1. What is matter defined as in the text?

A. Anything that has mass and occupies space
B. A form of energy that does not have mass
C. Only celestial bodies like stars and planets
D. A theoretical concept without physical existence

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

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

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

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

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 is the primary characteristic of a solid as described in the text?

A. Particles move freely and spread out
B. Particles are closely packed and vibrate in place
C. Particles have no fixed arrangement
D. Particles are only found in celestial bodies

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

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

7. What is plasma, according to the text?

A. A state of matter at extremely high temperatures
B. A type of chemical reaction
C. A liquid with no boiling point
D. A solid that can change shape

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

A. Freezing point
B. Reactivity with acids
C. Formation of new compounds
D. Combustion ability

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

A. -100°C
B. 0°C
C. 100°C
D. 200°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 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 celestial bodies like stars and planets
D. Substances that exist only in solid form

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

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

13. 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 atoms
C. The color of the atoms
D. The shape of the atoms

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

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

15. Which of the following is a characteristic of solids?

A. Fixed shape and volume
B. Expands to fill the container
C. Flows and takes the shape of the container
D. Particles move randomly at high speeds

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

A. Strong forces between particles
B. Weak forces between particles and high energy of particles
C. Particles are closely packed
D. Particles vibrate in place

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

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

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

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

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

A. Density
B. Color
C. Ability to rust
D. Volume

20. What is the temperature near which Bose-Einstein condensates occur?

A. Room temperature
B. Absolute zero
C. 100°C
D. Boiling point of water

21. What is matter defined as in the text?

A. Anything that has mass and occupies space
B. Only celestial bodies like stars and planets
C. Substances that do not interact with energy
D. The force that holds particles together

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

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

23. What determines the properties of a substance according to the text?

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

24. In which state of matter are particles closely packed but can move around each other?

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

25. What is the primary difference between liquids and gases?

A. Liquids have a fixed volume, while gases expand to fill their container
B. Gases are denser than liquids
C. Liquids have weaker forces between particles than gases
D. Gases are only found in celestial bodies

26. Which state of matter occurs at extremely high temperatures?

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

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

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

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

A. The boiling point of water
B. The color of gold
C. The ability of iron to rust
D. The volume of a gas

29. What is the boiling point of water at standard atmospheric pressure according to the text?

A. 0°C
B. 100°C
C. 212°C
D. -100°C

30. Which of the following is NOT a classical state of matter mentioned in the text?

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

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

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

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

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

33. 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

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

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

35. Which of the following is a common example of a solid?

A. Rocks
B. Air
C. Water
D. Oxygen

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

A. The energy of particles allowing them to move around each other
B. The absence of particles
C. The particles being fixed in place
D. The particles being in a gaseous state

37. Which state of matter allows particles to spread out and move freely?

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

38. What is an exotic state of matter that occurs at extremely high temperatures?

A. Plasma
B. Bose-Einstein condensate
C. Superfluid
D. Liquid crystal

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

A. Mass
B. Ability to react with oxygen
C. Flammability
D. Reactivity with acids

40. What describes how matter interacts with other substances?

A. Physical properties
B. Chemical properties
C. Biological properties
D. Optical properties

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

A. Anything that has mass and occupies space
B. A form of energy
C. Only visible objects
D. Substances that do not have mass

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

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

43. What determines the properties of a substance formed by an atom?

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

44. In which state of matter are particles closely packed but can move around each other?

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

45. Which of the following is a characteristic of solids?

A. Fixed shape and volume
B. Constantly changing shape
C. Expanding to fill their container
D. No fixed arrangement of particles

46. What is the state of matter that occurs at extremely high temperatures?

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

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

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

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

A. -10°C
B. 0°C
C. 100°C
D. 212°C

49. Which state of matter allows particles to move freely and expand to fill their container?

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

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

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