

1. 1. What is matter defined as?

- A. Anything with mass and volume
- B. Anything with color
- C. Anything with energy
- D. Anything with shape

2. 2. What are the basic building blocks of all substances?

- A. Atoms
- B. Molecules
- C. Particles
- D. Cells

3. 3. Which state of matter has particles that are closely packed together and vibrate in place?

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

4. 4. What are some examples of liquids?

- A. Water, oil, mercury
- B. Rocks, ice, metals
- C. Air, oxygen, nitrogen
- D. Stars, planets, celestial bodies

5. 5. At what temperatures does plasma occur?

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

6. 6. Which category of properties can be observed without changing matter's composition?

- A. Physical properties
- B. Chemical properties
- C. Biological properties
- D. Geological properties

7. 7. What are examples of physical properties?

- A. Mass, volume, density
- B. Color, temperature, freezing point
- C. Chemical reactions, interactions
- D. Shape, energy, composition

8. 8. What do chemical properties describe?

- A. How matter interacts with other substances
- B. Physical characteristics of matter
- C. States of matter
- D. Properties of atoms

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

- A. 0°C
- B. 100°C
- C. -273°C
- D. 25°C

10. 10. What are the basic particles that make up atoms?

- A. Protons, neutrons, electrons
- B. Molecules, cells, particles
- C. Atoms, substances, elements
- D. Rocks, ice, metals

11. 11. What is matter defined as?

- A. Anything with mass and occupies space
- B. Anything with color
- C. Anything with volume
- D. Anything with shape

12. 12. What are the basic building blocks of all substances?

- A. Atoms
- B. Molecules
- C. Cells
- D. Particles

13. 13. What are the three classical states of matter?

- A. Solid, liquid, gas
- B. Solid, liquid, plasma
- C. Liquid, gas, plasma
- D. Solid, gas, plasma

14. In which state of matter do particles vibrate in place?

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

15. Which property of matter describes its characteristics without changing its composition?

- A. Physical properties
- B. Chemical properties
- C. Mass
- D. Color

16. 16. What is an example of a common liquid?

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

17. At what temperatures does plasma occur?

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

18. 18. What determines the properties of a substance an atom forms?

- A. Arrangement of particles within an atom
- B. Size of the atom
- C. Color of the atom
- D. Shape of the atom

19. 19. What are the smallest particles that make up atoms?

- A. Protons, neutrons, electrons
- B. Molecules, cells, particles
- C. Atoms, molecules, cells
- D. Neutrons, electrons, photons

20. 20. What are the forces between particles in a gas?

- A. Weak forces
- B. Strong forces
- C. No forces
- D. Variable forces

21. 21. What is matter defined as?

- A. Anything with mass and occupies space
- B. Anything with color
- C. Anything with volume
- D. Anything with shape

22. 22. What are the basic building blocks of all substances?

- A. Atoms
- B. Molecules
- C. Cells
- D. Particles

23. Which state of matter has particles that are closely packed together and vibrate in place?

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

24. 24. What are some examples of solids?

- A. Rocks, ice, metals
- B. Water, oil, mercury
- C. Air, oxygen, nitrogen
- D. Stars, planets, galaxies

25. In which state of matter do particles have enough energy to move around each other?

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

26. 26. What are some examples of liquids?

- A. Water, oil, mercury
- B. Rocks, ice, metals
- C. Air, oxygen, nitrogen
- D. Stars, planets, galaxies

27. In which state of matter do particles move freely with weak forces between them?

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

28. 28. What are some examples of gases?

- A. Air, oxygen, nitrogen
- B. Rocks, ice, metals
- C. Water, oil, mercury
- D. Stars, planets, galaxies

29. 29. What are physical properties of matter?

- A. Characteristics that can be observed without changing composition
- B. Characteristics that involve chemical reactions
- C. Characteristics related to color
- D. Characteristics related to taste

30. 30. What are chemical properties of matter?

- A. Describe how matter interacts with other substances
- B. Describe physical characteristics of matter
- C. Describe how matter changes temperature
- D. Describe how matter changes shape

31. 31. What is matter defined as?

- A. Anything that has mass and occupies space
- B. The air we breathe
- C. Objects we touch
- D. The substance that makes up the universe

32. 32. What are atoms made up of?

- A. Protons, neutrons, and electrons
- B. Molecules
- C. Cells
- D. Particles

33. 33. What determines the properties of a substance an atom forms?

- A. Arrangement of particles within the atom
- B. Size of the atom
- C. Color of the atom
- D. Temperature of the atom

34. 34. What are the three classical states of matter?

- A. Solid, liquid, gas
- B. Plasma, Bose-Einstein condensates, gas
- C. Solid, liquid, plasma
- D. Solid, gas, Bose-Einstein condensates

35. In which state of matter do particles have enough energy to move around each other?

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

36. 36. What are some examples of solids?

- A. Rocks, ice, metals
- B. Water, oil, mercury
- C. Air, oxygen, nitrogen
- D. Plasma, Bose-Einstein condensates

37. 37. Which type of properties describe characteristics of matter that can be observed without changing the identity of the matter?

- A. Physical properties
- B. Chemical properties
- C. Biological properties
- D. Molecular properties

38. 38. What is an example of a physical property of water?

- A. Freezing point of 0°C
- B. Boiling point of 100°C
- C. Color
- D. Ability to react with other substances

39. 39. What do chemical properties describe?

- A. How matter interacts with other substances
- B. Physical characteristics of matter
- C. Temperature of matter
- D. Color of matter

40. At what temperatures does plasma and Bose-Einstein condensates occur?

- A. Extremely high and near absolute zero
- B. Room temperature
- C. Below freezing point
- D. Above boiling point

41. 41. What is matter defined as?

- A. Anything that has mass and occupies space
- B. The air we breathe
- C. The objects we touch
- D. The smallest particles in the air

42. 42. What are the basic building blocks of all substances?

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

43. 43. What are the three classical states of matter?

- A. Solid, liquid, gas
- B. Plasma, Bose-Einstein condensates, gas
- C. Solid, liquid, plasma
- D. Gas, liquid, Bose-Einstein condensates

44. In which state of matter do particles move freely with weak forces between them?

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

45. 45. What are examples of liquids?

- A. Water, oil, mercury
- B. Rocks, ice, metals
- C. Air, oxygen, nitrogen
- D. Stars, planets, particles

46. 46. What are physical properties of matter?

- A. Characteristics that can be observed without changing composition
- B. How matter interacts with other substances
- C. Changes matter undergoes in chemical reactions
- D. The ability of matter to flow

47. 47. What are chemical properties of matter?

- A. Describe how matter interacts with other substances
- B. Characteristics that can be observed without changing composition
- C. Changes matter undergoes in chemical reactions
- D. The ability of matter to flow

48. 48. What are examples of gases?

- A. Air, oxygen, nitrogen
- B. Water, oil, mercury
- C. Rocks, ice, metals
- D. Stars, planets, particles

49. 49. What are examples of solids?

- A. Rocks, ice, metals
- B. Water, oil, mercury
- C. Air, oxygen, nitrogen
- D. Stars, planets, particles

50. 50. What is an example of an exotic state of matter?

- A. Plasma
- B. Water
- C. Rocks
- D. Ice