

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

- A. Anything that has mass and occupies space
- B. A form of energy that can be seen
- C. Only living organisms and their products
- D. Substances that do not interact with other materials

2. Which of the following is NOT 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 color of the atoms
- B. The arrangement of protons, neutrons, and electrons
- C. The size of the substance
- 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. Which of the following is NOT a common example of a liquid?

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

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

- A. Strong forces between particles
- B. Particles vibrating in place
- C. Particles moving freely with weak forces
- D. Particles being arranged in a fixed shape

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

- A. Bose-Einstein condensate
- B. Plasma
- C. Superfluid
- D. Quark-gluon plasma

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

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

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

- A. -10°C
- B. 0°C
- C. 100°C
- D. 212°C

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

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

11. What is the most basic definition of matter?

- A. Anything that has mass and occupies space
- B. A form of energy that can be converted into light
- C. A type of wave that travels through the universe
- D. A theoretical concept only found in physics

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

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

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

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

14. What is the primary reason solids have a fixed shape?

- A. Particles move freely in all directions
- B. Strong forces between particles prevent movement
- C. Particles are far apart and randomly arranged
- D. Particles exist only in a single layer

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

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

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

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

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

- A. Physical property
- B. Chemical property
- C. Thermal property
- D. Mechanical property

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

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

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

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

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

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

21. 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 type of radiation emitted by stars
- D. The force that holds atoms together

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 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 of the atom

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

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

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

- A. Strong forces between particles
- B. Particles moving freely with weak forces
- C. Particles arranged in a fixed lattice
- D. High density of particles

26. Which of these is an example of a solid?

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

27. What is plasma?

- A. A state of matter at extremely high temperatures
- B. A type of liquid that conducts electricity
- C. A solid with no fixed shape
- D. A gas that never expands

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

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

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

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

30. In which state does matter exist as a Bose-Einstein condensate?

- A. At extremely high temperatures
- B. At temperatures near absolute zero
- C. Only in space
- D. When it is under high pressure

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

- A. Anything that has mass and occupies space
- B. Energy that exists in the universe
- C. A form of light or radiation
- D. An abstract concept without physical presence

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

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

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

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

34. What is the primary reason solids have a fixed shape and volume?

- A. Particles are spread out and move freely
- B. Strong forces between particles prevent free movement
- C. Particles are constantly changing composition
- D. Particles do not interact with each other

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

- A. Ice
- B. Mercury
- C. Oxygen
- D. Gold

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

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

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

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

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 of the following is a physical property of matter?

- A. Flammability
- B. Reactivity
- C. Color
- D. Corrosion

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

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

41. What is the most basic definition of matter?

- A. Anything that has mass and occupies space
- B. Anything that can be seen with the naked eye
- C. Anything that emits light or energy
- D. Anything that is composed of molecules

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

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

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

- 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 of the surrounding environment

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

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

45. Which of the following is an 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 between them
- C. Particles being closely packed together
- D. Particles vibrating in place

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

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

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

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

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

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

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

- A. The substance's melting point
- B. The substance's ability to rust
- C. The substance's color
- D. The substance's density