

## Motion and Forces Jeopardy

1. The property of things to remain at rest if at rest, and in motion if in motion.
2. The distance traveled per time.
3. Formula Daily Double: What is the formula for acceleration?
4. The speed of an object and direction of motion.
5. A quantity that specifies direction as well as magnitude. Drawn as an arrow.
6. Which Newton's Law that states every object continues in a state of rest, or in a state of motion in a straight line at constant speed, unless it is compelled to change that state by forces exerted upon it. In other words, "Things like to do what they are already doing."
7. A push or a pull.
8. The combination of all forces that act on an object.
9. The scientific SI unit of force.
10. Math Daily Double: An object is lifted by a support force of 10 N and is pulled down by gravity at 15 N. What is the net force on the object? And include the direction.
11. Define terminal velocity.
12.  $\Sigma F = 0$ .
13. The force that supports an object against gravity.
14. Formula Daily Double: What is the formula for force?
15. The rate at which velocity changes with time; the change may be in magnitude or direction or both.
16. The property of things to resist changes in motion.
17. Visual Daily Double: What is the reading on each scale?
18. The quantity of matter in an object. The quantity of how much stuff an object has.
19. Visual Daily Triple: Draw a triangle on the board what does this mean?
20. When two values change in opposite directions, so that one increases and the other decreases by the same amount.
21. The quantity of space an object occupies.
22. The force due to gravity on an object.
23. The fundamental SI unit of mass.
24. Formula Daily Double: What is the formula for momentum?
25. Which Newton's Law that states the force acting on an object is equal to the mass X the acceleration.
26. The force that opposes the motion when surfaces are in contact with one another.
27. Motion under the influence of gravitational pull only.
28. Frictional resistance due to motion through air.
29. The speed at which the acceleration of a falling object terminates because air resistance balances its weight.
30. The quantity that falling objects accelerate due to Earth's gravity.
31. Math Daily Triple: Include units, what is the acceleration of a train that goes from rest to 30 m/s in 5 s?
32. Which Newton's Law that states for every action there is an opposite and equal reaction.
33. Describe Daily Double: Describe the difference between weight and mass.
34. What is the product of an object's mass and its velocity called?
35. Define inertia.
36. A collision in which objects rebound without lasting deformation or the generation of heat.
37. A collision in which the colliding objects become distorted, generate heat, and join together.
38. Which law states the momentum before an event involving only internal forces is equal to the momentum after the event is called?
39. Which has more momentum a Mac Truck or a Volkswagen bug?
40. Which object falls faster to earth a heavy object or a light object?

Final Questions:  $f=mXa$  do not give a give  $v_f-v_i/t$