

NATURAL SCIENCE: PHYSICS

1. It is the measure of the amount of matter in an object.

- a. weight b. mass c. volume d. quantity

Ans: b

2. It is the distance traveled by the per unit in a stated direction.

- a. velocity b. speed c. acceleration d. thrust

Ans: b

3. The rate of change of the distance traveled per unit time in a stated direction

- a. velocity b. speed c. acceleration d. thrust

Ans: c

4. This law states that the force acting upon an object is equal to the product of the mass and acceleration of the object.

- a. Newton's 2nd Law of Motion b. Newton's 3rd Law of Motion
c. Newton's 1st Law of Motion d. Energy Law

Ans: a

5. When a force is applied to a body, several effects are possible. Which of the ff. effect CAN'T occur?

- a. the body rotates b. the body change direction
c. the body increase its mass d. the body changes shape

Ans: c

6. It is the reluctance of the object to change either its state of rest or uniform motion in a straight line. a. force

- b. friction c. inertia d. motion

Ans: d

7. This law states that the energy cannot be created nor destroyed but only changes from one form to another.

- a. Energy Law b. Kinetic Theory of Matter
c. Law of Conservation of Energy d. Boyle's Law

Ans: b

8. This law states that all matter is made up of a large number of molecules which are in continuous motion.

- a. Boyle's law
- b. Kinetic Theory of Matter
- c. Law of Conservation of Energy
- d. Boyle's Law

Ans: b

9. The lowest possible temperature that a substance can reach.

- a. freezing point
- b. absolute zero
- c. steam point
- d. threshold

Ans: b

10. It is the amount of heat required to raise the temperature of 1 kg. of a substance by 1 degree C.

- a. calorie
- b. watt
- c. specific heat capacity
- d. joule

Ans: c

11. The pressure cooker works under the principle that?

- a. Boiling point increases as pressure decreases
- b. boiling point decreases as pressure increases
- c. freezing point increases as pressure increases
- d. freezing point increases as pressure decreases

Ans: a

12. It is the process by which heat is transmitted through a substance from one particle to another by the amount of heated particles.

- a. convection
- b. insulation
- c. conduction
- d. radiation

Ans: c

13. It is phenomena in which energy transferred through vibrations.

- a. frequency
- b. waves
- c. refraction
- d. amplitude

Ans: b

14. The unit measurement for intensity of sound

- a. hertz
- b. decibel
- c. angstrom
- d. frequency

Ans: b

15. It is the process by which a heavy nucleus of an atom is split into 2 or more fragments of comparable sizes when its nucleus is struck by a neutron.

- a. chain reaction b. nuclear fusion c. radiation d. nuclear fission

Ans: d

16. It is the union of two light nuclei to form a heavier nucleus, resulting in a mass defect and release of energy

- a. radiation b. nuclear fission c. nuclear fusion d. radioactivity

Ans: c

17. Which of the following statements is a characteristic of an electronic spectrum?

- a. they all travel at the same speed in free space
b. they exhibit diffraction and interference phenomena
c. they follow the laws of refraction and reflection
d. All of the above

Ans: d

18. The term "RADAR" is derived from the phrase?

- a. Radio Detection and Ranging b. Radio Diffusion and Ranging
c. Radio Diffraction and Resolution d. Radiation Diffraction and Resolution

Ans: a

19. A material whose ability to conduct electricity lies between those of conductors and insulators

- a. integrated circuits b. silicon chips c. semiconductors d. insulators

Ans: c

20. "LASER" is derived from the phrase?

- a. Light Amplification by Stimulated Emission of Radiation
b. Light Application by Simulated Emission of Radiation
c. Light Amplification by Simulated Ejection of Radiation
d. None of the above

Ans: a

21. What is the color of a transparent substance?

- a. the color of the light it absorbs
- b. the color of the light it reflects
- c. the color of the light it transmits
- d. the color of the light it

Ans: c

22. What is a rotating electromagnetic called?

- a. Motor
- b. Rotor
- c. Phasor
- d. Sensor

Ans: b

23. What happens with the centripetal force when speed is doubled?

- a. remains the same
- b. force is increased 4x
- c. triples
- d. doubles

Ans: d

24. What is an electrochemical cell in which the reacting materials can be renewed by the use of reverse current?

- a. storage cell
- b. primary cell
- c. fuel cell
- d. chemical cell

Ans: a

25. What will make an object move in a circular path?

- a. central force
- b. gravitational force
- c. friction force
- d. electromagnetic force

Ans: a

26. What kind of energy is present whenever a body is at a distance from the ground?

- a. elastic potential energy
- b. electric potential energy
- c. electromagnetic potential energy
- d. gravitational potential energy

Ans: d

27. The process which occurs when heat passes from one molecule to another molecule.

- a. convection
- b. radiation
- c. conduction
- d. expansion

Ans: c

28. The temperature at which gas would no longer exert pressure.

- a. Kelvin Temperature
- b. Celsius Temperature
- c. Absolute Zero
- d. Boiling Point

Ans: c

29. The formula for finding the efficiency of a machine.

- a. efficiency = input force/output force x 100%
- b. efficiency = output force/ input force x 100%
- c. efficiency = output work / input work x 100%
- d. efficiency = input work/ output work x 100%

Ans: c

30. The amount of calories required to convert 50g. of ice at 0 degrees to water at 60 degrees.

- a. 3000 calories
- b. 4000 calories
- c. 7000 calories
- d. 6840 calories

Ans: c

31. When both are dropped, a 5 lb. ball and a 10 lb. ball will reach the ground at the same time because?

- a. the gravitational attraction is the same on both
- b. both have the same inertia
- c. the inertial resistance of the lighter ball is greater than that of the heavier ball
- d. the greater gravitational force of the 10 lb. ball is offset by its' greater inertial resistance.

Ans: d

32. The result when there is lack of cohesion among gas molecules.

- a. gas molecules are confined and kept together
- b. molecules move freely in all directions
- c. molecules are compressed into smaller volumes
- d. opposing force come into play

Ans: b

33. At what temperature does water have the smallest volume and greatest density?

- a. 0 degrees C
- b. 2 degrees C
- c. 4 degrees C
- d. 16 degrees C

Ans: c

34. What single force, when applied at the same point, will produce the same effect?

- a. resultant force
- b. composite force
- c. concurrent force
- d. nuclear force

Ans: a

35. Energy can be released by atomic fusion when?

- a. the atoms fused have a mutual attraction
- b. the atoms fused have a mutual repulsion
- c. the atom formed is fissionable
- d. the nuclear mass of the atom is less than the combined mass of the atoms fused

Ans: d