Quizlet NAME _____

23 Multiple choice questions

A+
100%

1. a fundamental physical quantity; a measure of the amount of matter or inertia
   a. motion
   b. **CORRECT:** mass
   c. metre
   d. work

2. the product of mass and velocity of a moving body
   a. metre
   b. **CORRECT:** momentum
   c. motion
   d. Newton

3. energy can neither be created nor destroyed but only changed in form
   a. **CORRECT:** law of conservation of energy
   b. law of conservation of momentum
   c. potential energy
   d. kinetic energy

4. the force of gravity on an object
   a. metre
   b. **CORRECT:** weight
   c. Newton
   d. vector

5. the product of force and displacement parallel to the force
   a. Newton
   b. **CORRECT:** work
   c. mass
   d. metre

6. that single force which would have the same effect as two or more forces applied to the same point
    a. metre
    b. vector
    c. resultant
    d. **CORRECT:** resultant force

7. the breaking down of a vector into its components
    a. resultant
    b. **CORRECT:** resolution of vectors
    c. resultant force
    d. vector

8. the study of motion without examining the causes; the description of motion
    a. Newton
    b. motion
    c. **CORRECT:** kinematics
    d. mass

9. forces in ropes, strings, wires, cables, etc.
    a. Newton
    b. motion
    c. vector
    d. **CORRECT:** tension

10. if one body exerts a force on a second body, the second body exerts the same force back on the first body; to every action there is an equal and opposite reaction
    a. Newton's Second Law
    b. **CORRECT:** Newton's Third Law
    c. Newton
    d. Newton's First Law

11. the SI unit of force; it is that force which will accelerate a mass of 1 kg at 1m.s
    a. **CORRECT:** Newton
    b. tension
    c. motion
    d. vector

12. a fundamental unit of length; it is equal to the distance travelled by light in a vacuum in the fraction 1/299,792,458 of a second
    a. mass
    b. motion
    c. work
    d. **CORRECT:** metre

13. change in position relative to an observer
    a. tension
    b. **CORRECT:** motion
    c. metre
    d. Newton

14. that single vector which has the same effect as a number of other vectors; the vector sum of a number of vectors
    a. resultant force
    b. vector
    c. Newton
    d. **CORRECT:** resultant

15. in the absence of external forces, the sum of the momenta before the collision is equal to the sum of the momenta after the collision
    a. resolution of vectors
    b. law of conservation of energy
    c. **CORRECT:** law of conservation of momentum
    d. momentum

16. a quantity that needs both a size and a direction to describe it fully and which obeys special laws of addition
    a. metre
    b. Newton
    c. **CORRECT:** vector
    d. tension

17. a quantity that can be represented completely, purely by a number
    a. vector
    b. mass
    c. speed
    d. **CORRECT:** scalar

18. the acceleration of an object is directly proportional to the resultant force acting on it and inversely proportional to its mass
    a. Newton
    b. Newton's First Law
    c. Newton's Third Law
    d. **CORRECT:** Newton's Second Law

19. the time rate of change of displacement
    a. **CORRECT:** velocity
    b. weight
    c. vector
    d. tension

20. time rate of change of distance
    a. mass
    b. scalar
    c. **CORRECT:** speed
    d. metre

21. energy of motion
    a. kinematics
    b. **CORRECT:** kinetic energy
    c. motion
    d. potential energy

22. a body will remain at rest or travel with constant velocity unless acted upon by an unbalanced force
    a. Newton
    b. Newton's Third Law
    c. Newton's Second Law
    d. **CORRECT:** Newton's First Law

23. energy due to position or configuration; stored energy
    a. **CORRECT:** potential energy
    b. tension
    c. kinetic energy
    d. motion