

Metals and Nonmetals: Properties and Uses

Chemistry · Practice Test · 30 Questions

1. Which of the following elements typically has a metallic luster?

- A) Sulfur
- B) Copper
- C) Carbon
- D) Oxygen

2. Nonmetals are generally:

- A) Malleable and ductile
- B) Brittle
- C) Good conductors of heat
- D) Lustrous

3. Which property allows metals to be drawn into thin wires?

- A) Malleability
- B) Ductility
- C) Sonority
- D) Conductivity

4. Which of these is a nonmetal that is a good conductor of heat and electricity?

- A) Diamond
- B) Graphite
- C) Sulfur
- D) Phosphorus

5. Metals typically form oxides that are:

- A) Acidic
- B) Basic
- C) Amphoteric
- D) Neutral

6. Which metal is liquid at room temperature?

- A) Iron
- B) Gold
- C) Mercury
- D) Aluminum

7. Alloys are formed by mixing:

- A) Metals with nonmetals
- B) Nonmetals with nonmetals
- C) Metals with other metals
- D) Nonmetals with acids

8. Brass is an alloy of:

- A) Iron and Zinc
- B) Copper and Zinc
- C) Aluminum and Copper
- D) Lead and Tin

9. The process of depositing a thin layer of zinc on iron to prevent rusting is called:

- A) Electroplating
- B) Alloying
- C) Galvanization
- D) Tinning

10. Rust is mainly composed of:

- A) Hydrated iron oxide
- B) Copper carbonate
- C) Aluminum oxide
- D) Zinc oxide

11. Which of the following is a characteristic property of nonmetals?

- A) High tensile strength
- B) Sonorous
- C) Brittle
- D) Good conductors of electricity

12. Elements that show properties of both metals and nonmetals are called:

- A) Alloys
- B) Metalloids
- C) Nonmetals
- D) Covalent compounds

13. Silicon is an example of a:

- A) Metal
- B) Nonmetal
- C) Metalloid
- D) Noble gas

14. Which metal is known for its use in making jewelry?

- A) Iron
- B) Copper
- C) Gold
- D) Aluminum

15. Which metal is used for making electrical wires and cables due to its good conductivity?

- A) Lead
- B) Zinc
- C) Aluminum
- D) Copper

16. The hardest substance known is:

- A) Graphite
- B) Diamond
- C) Iron
- D) Silicon

17. Nonmetals generally have low density, with an exception being:

- A) Sulfur
- B) Carbon
- C) Diamond
- D) Iodine

18. Which of these is a characteristic of metals?

- A) Nonlustrous
- B) Low melting point
- C) Good conductors of heat
- D) Brittle

19. The green deposit on copper articles is due to the formation of:

- A) Copper oxide
- B) Copper chloride
- C) Copper carbonate
- D) Copper sulfate

20. Metals are generally good conductors of heat and electricity because they have:

- A) Strong ionic bonds
- B) Free electrons
- C) Low melting points
- D) Densely packed atoms

21. Which metal is used in automobile batteries?

- A) Tin
- B) Magnesium
- C) Lead
- D) Zinc

22. Carbon exists in various allotropic forms, including:

- A) Brass
- B) Steel
- C) Diamond
- D) Bronze

23. Which of the following is a nonmetal that can be cut with a knife?

- A) Iron
- B) Aluminum
- C) Sodium
- D) Copper

24. Acidic oxides dissolve in water to give an acidic solution that turns:

- A) Red litmus blue
- B) Blue litmus red
- C) Red litmus red
- D) Blue litmus blue

25. Which of the following elements is a metal?

- A) Oxygen
- B) Nitrogen
- C) Sulfur
- D) Iron

26. The ability of a metal to be hammered into thin sheets is called:

- A) Ductility
- B) Malleability
- C) Brittleness
- D) Tenacity

27. Which nonmetal is used as a reducing agent in metallurgy?

- A) Sulfur
- B) Phosphorus
- C) Carbon
- D) Iodine

28. Metals are generally:

- A) Insulators
- B) Conductors
- C) Non-reactive
- D) Brittle

29. Cathodic protection of iron involves connecting it to a more reactive metal, such as:

- A) Copper
- B) Silver
- C) Magnesium
- D) Gold

30. Which property is NOT typically shown by nonmetals?

- A) Low density
- B) Low melting point
- C) Good conductor of electricity
- D) Brittle