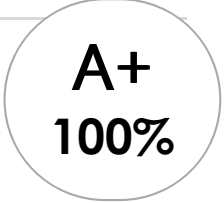


24 Multiple choice questions



A+
100%

1. angles measured clockwise from north; used in vector analysis
 - a. energy
 - b. gravity
 - c. dynamics
 - d. **CORRECT: bearings**

2. defined as displacement over time
 - a. average speed
 - b. **CORRECT: average velocity**
 - c. instantaneous velocity
 - d. gravity

3. defined as distance over time
 - a. **CORRECT: average speed**
 - b. displacement
 - c. average velocity
 - d. energy

4. the SI unit of mass
 - a. **CORRECT: kilogram**
 - b. force
 - c. energy
 - d. joule

5. when two or more objects exert forces on each other, generally over a short time interval
 - a. **CORRECT: collision**
 - b. friction
 - c. component
 - d. joule

6. the unity of energy (or work); the product of a force of one newton acting through a distance of one metre
 - a. energy
 - b. force
 - c. impulse
 - d. **CORRECT:** joule

7. one of the numerous vectors that can be added vectorially to yield a resultant vector
 - a. impulse
 - b. **CORRECT:** component
 - c. joule
 - d. collision

8. the time rate of change of velocity; can be a speeding up, slowing down and/or changing of direction
 - a. **CORRECT:** acceleration
 - b. inertia
 - c. collision
 - d. friction

9. the property of matter that causes it to resist changes in motion
 - a. energy
 - b. impulse
 - c. **CORRECT:** inertia
 - d. force

10. the velocity at an instant of time; found by taking the average velocity over an extremely small time interval; it is equal to the slope of the tangent at the point on a displacement-time graph
 - a. average velocity
 - b. inelastic collision
 - c. **CORRECT:** instantaneous velocity
 - d. displacement

11. friction caused by movement of bodies through the air
 - a. impulse
 - b. **CORRECT: air resistance**
 - c. inertia
 - d. acceleration

12. a force that always opposes motion; arises as a result of contact between different materials
 - a. inertia
 - b. gravity
 - c. **CORRECT: friction**
 - d. force

13. the capacity for doing work
 - a. force
 - b. inertia
 - c. bearings
 - d. **CORRECT: energy**

14. the product of force and time; equals the change in momentum
 - a. joule
 - b. force
 - c. inertia
 - d. **CORRECT: impulse**

15. the force directed towards the centre of a circle necessary for an object to follow a circular path
 - a. force
 - b. **CORRECT: centripetal force**
 - c. energy
 - d. centripetal acceleration

16. that region of space in which a mass experiences a force of attraction from other masses
 - a. **CORRECT: gravitational field**
 - b. friction
 - c. average speed
 - d. gravity

17. a collision in which kinetic energy is conserved
- collision
 - CORRECT: elastic collision**
 - inelastic collision
 - acceleration
18. that which changes the motion or shape of a body
- CORRECT: force**
 - energy
 - joule
 - impulse
19. the acceleration directed towards the centre of a circle about which an object is moving
- CORRECT: centripetal acceleration**
 - elastic collision
 - centripetal force
 - acceleration
20. the study of the causes of motion
- CORRECT: dynamics**
 - friction
 - gravity
 - bearings
21. the state in which a body does not undergo any changes in its motion; the resultant force is zero
- collision
 - friction
 - kilogram
 - CORRECT: equilibrium**
22. change in position in a given direction
- CORRECT: displacement**
 - component
 - impulse
 - dynamics

23. a collision in which kinetic energy is not conserved; it is conserved into other forms such as heat and sound
- CORRECT:** inelastic collision
 - acceleration
 - elastic collision
 - collision
24. the force of gravitation on an object
- bearings
 - CORRECT:** gravity
 - dynamics
 - energy