Definitions

Mass; Weight; Mass vs Weight
Gravitational field strength
Density
Acceleration
Scalar vs vector; speed vs velocity
Drag force
Momentum
Equilibrium
Impulse
Limit of proportionality
Elastic solid/material
Hooke's law
Energy conservation

1. State some scalar quantities.

2. State the factors which completely describe a vector quantity.

3. State some vector quantities.

4. Distinguish between scalar and vector quantities.

5. Define speed.

6. Define velocity.

7. Distinguish between speed and velocity, using the words vector and scalar.

8. Define acceleration.

9. State the name given to negative acceleration.

10. Explain what is meant by deceleration.

11. State and explain which feature of a position-time graph shows velocity.

12. State and explain which feature of a speed-time graph shows acceleration.

13. Explain what is meant by mass.

14. State what is meant by the term weight.

15. Explain what is meant by gravitational field strength.

16. State some ways in which weight differs from mass.

17. State the equation linking the density of a substance with its mass and volume.

18. State three ways in which a force may change the motion of the object.

19. State why force is a vector quantity.

20. Explain what is mean by the elastic solid.

21. Explain what is meant by the term limit of proportionality of a spring.

22. Explain what is mean by the drag force.

23. State the name that is given to the turning effect of a force.

24. Define the moment of a force.

25. State the two factors on which the turning effect of a force depends.

26. Explain what is meant by centre of gravity.

27. State the two conditions required for any object to be in equilibrium.

28. State the word equation that defines momentum.

29. State and explain whether momentum is a vector or scalar quantity

30. Explain why momentum is a vector quantity.

31. Define impulse in terms of force and time.

32. State an expression for the kinetic energy of an object of mass m that is moving with a speed v.

33. State and explain whether kinetic energy is a scalar quantity or a vector quantity.

34. State the word used to describe the energy stored in a stretched or compressed spring.

35. Explain what is meant by the term energy conservation.

36. Briefly explain a Sankey diagram.