

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.  $-10^{\circ}\text{C}$
  - B.  $0^{\circ}\text{C}$
  - C.  $100^{\circ}\text{C}$
  - D.  $212^{\circ}\text{C}$

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.  $-100^{\circ}\text{C}$
  - B.  $0^{\circ}\text{C}$
  - C.  $100^{\circ}\text{C}$
  - D.  $200^{\circ}\text{C}$

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.  $-100^{\circ}\text{C}$
  - B.  $0^{\circ}\text{C}$
  - C.  $100^{\circ}\text{C}$
  - D.  $200^{\circ}\text{C}$
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.  $-100^{\circ}\text{C}$
  - B.  $0^{\circ}\text{C}$
  - C.  $100^{\circ}\text{C}$
  - D.  $212^{\circ}\text{C}$
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.  $0^{\circ}\text{C}$
  - B.  $100^{\circ}\text{C}$
  - C.  $212^{\circ}\text{C}$
  - D.  $-100^{\circ}\text{C}$
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