

1. What is the 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 components
- D. A type of radiation emitted by stars

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 speed of the atom

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

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

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

- A. The particles have enough energy to move around each other
- B. The particles are spread out and move freely
- C. The particles are completely stationary
- D. The particles repel each other strongly

6. Which state of matter expands to fill the space of its container?

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

7. What is plasma?

- A. A state of matter that occurs at extremely high temperatures
- B. A type of chemical reaction
- C. A form of energy that does not occupy space
- D. A liquid with no boiling point

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

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

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

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

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

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

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

- A. Anything that has mass and occupies space
- B. Only visible objects that we can touch
- C. Energy that does not have physical form
- D. Substances that exist only in extreme temperatures

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

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

13. 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 container holding the substance
- C. The temperature of the surrounding environment
- D. The amount of energy absorbed by the substance

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 the primary reason gases can expand and fill their container?

- A. The strong forces between particles
- B. The weak forces between particles and high particle energy
- C. The fixed shape of the particles
- D. The inability of particles to move

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

- A. Air
- B. Water
- C. Ice
- D. Oxygen

17. What state of matter occurs at temperatures near absolute zero?

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

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

- A. Physical property
- B. Chemical property
- C. Density
- D. Volume

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

- A. -100°C
- B. 0°C
- C. 100°C
- D. 200°C

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

- A. Color
- B. Temperature
- C. Reactivity
- D. Density

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

- A. Anything that has mass and occupies space
- B. Only objects that are visible to the naked eye
- C. Substances that can change into energy
- D. The force that holds particles together

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 size of the container holding the atoms
- B. The arrangement of protons, neutrons, and electrons within the atom
- C. The temperature of the surrounding environment
- D. The color of the atoms

24. Which state of matter has particles that are 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 spread out and move freely
- B. Particles are closely packed but have enough energy to move around each other
- C. Particles are fixed in place with strong forces between them
- D. Particles do not interact with each other

26. Which state of matter expands to fill the space of its container?

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

27. What is an example of a solid mentioned in the text?

- A. Air
- B. Water
- C. Ice
- D. Oxygen

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

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

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

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

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

- 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 substances that can be seen with the naked eye
- C. Energy and light waves
- D. A form of pure energy

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, what prevents particles from moving freely?

- A. Weak forces between particles
- B. High energy levels of particles
- C. Strong forces between particles
- D. Absence of particles

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

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

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

- A. Gases have a fixed volume, while liquids do not
- B. Liquids have weak forces between particles, while gases have strong forces
- C. Gases expand to fill their container, while liquids maintain a fixed volume
- D. Liquids are always hotter than gases

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

- A. Air
- B. Water
- C. Mercury
- D. Ice

37. What is plasma primarily characterized by?

- A. Extremely low temperatures
- B. Extremely high temperatures
- C. Fixed shape and volume
- D. Particles arranged in a crystalline structure

38. Which property describes how matter interacts with other substances?

- A. Physical property
- B. Chemical property
- C. Density
- D. Mass

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

- A. -100°C
- B. 0°C
- C. 100°C
- D. 212°C

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

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

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

- A. Anything that has mass and occupies space
- B. Only substances that can be seen with the naked eye
- C. Energy that cannot be measured
- D. A form of light or radiation

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

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

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
- C. The color of the atom
- D. The temperature outside the atom

44. In solids, how do particles behave?

- A. They are spread out and move freely
- B. They are closely packed and vibrate in place
- C. They have no fixed arrangement
- D. They exist only in a liquid state

45. Which of the following is a common example of a liquid?

- A. Rock
- B. Air
- C. Water
- D. Ice

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

- A. Strong forces between particles
- B. Particles moving freely with weak forces
- C. Particles being closely packed
- D. Particles having a fixed shape

47. What is plasma?

- A. A state of matter that occurs at extremely high temperatures
- B. A type of solid that conducts electricity
- C. A form of liquid that is transparent
- D. A rare chemical element

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

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

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

- A. -100°C
- B. 0°C
- C. 100°C
- D. 212°C

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

- A. Color
- B. Mass
- C. Ability to corrode
- D. Volume