1. What is matter defined as in the text?

A. Anything that has mass and occupies space
B. Only visible objects like rocks and metals
C. Energy without physical substance
D. A form of radiation

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

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

3. What determines the properties of a substance made from atoms?

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

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

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

5. Which of the following is NOT a characteristic of solids?

A. Fixed shape
B. Constant volume
C. Free movement of particles
D. Closely packed particles

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

A. Strong forces between particles
B. Particles moving freely with weak forces
C. Particles that are closely packed but can move around each other
D. Particles that do not interact at all

7. Which state of matter is described as having particles that spread out and move freely?

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

8. Which of the following is an example of a gas mentioned in the text?

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

9. What is plasma mentioned as occurring at?

A. Extremely high temperatures
B. Standard room temperature
C. Temperatures near absolute zero
D. Only in laboratory conditions

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

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

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

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

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

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

13. What determines the properties of a substance made from atoms?

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

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

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

15. What is a key characteristic of solids?

A. They expand to fill their container
B. They have a fixed shape and volume
C. They move freely without any forces between particles
D. They are only found in extreme temperatures

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

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

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

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

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

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

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

A. Physical properties
B. Chemical properties
C. States of matter
D. Atomic structure

20. Which state of matter is characterized by particles that are spread out and move freely?

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

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

A. Anything that has mass and occupies space
B. Only celestial bodies like stars and planets
C. The energy that exists in the universe
D. A form of light that can be seen

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

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

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

A. The number of atoms in the substance
B. The arrangement of protons, neutrons, and electrons within the atom
C. The color of the substance
D. The temperature at which the substance is formed

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. Strong forces between particles
B. Particles moving freely with weak forces
C. Particles with enough energy to move around each other
D. Particles that are spread far apart

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

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

27. What is plasma?

A. A state of matter that occurs at extremely high temperatures
B. A type of liquid that conducts electricity
C. A solid that can change shape under pressure
D. A form of energy that does not occupy space

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

A. The ability to react with acid
B. The boiling point of a substance
C. The flammability of a substance
D. The ability to rust

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

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

30. How does matter behave in a gas state compared to a solid state?

A. Gases have a fixed shape and volume, while solids expand freely
B. Gases have particles that are spread out and move freely, while solids have closely packed particl
C. Gases are only found in celestial bodies, while solids are found on Earth
D. Gases have strong forces between particles, while solids have weak forces

31. What is the most basic definition of matter?

A. Anything that has mass and occupies space
B. Energy that can be seen or touched
C. A form of light or radiation
D. Only living organisms and plants

32. Which of the following are the basic building blocks of all substances?

A. Molecules
B. Atoms
C. Protons
D. Neutrons

33. What are the three primary particles that make up an atom?

A. Protons, neutrons, and electrons
B. Quarks, leptons, and bosons
C. Molecules, ions, and compounds
D. Photons, neutrons, and neutrinos

34. Which state of matter has particles that are closely packed but can move around each other?

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

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

A. Strong forces between particles and fixed positions
B. Closely packed particles with limited movement
C. Spread-out particles with weak forces between them
D. Particles that are frozen in place

36. Which of the following is NOT a classical state of matter?

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

37. What is an example of a physical property of matter?

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

38. Which of the following describes a chemical property of matter?

A. Color
B. Mass
C. Boiling point
D. Ability to undergo combustion

39. At what temperature does plasma typically occur?

A. Near absolute zero
B. Extremely high temperatures
C. Room temperature
D. Below freezing point

40. Which state of matter has particles that vibrate in place and maintain a fixed shape?

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

41. What is the most basic definition of matter?

A. Anything that has mass and occupies space
B. The energy that powers the universe
C. A form of light or radiation
D. An abstract concept without physical presence

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

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

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

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

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

A. Particles moving freely around each other
B. Particles being far apart with weak forces
C. Particles vibrating in fixed positions
D. Particles forming a rigid lattice

45. Which state of matter can expand to fill the space of its container?

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

46. What is plasma primarily associated with?

A. Extremely high temperatures
B. Absolute zero conditions
C. Fixed crystalline structures
D. Low-pressure environments

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

A. Density
B. Color
C. Freezing point
D. Reactivity with acids

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

A. -10°C
B. 0°C
C. 20°C
D. 100°C

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

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

50. What determines the properties of a substance made from atoms?

A. The arrangement of protons, neutrons, and electrons
B. The temperature of the universe
C. The color of the atoms
D. The speed of light