1. What is matter defined as at its most basic level?

A. Anything that has mass and occupies space
B. Only living organisms and their products
C. Energy that cannot be observed
D. A form of light or radiation

2. Which of the following is NOT considered a fundamental particle of an atom?

A. Proton
B. Neutron
C. Photon
D. Electron

3. What determines the properties of a substance formed by atoms?

A. The arrangement of protons, neutrons, and electrons within the atom
B. The color of the atom
C. The size of the atom
D. The temperature outside the atom

4. In which state of matter are particles closely packed but able to move around each other?

A. Solid
B. Liquid
C. Gas
D. Plasma

5. What allows gases to expand and fill their container?

A. Strong forces between particles
B. Particles moving freely with weak forces between them
C. Particles being completely motionless
D. Particles forming a rigid lattice

6. Which of the following is an example of a solid?

A. Air
B. Water
C. Rock
D. Mercury

7. What is plasma?

A. A state of matter that occurs at extremely high temperatures
B. A type of liquid with no boiling point
C. A solid that can flow like a liquid
D. A form of energy that does not occupy space

8. Which property of matter describes how it interacts with other substances?

A. Physical property
B. Chemical property
C. Density
D. Color

9. What is the freezing point of water at standard atmospheric pressure?

A. -100°C
B. 0°C
C. 100°C
D. 212°C

10. Which state of matter occurs at temperatures near absolute zero?

A. Solid
B. Liquid
C. Gas
D. Bose-Einstein condensate

11. What is matter primarily defined as?

A. Anything that has mass and occupies space
B. Energy that cannot be seen or touched
C. A form of light or radiation
D. The absence of physical substance

12. Which of the following is NOT one of the fundamental particles that make up an atom?

A. Protons
B. Neutrons
C. Quarks
D. Electrons

13. In solids, how are the particles arranged?

A. Closely packed and vibrate in place
B. Spread out and move freely
C. Randomly dispersed with no fixed structure
D. Only exist in a crystalline form

14. Which state of matter allows substances to flow and take the shape of their container while maintain

A. Solid
B. Liquid
C. Gas
D. Plasma

15. What is the primary reason gases can expand and fill their container?

A. Strong forces between particles
B. Weak forces between particles and high particle energy
C. Particles are arranged in a fixed lattice
D. Particles are only found in a liquid state

16. Which of the following is an example of a liquid?

A. Rock
B. Air
C. Mercury
D. Ice

17. What is plasma primarily characterized by?

A. Extremely low temperatures
B. Extremely high temperatures
C. Fixed shape and volume
D. Particles that do not move

18. Which of the following is a chemical property of matter?

A. Color
B. Density
C. Boiling point
D. Reactivity with other substances

19. What is the state of matter that occurs near absolute zero?

A. Solid
B. Liquid
C. Gas
D. Bose-Einstein condensate

20. Which of the following is NOT a physical property of matter?

A. Mass
B. Volume
C. Freezing point
D. Combustibility

21. What is matter defined as at its most basic level?

A. Anything that has mass and occupies space
B. Only visible objects that can be touched
C. Energy that cannot be measured
D. Substances that exist only in gases

22. Which of the following is NOT a fundamental particle that makes up an atom?

A. Proton
B. Neutron
C. Photon
D. Electron

23. What determines the properties of a substance formed by atoms?

A. The size of the atoms
B. The arrangement of protons, neutrons, and electrons within the atom
C. The color of the atoms
D. The speed at which atoms move

24. In which state of matter are particles closely packed and vibrate in place?

A. Solid
B. Liquid
C. Gas
D. Plasma

25. What allows liquids to flow and take the shape of their container?

A. Particles are closely packed but have enough energy to move around each other
B. Particles are spread out and move freely
C. Particles are fixed in place and cannot move
D. Particles are in a state of absolute zero

26. Which state of matter allows particles to expand and fill the space of their container?

A. Solid
B. Liquid
C. Gas
D. Bose-Einstein condensate

27. What is plasma?

A. A state of matter that occurs at extremely high temperatures
B. A type of liquid with no boiling point
C. A solid that can change shape without melting
D. A gas that exists only in space

28. Which of the following is a physical property of matter?

A. Freezing point
B. Reactivity with acids
C. Flammability
D. Ability to rust

29. What describes how matter interacts with other substances in chemical reactions?

A. Physical properties
B. Chemical properties
C. Atomic structure
D. Mass and volume

30. Which of the following is an example of a gas?

A. Ice
B. Mercury
C. Oxygen
D. Rock

31. What is matter defined as at its most basic level?

A. Anything that has mass and occupies space
B. Energy that cannot be seen or touched
C. A form of light or radiation
D. Only living organisms and their products

32. Which of the following is NOT a fundamental particle that makes up an atom?

A. Proton
B. Neutron
C. Photon
D. Electron

33. In solids, particles are primarily characterized by which behavior?

A. Moving freely in all directions
B. Being closely packed and vibrating in place
C. Expanding to fill the container
D. Forming a plasma state

34. Which state of matter allows substances to flow and take the shape of their container while maintain

A. Solid
B. Liquid
C. Gas
D. Plasma

35. What distinguishes gases from liquids and solids in terms of particle arrangement?

A. Particles are closely packed and fixed in position
B. Particles are closely packed but can move around each other
C. Particles are spread out and move freely
D. Particles are arranged in a crystalline lattice

36. Which exotic state of matter occurs at extremely high temperatures?

A. Bose-Einstein condensate
B. Plasma
C. Superfluid
D. Fermionic condensate

37. Which of the following is a physical property of matter?

A. Reactivity with acids
B. Freezing point
C. Ability to combust
D. Formation of ions

38. What is the boiling point of water at standard atmospheric pressure?

A. -100°C
B. 0°C
C. 100°C
D. 212°C

39. Which state of matter is formed when particles have very low energy and are near absolute zero?

A. Solid
B. Liquid
C. Gas
D. Bose-Einstein condensate

40. What determines the properties of a substance formed by atoms?

A. The color of the atoms
B. The arrangement of protons, neutrons, and electrons within the atom
C. The speed of light
D. The gravitational pull on the atoms

41. What is the most basic definition of matter?

A. Anything that has mass and occupies space
B. A form of energy that cannot be seen
C. Only living organisms and their products
D. A type of wave that travels through the universe

42. Which of the following is NOT considered one of the three classical states of matter?

A. Solid
B. Liquid
C. Plasma
D. Gas

43. In solids, how do particles behave?

A. They move freely and are spread out
B. They vibrate in place and are closely packed
C. They only exist in a fixed shape but not volume
D. They have no interaction with each other

44. Which state of matter allows substances to take the shape of their container while maintaining a co

A. Solid
B. Liquid
C. Gas
D. Plasma

45. What state of matter occurs at extremely high temperatures?

A. Solid
B. Liquid
C. Gas
D. Plasma

46. Which of the following is a physical property of matter?

A. Ability to rust
B. Freezing point
C. Reactivity with acids
D. Combustibility

47. What determines the properties of a substance formed by atoms?

A. The size of the universe
B. The arrangement of protons, neutrons, and electrons within the atom
C. The color of the atom
D. The speed of light

48. Which of these is an example of a gas?

A. Ice
B. Mercury
C. Oxygen
D. Rock

49. What is the state of matter that occurs at temperatures near absolute zero?

A. Solid
B. Liquid
C. Bose-Einstein condensate
D. Gas

50. Which of the following is a chemical property of matter?

A. Density
B. Color
C. Reactivity with oxygen
D. Melting point