservation of momentum
6. Air resistance
7. Newton's third law
8. Acceleration
9. Artificial satellite
10. Projectile
11. Centripetal
12. Centripetal acceleration
13. Vertical motion
14. Centripetal force
15. Horizontal motion
16. Gravity
17. Free fall
18. Speed
19. Velocity
20. Acceleration
21. Force
22. Inertia
23. Net force
24. Orbit
25. Energy

SHORT ANSWER QUESTIONS

Directions: On a separate sheet of paper answer the following questions. Use complete sentences.

1. What affects the amount of air resistance that acts on an object?
2. What can an object in free fall be considered?
3. Name three things that illustrate Newton's third law.
4. What equals mass times acceleration, according to Newton's second law?
5. What is the force of gravity on an object?
6. What is reached when air resistance and force are equal due to gravity?
7. When is the velocity of a projectile considered to be constant?
8. What force causes a leaf to fall more slowly than a penny?
9. What opposes acceleration due to gravity?
10. What does a net force acting on a moving object cause it to do?
11. What two measurements are needed to calculate the momentum of an object?
12. What is a projectile?
13. State Newton's second law of motion as an equation.
14. For what purposes are artificial satellites used?
15. What is the unit of momentum?
16. Which has more kinetic energy, the car we ride in or a truck? Explain.
17. What is a reference point?
18. What is the formula for calculating average acceleration?
19. Why will a moving object continue until a force acts on it?
20. What does $F = M \times A$ mean?
21. How does distance affect gravitational force?
22. How does mass affect gravitational force?
23. When is an object in free fall?